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Vivências de mães no desmame precoce: uma teoria fundamentada nos dados

Experiences of mothers with early weaning: a grounded theory

Experiencias de madres en el destete temprano: teoría fundamentada em los datos

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ABSTRACT

Objective: To understand the experiences of mothers with early weaning.

Method: Qualitative research with a theoretical-methodological contribution from Grounded Theory (Straussian perspective), carried out in the context of primary health care in a medium-sized municipality in the northeast of Brazil. 19 collaborators participated by theoretical sampling. Data collection took place between April and September 2018, with in-depth interviews, and was analyzed in three stages: open and axial coding, and integration.

Results: The central category "Women experiencing guilt and overload due to early weaning" was supported by three categories: a) conditions: "Showing the factors that limit breastfeeding"; b) actions/interactions: "Trying to balance motherhood and work during breastfeeding" and "Insufficient social support to keep exclusive breastfeeding"; and c) consequences: "Introducing formula and complementary foods before six months" and "Blaming oneself for the early weaning".

Final considerations: The theoretical model can give support to managers and health professionals to advocate for longer maternity leaves and confront gender disparities and inequities, professional performance with conflicts of interest, and abusive marketing regarding the use of formula.

Descriptors: Breast feeding. Maternal and child health. Child health. Grounded theory. Weaning. Nursing.

RESUMO

Objetivo: Compreender vivências de mães no desmame precoce.

Método: Estudo qualitativo orientado pelo referencial metodológico da teoria fundamentada nos dados. A amostragem teórica foi composta por 19 participantes: mães, familiares e profissionais da saúde de uma Unidade Básica de Saúde, todos da Região Nordeste, Brasil. A coleta de dados ocorreu de abril a setembro de 2018, com entrevistas individuais em profundidade, analisadas por meio da codificação aberta, axial e de integração.

Resultados: Emergiu o fenômeno "A mulher vivenciando a culpa e a sobrecarga pelo desmame precoce", sustentado por cinco categorias inter-relacionadas.

Considerações finais: As mães vivenciaram a carência da rede de apoio, a insuficiência do tempo da licença-maternidade e o sentimento de culpa.

Descritores: Aleitamento materno. Saúde materno-infantil. Teoria fundamentada nos dados. Desmame precoce. Enfermagem.

RESUMEN

Objetivo: Comprender las experiencias de las madres en el destete precoz.

Método: Teoría fundamentada en los datos. La muestra teórica estuvo compuesta por 19 participantes: madres, familiares y profesionales de la salud de una Unidad Básica de Salud de la región Nordeste de Brasil. La recolección de datos ocurrió de abril a septiembre de 2018, con entrevistas en profundidad, analizadas a través de codificación abierta, axial y de integración.

Resultados: Emergió la categoría central "La mujer experimentando culpa y sobrecarga por el destete precoz", sustentada entre categorías: a) condicionantes: "revelando las limitaciones para la lactancia materna"; b) acciones/interacciones: "intentar conciliar la lactancia materna con la práctica profesional" y "recibir apoyo social insuficiente para mantener la lactancia materna exclusiva"; y c) consecuencias: "introducir fórmulas infantiles y alimentación complementaria antes de los seis meses de edad y culpabilizarse por el destete precoz".

Consideraciones finales: Las madres experimentaron la falta de una red de apoyo, la insuficiencia del tiempo de licencia por maternidad y el sentimiento de culpa.

Descriptor: Lactancia materna. Salud materno infantil. Teoría fundamentada. Destete precoz. Enfermería.

INTRODUCTION

Breastfeeding is recognized worldwide by the nutritional and psychic benefits that result from mother-child interaction. In this regard, studies show potential evidence of its effects as early as during childhood itself. It helps reducing mortality rates⁽¹⁾ from infections in the respiratory (57%) and gastrointestinal tracts (72%), and, in the adult stage, helps reducing rates of dental malocclusion, overweight, and diabetes; in addition to effects related to better cognitive development. The practice of breastfeeding can also lead to benefits to the

health of the mother, since it contributes to avoid postpartum hemorrhages, breast and ovary cancer, and diabetes mellitus type II⁽²⁾.

Recommendations suggest that breastfeeding should be the exclusive source of nutrients for the child up to the sixth month of age⁽³⁾. Considering this recommendation, early weaning is the early introduction of other foods to the child before six months of age⁽⁴⁾, which can cause several health issues and impair their development.

Exclusive breastfeeding (EB) is a global health imperative⁽⁵⁾, since it can save up to 1.3 million children every year, around the world⁽⁶⁾. EB improves the likelihood of survival of the baby, with breastfed children being 14 times more likely to survive when compared to those who are not. This is because the practice prevents diarrhea and pneumonia, two of the main causes of child mortality⁽⁷⁾.

Early weaning is a recurring practice, that takes place due to several factors, including: nipple fissures and pacifier use⁽⁸⁾; myths and beliefs associated with the perception of one's milk as weak or insufficient to sate the child; mothers' return to work, mother lifestyle, and physician influence⁽⁹⁾; lack of paternal support to breastfeeding⁽¹⁰⁾; feelings that the child is dissatisfied with the mothers' milk⁽¹¹⁾; inadequate positioning of the mother or inadequate holding of the child during breastfeeding or suction; and incorrect grip and swallowing⁽¹²⁾. There are also historical, socioeconomic, cultural, physiological, and psychosocial factors that can be associated to early weaning⁽¹³⁾.

Although the contributions of breastfeeding is well-known, early weaning is still a global reality and a public health issue. From an epidemiological perspective, estimates indicate that only 41% of children below six months are under EB - a percentage below the goals of the World Health Organization (WHO), which predicts that number should be 50% in 2025 and 70% in 2030⁽⁴⁾.

Corroborating evidence regarding early weaning, a research developed in the United States confirms that only 46.2% of children were exclusively breastfed up to the third month of life; this number was only 25.8% when we consider up to the sixth month of age⁽¹⁴⁾. Regarding other parts of the world, Latin America and the Caribbean presented rates of 37%⁽¹³⁾; in the south of Asia, only 37.7% of women continue exclusive breastfeeding⁽¹⁵⁾. In Ethiopia, breastfeeding went from 74% to 64% in children from 0 to 1 month, being even lower, 36%, in children from four to five months of life⁽¹⁶⁾.

The National Study of Child Nutrition and Diet (ENANI), developed in all regions in the country from 2019 to 2020, with 14,584 children under five, found that the prevalence of

EB in children under six months in Brazil was 45.8%. The greatest rates were found in the South (54.3%), and the lowest, in the Northeast, with only 39%⁽¹⁷⁾.

In an attempt to understand the motivations for this situation, a Brazilian study analyzed the official discourses for the promotion of EB in Brazil, showing that there is little to no complex approach that includes weaning. The subjectivities of the woman who breastfeed are unappreciated, and the difficulties associated with breastfeeding are seen as a secondary concern. Therefore, the condition of continuing to breastfeed, even after the end of the maternal leave is seen as something simplistic, as an option that is nothing more than maternal desire. The silencing of certain meanings associated with breastfeeding is also indicated, such as the perspectives of the mother regarding this process, the relationship of the father of the child with breastfeeding, and the weaning⁽¹⁸⁾.

There are studies about the circumstances that affect the choice of a woman regarding breastfeeding, but this process is a much more complicated phenomenon than the description of maternal experiences^(18,19). Therefore, certain gaps stand out regarding a better understanding of the phenomenon and a theoretical development that can encompass the conceptualization and construction of a theoretical model that can present the structure of the phenomenon and the complexities of this occurrence. Therefore, further research is necessary to bring further analytical descriptions of data, in order to create theories on this phenomenon⁽²⁰⁾.

Considering the above, it becomes clear that there are many studies on the motives and circumstances that lead to early weaning, but few on how mothers experience this process. With this in mind, this study developed the following research question: How do mothers experience the process of early weaning?

Therefore, this work aims to understand the experiences of mothers in early weaning. Justifications for such work include the fact that there is a high prevalence of early weaning in the northeast of Brazil, where this study is from; the experiences of mothers and children in early weaning are complex; and the importance of breastfeeding for the dyad mother-child must be recognized. Therefore, this study aims to contribute for the *praxis* of health care workers, guiding mother-child health care actions and the emotional support provided to the woman, the child, and the family in this context.

METHOD

This is a qualitative study, guided by Straussian Grounded Theory. The GT has an hermeneutic character that allows the construction of theoretical models based on research

data that systematically integrate several concepts for a deep understanding of a certain phenomenon, revealing new paths and possibilities of action⁽²⁰⁾. Regarding the rigor and quality of the development of the study, it followed the criteria established by the Consolidated criteria for reporting qualitative research (COREQ)⁽²¹⁾.

The setting of the study was a Basic Health Unit (UBS) that functioned as a Family Health Strategy center in the state of Rio Grande do Norte (RN), Brazil. This UBS was chosen because it has the lowest rates of exclusive breastfeeding in the town (<50%), according to information from the Basic Health Care Information System (SIAB)⁽²²⁾.

Data collection took place from April to September 2018, using a two-part script: the first addressed the profile of the participant, with sociodemographic (age, educational level, marital status, employment, and income) and clinical information (data about breastfeeding, early weaning, and birth of the child, including whether the child was premature); the second stage included the application of in-person and individual interviews, with open, in-depth questions, adapted to the context throughout data collection to lead to a deeper development of categories.

In the GT, participant selection is guided by data collection and analysis, which directs "where" and "with whom" new data can be found, thus creating Sample Groups (SGs). These groups must be formed by collaborators with empirical experience in the study object, defined by hypothetical-deductive questions. The objective, as a result, is maximizing opportunities for perfecting conceptual categories and discovering variability, in order to identify patterns of behavior in the investigated and in those who interacted with them^(20,23).

Sample size was decided when theoretical saturation was reached⁽²⁰⁾, with three SGs and a total of 19 participants. The first SG included 13 mothers; the second, 3 primary care and family health workers; and the third, 3 family members (including grandmothers and fathers).

The first SG was selected intentionally, considering the hypothesis that its members would be key participants to answer the objective of this study. For the others, inclusion criteria were: (1) mothers with babies up to six months old who went through early weaning⁽¹³⁾; who lived in the urban area of the town; and (3) were 18 or older. We excluded mothers of babies with galactosemia or any other disease that would prevent breastfeeding; mothers with auditory issues, who could not be communicated with, since we are also searching for meaning in language and there was no sign-language translator.

The second SG was formed through an analytical process of the first GS, which indicated the health workers that were references for the mothers. These participants were

selected by convenience, considering the citations of the professionals in the interviews collected.

Finally, the third SG was formed by convenience, including relatives of these mothers - especially grandparents and the father of the baby in early weaning, since these were closer relationships of these women according to the reports from the interviews collected (Table 1).

Table 1 - Presentation of the Sample Groups, their hypothesis, inclusion and exclusion criteria, and guiding questions. Natal, Rio Grande do Norte, Brazil, 2023.

SG	Hypotheses	Guiding question	Inclusion criteria	Exclusion criteria	Enrollment of participants
1st. - Mothers	-	Could you tell me how you experience the early weaning of your child? What aspects contributed for you to interrupt exclusive breastfeeding?	(1) Mothers with children up to six months who went through early weaning; (2) mothers who lived in the urban area of the town; and (3) 18-year-old or older mothers.	(1) Mothers of babies with galactosemia or other diseases that would prevent breastfeeding; and (2) mothers with auditory issues, who could not be communicated with, since we are also searching for meaning in language and there was no sign-language translator.	Selected intentionally; considered to be key participants to answer the goal of the study; indicated by the community health agents that monitored them in home visits.
2nd. - Health workers	Health workers have an influence on early weaning.	I would like to know how you perceive the influence of health workers in early weaning. What factors do you think make early weaning more difficult? What are the strategies used, based on your experience, to promote exclusive breastfeeding in your community? How do women receive support during exclusive breastfeeding?	(1) Primary care and family health professionals; and (2) professionals who work for four months or more, since the professional has a very close contact with the community, standing out in health care.	(1) Having worked for four months or less; (2) being on vacation or on leave during collection.	The professionals were indicated according with the analytical process of the first SG, as references in the attention to new mothers; were selected by convenience; and worked in the setting of the study.

3rd - Families	Relatives, especially grandparents and fathers, are important references in regard to breastfeeding, due to how close their relationships are with the woman and are considered co-participant in early weaning.	How do you see the participation of the family in early weaning? Tell me about the cultural factors that can have an influence on early weaning.	(1) Members from the family support network, especially grandmothers and fathers, have a stronger bond of affection; and (2) older than 18.	(1) Fathers who were imprisoned or prevented from in-person meetings; and (2) communication difficulties and speech incoherence from chronic diseases that affect cognition.	Indicated by members of the first SG.
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Source: Research Data, 2019.

After the reasons for this research were explained and an individual invitation was extended in person, the open interviews took place with the participants. The location of the interview was chosen by them. The interviews were carried out by the main researcher, RN and MS in nursing, with professional and academic experience in the topic and with the research method. We used a digital recording device to register the interviews, which lasted a mean of 50 minutes and were later transcribed in full and inserted in the software NVIVO 10, for data organization. Transcriptions were printed and given back to the participants, so they could validate them or elaborate their responses, including or excluding statements.

The GT method states that the theoretical sampling of the SGs is concluded when the categories become dense enough to generate properties and dimensions. Furthermore, we found that, during the analysis of the SGs, within the paradigmatic model, there were no theoretical gaps to be filled due to the scope of the sample⁽²⁰⁾. Therefore, in this study, theoretical saturation was reached when all conceptual categories presented explanatory and theoretical power.

According with the GT, data analysis takes place at the same time as collection, using the constant comparison method. From a Straussian perspective, the analysis takes place in three stages: open coding, axial coding, and integration. Open coding is when the data is conceptualized and brought together according to similarities, in order to identify the properties and dimensions of each concept. Axial analysis, in turn, is the regrouping of data that was separated in open coding, in order to allow the categories to emerge. Finally, we have the integration stage, where the concepts of the categories and subcategories are unified in order to construct the theory⁽²⁰⁾.

The results were organized according with the following components of the paradigmatic model: conditions, actions-interactions, and consequences. The conditions are the reasons informed by the interviewees for specific situations to happen, and the explanation

they give for why they respond to a certain situation in a certain way. Actions-interactions are the responses and the movements expressed by the participants in order to deal with a certain situation. The consequences are the real or predicted results, found from the conditions and actions-interactions; they are the consequences, that which emerges as a result of what was motivated. Thus, the inter-relation between the components of the analysis evidences the phenomenon⁽²⁰⁾.

Among the stages for the development of a GT, the validation of the theoretical model is pertinent as a tool to evaluate the relevance, representativity, and applicability of the study, in an attempt to broaden the perspective about the phenomenon and the research⁽²³⁾. Therefore, there were two dynamic rounds of conversation, with three PhD researchers chosen by convenience, experts in the topic being researched (n=01) and in the methodological-theoretical references used (n=02). The meetings were scheduled and, later, carried out in a virtual room (Google Meet), and recorded with consent. In the first round, we presented categories, diagrams, and the theoretical model. In the second, we discussed the theoretical model after revisions. The rounds were mediated by the main author, with open questions, allowing for open interventions on the discussion of abstraction and generalization of the phenomenon. It stands out that no participant in the round of conversation was interviewed during data collection.

This investigation respected the ethical precepts from Resolution 466/2012 from the National Council of Health (NCS) and approved by the Research Ethics Committee at the institution responsible, according with opinion No. 2.574.139 and CAAE 83235117.2.0000.5537. It stands out that, to preserve the anonymity of the participants, we used the letter "E" for the mothers, "P" for the professionals, and "F" for the family of these mothers; the letter was followed by a number indicating the order in which the interviews were carried out (E1, E2; P1, P2; F1...). It is worth noting that all participants signed an Informed Consent.

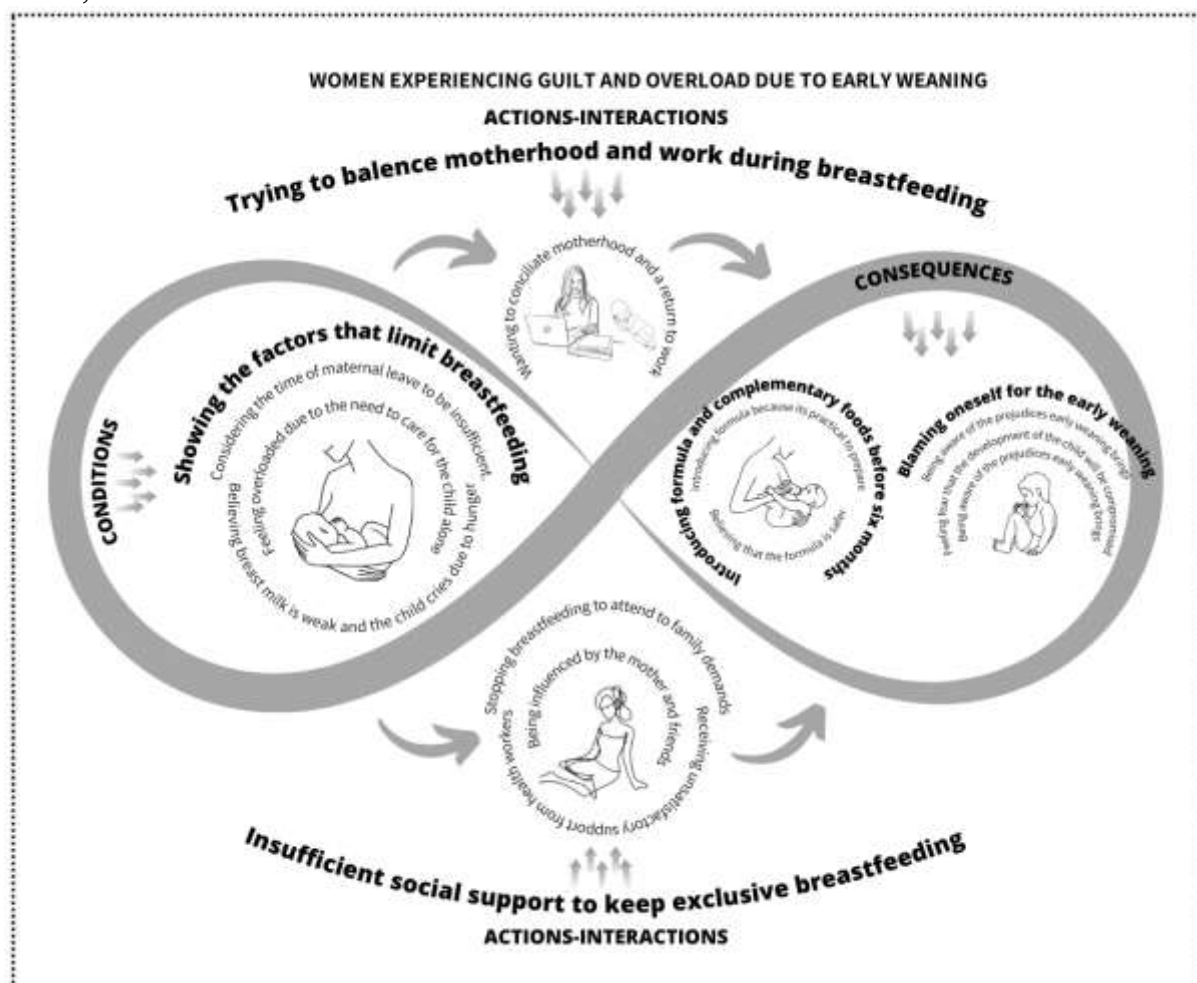
RESULTS

Regarding the sociodemographic characteristics of the participants, the age of the mothers varied from 18 to 35. Most mothers were from 24 to 29 (46.15%), with complete high school (36.84%), single (54.84%), who informed to be breastfeeding a child for the first time (47.36%). Some of them worked at home (30.76%) while the others (69.23%) had other occupations, such as salespersons, teachers, and gas station clerks. Most mothers belonged to families with an income of one minimum wage (61.53%).

Regarding the characterization of the children — specifically, the age in which the weaning took place — it was, in most cases, from two to three months of life (69.23%), with one mother who stopped breastfeeding right after hospital discharge; the others (23.07%), did so at four months. Regarding gestational age, most children were born with 38 to 40 weeks (84.61%); two others were born premature, from 36 to 37 weeks (15.38%).

Concerning the process of systematic analysis and integration of data, a phenomenon emerged, named "A woman experiencing guilt and overload due to early weaning", which was based on five categories, systematically inter-related: "Showing the factors that limit breastfeeding" (conditions); "Trying to balance motherhood and work during breastfeeding"; "Insufficient social support to keep exclusive breastfeeding" (actions/interactions); "Introducing formula and complementary foods before six months of age"; and "Self-blame due to early weaning" (Consequences). The theoretical model is shown in Figure 1.

Figure 1 - Theoretical-explanatory model for the phenomenon. Natal, Rio Grande do Norte, Brazil, 2023.



Source: Research Data, 2019.

Conditions

The category "Showing the factors that limit breastfeeding" is based on three subcategories, which are: "Believing breast milk is weak and the child cries due to hunger"; "Feeling overloaded due to the need to care for the child alone", and "Considering the time of maternal leave to be insufficient". Regarding the first subcategory, participants give some reasons, shown in the excerpts below.

At first, my girl breastfed and continued to be hungry, she cried a lot and, when I put her on my breast, she would shush, feed, feed, and just a little later she would cry again, so I'd think my milk was not strong enough, it was satiating her [...]. (E12)

[...] the old story that mother milk is not enough to feed the child; it's a taboo that people cannot seem to leave behind and deconstruct; and we cannot do this intervention in the family, it goes from one generation to another, because it doesn't matter how much you tell a patient who is having her first child, when she gets home, she'll have the experience [...]. (P1)

In the second subcategory, "Feeling overloaded due to the need to care for the child alone", we can see the overload is triggered by the increased demands of being a solo mother, which makes more difficult to breastfed.

I wanted exclusive breastfeeding, but I think it dried up a bit with these preoccupations, because his father left us. I noticed there was less milk, as much as I drank water, a lot of juices, I couldn't handle the overload alone [...]. (E9)

When you don't have anyone to help, a partner to help you in the middle of the night, to do some tasks for you, then, the mother gets overloaded. Being worried makes it more difficult because it means the mother is not thinking exclusively in breastfeeding [...] any type of problem she has in the postpartum, concerns or stress, overloads the mind and body of the woman, she gets overburdened, and there are women who find a way to get free from the "burden" which is exclusive breastfeeding, and stop it. (E8)

In the subcategory "Considering the time of maternal leave to be insufficient", participants mentioned that the length of their maternal leave, which is shorter than six months, as one of the reasons for early weaning.

[...] it's really hard, considering work laws too. If it's a public job, you get six months; if it is private, you get four months, and I think there's not a reason for this. The baby, up to the sixth month, it is essential that he gets breastfed, it's recommended, it is demanded from us, but unfortunately, the mother who's working can't do it, and this is why [...]. (E13)

[...] I believe automatic maternal leave could improve breastfeeding levels a lot; if a pregnant woman knew she would be able to stay the 180 days at home, and not only the 120, because four months seems so little, because I'll have to let her, since I have to let her anyway, I think it would be a great help in this situation [...]. (P2)

Actions-interactions

The category "Trying to balance maternity and work during breastfeeding" has the subcategory "Wanting to conciliate motherhood and a return to work". The second category, "Insufficient social support to keep exclusive breastfeeding", is formed by three subcategories: "Being influenced by the mother and friends"; "Receiving unsatisfactory support from health workers"; and "Stopping breastfeeding to attend to family demands".

That said, regarding the first category, the subcategory "Wanting to conciliate motherhood and a return to work", participants reported how hard it is for contemporary woman to manage their multiple roles in society.

I wanted exclusive breastfeeding, but it was impossible to do it for six months. I couldn't do it because of my job. That was my plan, but it didn't work, I didn't manage to conciliate both things [...]. (E2)

When I got back to work, it was the hardest part, not only mentally, but physically too. My breast got really swollen, it was too full and I couldn't go home, I got worried, because my milk would be the best remedy against flus or any other viruses he could get, but I couldn't give it to him because I was at work [...] even if he went to a nursery, they don't give him mother's milk, even if you take it there from home they won't give because of concerns about hygiene, and the fact there are other children and people there; so, you have to start giving formula after four months, unless you don't have to work. I tried, but I couldn't manage doing everything[...]. (E13)

The second category, "Being influenced by the mother and friends", showed that the lack of sufficient social support is one of the main factors involved in early weaning.

[...] my mom doesn't think that exclusive breastfeeding is important, she doesn't even want me to breastfeed because I get too thin. She thinks I should just give the formula [...] it isn't important for her, not that important, maybe because she doesn't know the subject well. It's a weakness we have, but we end up being influenced into giving complements, because we here so many friends saying it [...]. (E5)

Once an aunt of mine came here and said: "you see, I wouldn't keep a son of mine on my breast so much as you, so much to do and you're there breastfeeding, give this girl a baby bottle already and be over with that" [...]. (E7)

In the second subcategory, "Receiving unsatisfactory support from health workers", participants report having been encouraged to introduce foods to their babies diets too early, such as using formula before the recommended period, as the statements below show:

[...] last month, I went to the pediatrician, he said I already could, after four months, introduce other foods: apples, orange juice, juices with no sugar. He gave me a diet at five months, told me what he could eat with six and seven months, the pediatrician told me all that already [...]. (E2)

At the health unit I got no clear information from the team, so I got insecure. At first, I'm using artificial milk, really, I'm trying to use the baby bottle with artificial milk. I got really sad when I had to stop breastfeeding [...]. (E6)

In the subcategory "Stopping breastfeeding to attend to family demands", mothers reported that they did not breastfeed exclusively because they also had to cater to the needs of another child. Despite wanting to have more free time, participants weaned their babies earlier, as it was difficult to associate exclusive breastfeeding and other family demands.

I wanted more time, more hours to breastfeed him, but I often stopped it; I would take him out of my breast because it was time to give the medication or feed my other child. That's why I took him out, to attend to my other child [...]. (E1)

Sometimes, time is short. Not only I have to care for her, I have to care for him too. That would be more work, although my mother helps me, but, even so, sometimes I'm alone with her, but my other child calls me, wants attention, so in the end I stop breastfeeding [...]. (E6)

Consequences

Two categories emerged from the interviews: "Introducing formula and complementary foods before six months" and "Blaming oneself for the early weaning". The first has the subcategories "Introducing formula because its practical to prepare" and "Believing that the formula is safer". This component represents the outcomes and real repercussions of actions and interactions related with the phenomenon, according to five subcategories.

Regarding the first category, in the subcategory "Introducing formula because its practical to prepare", participants clarified they introduced dietary complements early because artificial milk is practical and convenient. This can be associated to the several roles women take in modern society.

[...] Powdered milk, it has everything ready, measured portions, you just have to use warm water and the amount is right. I'm still afraid, but let's say it's way more practical when you have to leave your child with someone else (...) The powder is really more practical, easier to make, because everyone knows how to mix water and powder and shake it, say that's this practical side of it (...) I got from the maternity and send someone to get the milk, I read the instructions on the can and used it of my own volition [...]. (E7)

[...] as much as we, nurses, give information on the importance of breastfeeding, mothers stop it; it's more because it's convenient, I think, and also a matter of time, but I think for most of them it's a matter of time, it's something that's going to be a bother, so they introduce another milk; very few of them keep at it. So, because it's convenient, they get the milk ready for the person who'll care for the child, it's easier to prepare the milk than for them to wean or stop to breastfeed [...]. (P3)

Regarding the second subcategory, "Believing that the formula is safer", women expressed that if pumped breast milk is handled incorrectly, it can become contaminated and transmit diseases to the child.

[...] I didn't think of pumping my milk because I was worried about hygiene, I was afraid that the hygiene wouldn't be enough and the milk would get contaminated, because I'd have to pump it, store it in the fridge, and I got afraid, I wanted to, but I was afraid he'd get contaminated with something [...]. (E13)

I'll introduce artificial milk, although I have a lot of milk, I don't know how to pump it or store it [...]. (E16)

The category "Blaming oneself for the early weaning", it has the subcategories: "Feeling guilty for introducing formula"; "Feeling fear that the development of the child will be compromised", and "Being aware of the prejudices early weaning brings". Thus, in all subcategories, negative emotional experiences were associated with the lack of exclusive breastfeeding.

[...] I feel a weigh on my conscience because sometimes my mother has to use the formula (...), I get sad, guilty, a weigh on my conscience. I sometimes stay awake at night, thinking, because I know how important exclusive breastfeeding is until the sixth month, it's a health issue, and I get worried, because I did it with my two other daughters, but with her, I didn't so I think this isn't fair [...]. (E5)

I feel sad, I think there's nothing worse; there wasn't another feeling when I stopped exclusive breastfeeding, I got sad, because I couldn't, I had no more milk at all [...]. (E2)

In the subcategory "Feeling fear that the development of the child will be compromised", the participants mentioned feeling afraid that the child's health would be harmed.

At first, I got really worried, when she had to stop it; I know how important breastfeeding is until the sixth month, especially for the mental development. I got afraid of malnutrition, because my greatest fear is that he wouldn't gain weight and grow (...) his grandparents had the same concern about his development and health [...]. (F3)

[...] my mom felt very frail, under pressure, because on one hand I was on the ICU, and on the other, she had a great responsibility on her hands, because she was caring for a newborn that completely depended on her to start feeding, which he had never done. When she got the recommendations to give him formula at home, she didn't know if she would accept it, so she was really weakened during this period, feeling very responsible and afraid he wouldn't develop [...]. (E13)

Regarding the subcategory "Being aware of the prejudices early weaning brings", it clearly showed that exclusive breastfeeding was compromised because mothers had to go back to work.

[...] Imagine having to leave home at six and come back at 10 PM, and having to stop breastfeeding because I spent about 10 hours out of home, with patients, at work; so I stopped breastfeeding (...) When I got home, I gave him formula on the bottle, because at home, I know, I'm aware that this, in a way, is harmful, but I was born, let's say this is cultural for me and women in my family, we work and our child is raised like this, I mean, there's other types of care, with pacifiers and baby bottles (...) I have to grow so I can have a job and support them [....] (E8)

It's really hard that you're forced to work, you have to let your child with someone else, and you keep imagining that his food is right there, already prepared inside of you, but you can't be with him all the time, breastfeeding. So, you, after four months, have to introduce the formula, even knowing how important it is. But, unless you don't have to work out [...]. (E12)

DISCUSSION

Regarding the conditions, results show that early weaning is related with cultural beliefs, such as associating the cries of the children with an erroneous, socially disseminated perspective about breast milk as something insufficient or weak. We believe this setting reflects a culturally diversified society, as well as the lack of knowledge from mothers and their social networks regarding the composition of breast milk. In accordance with these findings, another investigation shows that statements of mothers weaning their babies in the first 15 to 30 days involved the introduction of other liquids or foods, mostly because of cultural and educational beliefs, such as that breast milk is insufficient⁽²⁴⁾.

An analysis of the reports in this study showed that the myth regarding weak milk, excessive crying, prematurity, lack of experience, negative experiences in motherhood, the lack of previous experiences with breastfeeding in the family, and the lack of support led to early weaning. Furthermore, motherhood is a significant burden on women, since most of them have to care for their children alone, which has psychic and physical consequences.

Thus, it is necessary to have a sensible and attentive look toward the needs of these overloaded mothers. We, especially the nurses, must be careful to identify them, so interventions can be carried out fast when it comes to mother-child assistance, so integral care can be provided to the mother-child dyad, and to the mental health of the mother.

Returning to work was a difficulty found to maintain exclusive breastfeeding⁽²⁵⁾. Broadly, social and emotional aspects of the life of the woman-mother-worker who breastfeeds can affect the child or the mother who is about to end her maternal leave and go

back to work. These issues are not addressed by official materials that promote EB, hiding the difficulties in maintaining this practice after the mother resumes her professional routine, silencing the issue of weaning and neglecting (inter)subjective aspects related to it⁽¹⁸⁾.

Regarding the Brazilian maternity leave, its historical construction and the elaboration of the relevant laws is a set of characteristics that lead to inequalities between public and private workers, leading to different treatments depending on the insertion and type of employment bond in the job market; the contributions of the person to social security; sex-based differences; and the fact that, in the private sector, the increase of the maternity leave to six months is optional. That means that being unemployed and lacking resources to contribute to social security by oneself mean that these women will have no protection⁽²⁶⁾.

Considering the above, we can see the importance of equal access to maternity leave; there should be equal rights to all working women, whether they work in the public or private sector.

Regarding this issue, a study showed the relevance of increasing paid maternity leave from 120 to 180 days for formal workers, without distinction; in addition to public policies that can subsidize informal workers, providing them with the necessary conditions to breastfeed for more than six months⁽²⁷⁾. These findings reiterate the need to discuss the increase of maternity leave to 180 days, regardless of employment bonds. Health workers, civil society, and state sectors should provide sensible care by transforming maternity leave into a right for all working women.

The experience of maternity leads to changes in the lives of women and their families. This happens because maternity requires adapting one's routine to the needs of the child, and strengthening the support network to deal with these new, unique experiences.

This study also highlights the insufficient support from health professionals regarding encouraging EB. This is in accordance with another research, which corroborates the need of interventions to maximize the social support from health professionals, relatives, and prenatal care groups, since this provides an exponential contribution to the efficacy of exclusive breastfeeding⁽²⁸⁾. These findings are in agreement with those of a quasi-experimental study from Saudi Arabia, whose goal was analyzing the effects of counseling, suggesting that education and support to breastfeeding in the postpartum are factors that have a positive impact on the time of exclusive breastfeeding⁽²⁾.

The encouragement and support to breastfeed received from society and professionals was not consistent, according with participants of the study, during their pregnancy and early motherhood, especially after hospital discharge. As a consequence, the prevalence of

exclusive breastfeeding is far from the recommended one. Thus, the lack of professional orientation about breastfeeding after discharge, shown in this study, should not be taking place. It also stands out that, it is in this period, when mother and child are adapting to one another, that most complications take place; thus, social support is paramount in this process⁽²⁹⁾.

Regarding the consequences, the formula was strongly represented as an alternative food. Due to its practical nature and the independent lives of modern women, who can care for their homes, have a job, and continue to provide nutrition to their children, the formula has transformed artificial milk feeding into a cultural practice⁽³⁰⁾. This can be related, especially, with the lack of health education to strengthen the support network of women, and to the multiple roles they take on in our society. A result of this situation was found by researchers according to who introducing formula or other artificial milks can increase the risk of early weaning in 4.7 times⁽³¹⁾.

This is also associated with the use of artificial foods and baby bottles. A cross-sectional study carried out in the south of Asia to analyze factors that influence the length of exclusive breastfeeding showed that conditions related with child health are worrisome in the long term. These include malnutrition, impaired growth and development, pneumonia, obesity, diabetes, and higher blood pressure⁽¹⁵⁾.

Another study, developed in a maternity in the south of Brazil shows that early weaning is more likely to occur up to 45 days after delivery when the grandmother is the main support in caring for the child⁽²⁵⁾.

Still in this context of being influenced by one's support network, this investigation showed the influence of health professionals, especially pediatricians and nurses. This professional support to the woman during the pregnancy-early motherhood period is extremely important, being considered as a determinant of adherence to exclusive breastfeeding. In addition, the family has a decisive role in the success of this practice or lack thereof.

As a result, it is really important to seek to engage family members in breastfeeding with information campaigns. These measures can help grandmothers not to overestimate formulas, recognizing the relevance of exclusive breastfeeding.

In this regard, we also found feelings of guilt being expressed by the moral conscience of mothers, influenced by external factors, related to the internalization of expectations regarding their conduct and social behavior. This guilt is permeated by the feeling that breastfeeding is mandatory, as it implies a show of love towards a child, and, thus, the

fulfilling of the sacred duty of "being a mother". The guilt is a feeling coming from the outside in; it is the judgment of others about oneself; it is judging one's own actions according to the reactions of others⁽³²⁾. Guilt has also been associated with child formula, which is perceived as a moral failure⁽³³⁾.

These reports show the feeling of guilt in these mothers, since they cannot attend to the recommendations of health organs. These findings show how relevant it is for workers to propose interventions and preventive actions related with the emotional aspects experienced by maternal figures, especially within their families, in order to reduce early weaning.

The roles of mother and of responsible for feeding the child are not socially fixed attributions that women naturally assume and develop in harmony; they are socially and individually built challenges and demands that involve resignification, conflict, and a redefinition of the mother's social identity⁽³²⁾. Therefore, the practice of breastfeeding represents an intersubjective and complex process, with psychic and social outcomes for those involved; these factors are often neglected or overlooked⁽¹⁸⁾.

The theoretical constructs presented show that the theory emerging here can contribute to change the *praxis* of health workers in mother-child care, in the context of early weaning. The complexity of relationships between factors that contribute to early weaning, shown in the theoretical model, can give support to actions from managers and health workers to advocate for longer maternity leaves, and to confront gender inequalities, professional activities with conflicts of interest, and the abusive marketing for the use of formula.

The lack of a support network, the insufficient maternity leave, and the feelings of guilt were challenges to the mothers, since they need to balance several responsibilities in addition to being mothers and to introduce complementary foods in the diet of their children before their sixth month of age. Therefore, it is extremely necessary to devote a sensible look to give emotional support to the mothers, as a way to facilitate minimizing their feelings of guilt and fear due to the fact that exclusive breastfeeding is not taking place.

FINAL CONSIDERATIONS

The emergent theoretical model showed that early weaning has unique and complex associations with several elements of the mother-child dyad. Breastfeeding goes beyond physiology, being influenced by the life story of the mother, due to meanings constructed both individually and through social interaction. Among these, beliefs and myths from previous generations stand out, marked by the cultural diversity in our society.

Understanding the experiences of mothers with early weaning is essential to rethink *praxis*, assistance, and the delineation of interventions, especially cultural ones, to promote health in contexts where weaning is a reality. It is also necessary for health workers to get involved with health programs for mothers and children, considering the complexity of the process of breastfeeding, in order to aid in the qualification of care to the mother's health; to protect the child in an integral and sensible way; and, especially, to strengthen the support network, so the mother feels embraced in their new role.

We expect this study to contribute for the advancement of the science of nursing and for the practice of health professionals, raising their awareness regarding an understanding of early weaning was a dynamic and unique phenomenon, marked by different experiences and human interactions. This expectation is due to the fact that this study is based on investigative data, going beyond descriptive studies, especially due to the scarcity of literature about the theorization and structuring of early weaning in Brazil.

The main limitations of this study are the fact we did not establish a relationship with participants before the research started, and, thus, did not report on the characteristics of the interviewer, in addition to the fact that the theoretical model was validated only by researchers, without a selection of participants of the study. However, this study is innovative as it constructs a theoretical-representative model of the phenomenon investigated to guide the practice of health workers, to provide subsidies to formulate intersectoral public policies, such as increasing to six months the length of maternity leaves in Brazil, and to encourage discussions between managers and health professionals.

REFERENCES

1. Shafaei FS, Mirghafourvand M, Havizari S. The effect of prenatal counseling on breastfeeding self-efficacy and frequency of breastfeeding problems in mothers with previous unsuccessful breastfeeding: a randomized controlled clinical trial. *BMC Womens Health*. 2020;20:94. doi: <https://doi.org/10.1186/s12905-020-00947-1>
2. AlQurashi A, Wani T, Alateeq N, Heena H. Effect of counseling service on breastfeeding practice among saudi mothers. *Healthcare*. 2023;11(6):878. doi: <https://doi.org/10.3390/healthcare11060878>
3. Ministério da Saúde (BR). Saúde da criança: aleitamento materno e alimentação complementar. Brasília, DF: Ministério da Saúde; 2015 [cited 2022 Oct 20]. Available from: https://bvsmis.saude.gov.br/bvs/publicacoes/saude_crianca_aleitamento_materno_cab23.pdf

4. United Nations International Children's Emergency Fund. Global breastfeeding scorecard, 2018: enabling women to breastfeed through better policies and programmes. New York: UNICEF; 2018 [cited 2022 Oct 20]. Available from: <https://www.who.int/publications/m/item/global-breastfeeding-scorecard-2018-enabling-women-to-breastfeed-through-better-policies-and-programmes>
5. Yang SF, Burns E, Salamonson Y, Schmied V. Expectations and experiences of nursing students in supporting new mothers to breastfeed: a descriptive qualitative study. *J Clin Nurs*. 2019;28(11-12):2340-50. doi: <https://doi.org/10.1111/jocn.14836>
6. Dibisa TM, Sintayehu Y. Exclusive breast feeding and its associated factors among mothers of <12 months old child in Harar Town, Eastern Ethiopia: a cross-sectional study. *Pediatric Health Med Ther*. 2020;11:145-52. doi: <https://doi.org/10.2147/PHMT.S253974>
7. Joseph FI, Earland J. A qualitative exploration of the sociocultural determinants of exclusive breastfeeding practices among rural mothers, North West Nigeria. *Int Breastfeed J*. 2019;14:38. doi: <https://doi.org/10.1186/s13006-019-0231-z>
8. Mosquera PS, Lourenço BH, Gimeno SGA, Malta MB, Castro MC, Cardoso MA, et al. Factors affecting exclusive breastfeeding in the first month of life among Amazonian children. *PLoS One*. 2019;14(7):e0219801. doi: <https://doi.org/10.1371/journal.pone.0219801>
9. Gianni ML, Bettinelli ME, Manfra P, Sorrentino G, Bezze E, Plevani L, et al. Breastfeeding difficulties and risk for early breastfeeding cessation. *Nutrients*. 2019;11(10):2266. doi: <https://doi.org/10.3390/nu11102266>
10. Carreiro JA, Francisco AA, Abrão ACFV, Marcacine KO, Abuchaim ESV, Coca KP. Dificuldades relacionadas ao aleitamento materno: análise de um serviço especializado em amamentação. *Acta Paul Enferm*. 2018;31(4):430-8. doi: <https://doi.org/10.1590/1982-0194201800060>
11. Martins FA, Ramalho AA, Andrade AM, Optiz SP, Koifman RJ, Silva IF. Padrões de amamentação e fatores associados ao desmame precoce na Amazônia ocidental. *Rev Saude Publica*. 2021;55:21. doi: <https://doi.org/10.11606/s1518-8787.2021055002134>
12. Colombo L, Crippa BL, Consonni D, Bettinelli ME, Agosti V, Mangino G, et al. Breastfeeding determinants in healthy term newborns. *Nutrients*. 2018;10(1):48. doi: <https://doi.org/10.3390/nu10010048>
13. Shiraishi, M, Matsuzaki M, Kurihara S, Iwamoto M, Shimada M. Post-breastfeeding stress response and breastfeeding self-efficacy as modifiable predictors of exclusive breastfeeding at 3 months postpartum: a prospective cohort study. *BMC Pregnancy Childbirth*. 2020;20(1):730. doi: <https://doi.org/10.1186/s12884-020-03431-8>
14. McGuire S. Centers for disease control and prevention. 2013. strategies to prevent obesity and other chronic diseases: The CDC guide to strategies to support breastfeeding mothers and babies. Atlanta: U.S. Department of Health and Human Services, 2020. *Adv Nutr*. 2014;5(3):291-2. doi: <https://doi.org/10.3945/an.114.005900>

15. Arif S, Khan H, Aslam M, Farooq M. Factors influencing exclusive breastfeeding duration in Pakistan: a population-based cross-sectional study. BMC Public Health. 2021;21(1):1998. doi: <https://doi.org/10.1186/s12889-021-12075-y>
16. Abdulahi M, Fretheim A, Magnus JH. Effect of breastfeeding education and support intervention (BFESI) versus routine care on timely initiation and exclusive breastfeeding in Southwest Ethiopia: study protocol for a cluster randomized controlled trial. BMC Pediatr. 2018;18(1):313. doi: <https://doi.org/10.1186/s12887-018-1278-5>
17. Universidade Federal do Rio de Janeiro. Aleitamento materno: prevalência e práticas de aleitamento materno em crianças brasileiras menores de 2 anos 4: ENANI 2019 [Internet]. Rio de Janeiro: UFRJ; 2021 [cited 2022 Oct 20]. Available from: https://enani.nutricao.ufrj.br/wp-content/uploads/2021/11/Relatorio-4_ENANI-2019_Aleitamento-Materno.pdf
18. Kalil IR, Aguiar AC. Aquilo que a amamentação retira e o desmame restaura: relatos maternos sobre tensionamentos e materiais de comunicação e informação em saúde. RECIIS. 2021;15(3):597-613. doi: <https://doi.org/10.29397/reciis.v15i3.2328>
19. Primo CC, Brandão MAG. Teoria Interativa de Amamentação: elaboração e aplicação de uma teoria de médio alcance. Rev Bras Enferm. 2017;70(6):1191-8. doi: <https://doi.org/10.1590/0034-7167-2016-0523>
20. Lacerda MR, Santos JLG. Teoria fundamentada nos dados: bases teóricas e metodológicas. Porto Alegre: Moriá; 2019.
21. Souza VR, Marziale MH, Silva GT, Nascimento PL. Translation and validation into Brazilian Portuguese and assessment of the COREQ checklist. Acta Paul Enferm. 2021;34:eAPE02631. doi: <https://doi.org/10.37689/acta-ape/2021AO02631>
22. Ministério da Saúde (BR). Sistema de Informação da Atenção Básica. Brasília, DF: Ministério da Saúde; 2015.
23. Adamy EK, Zocche DAA, Vendruscolo C, Santos JLG, Almeida MA. Validation in grounded theory: conversation circles as a methodological strategy. Rev Bras Enferm. 2018;71(6):3121-6. doi: <https://doi.org/10.1590/0034-7167-2017-0488>
24. Lima APE, Castral TC, Leal LP, Javorski M, Sette GCS, Scochi CGS, Vasconcelos MGL. Aleitamento materno exclusivo de prematuros e motivos para sua interrupção no primeiro mês pós-alta hospitalar. Rev Gaúcha Enferm. 2019;40:e20180406. doi: <https://doi.org/10.1590/1983-1447.2019.20180406>
25. Wagner LPB, Mazza VA, Souza SRRK, Chiesa A, Lacerda MR, Soares L. Fortalecedores e fragilizadores da amamentação na ótica da nutriz e de sua família. Rev Esc Enferm USP. 2020;54:e03563. doi: <https://doi.org/10.1590/S1980-220X2018034303564>

26. Sorj B, Fraga AB. Licenças maternidade e paternidade no Brasil: direitos e desigualdades sociais. *Rev Bras Estud Popul.* 2022;39:1-19. doi: <https://doi.org/10.20947/S0102-3098a0193>
27. Fernandes RC, Höfelmann DA. Intention to breastfeed among pregnant women: association with work, smoking, and previous breastfeeding experience. *Ciênc Saúde Coletiva.* 2020;25(3):1061-72. doi: <https://doi.org/10.1590/1413-81232020253.27922017>
28. Isiguzo C, Mendez DD, Demirci JR, Youk A, Mendez G, Davis EM, et al. Stress, social support, and racial differences: dominant drivers of exclusive breastfeeding. *Matern Child Nutr.* 2023;19(2):e13459. doi: <https://doi.org/10.1111/mcn.13459>
29. Bauer DFV, Ferrari RAP, Cardelli AAM, Higarashi IH. Orientação profissional e aleitamento materno exclusivo: um estudo de coorte. *Cogitare Enferm.* 2019;24. doi: <http://doi.org/10.5380/ce.v24i0.56532>
30. Gil CA. Os anúncios de leite artificial no Rio de Janeiro da Primeira república – maternidade e alimentação infantil em debate. *Rev Ingesta.* 2019;1(2):236-7. doi: <https://doi.org/10.11606/issn.2596-3147.v1i2p236-237>
31. Mendes SC, Lobo IKV, Sousa SQ, Viana RPT. Factors associated with a shorter duration of breastfeeding. *Ciênc Saúde Coletiva.* 2019;24(5):1821-9. doi: <https://doi.org/10.1590/1413-81232018245.13772017>
32. Giordani RCF, Piccoli D, Bezerra I, Almeida CCB. Maternidade e amamentação: identidade, corpo e gênero. *Ciênc Saúde Colet.* 2018;23(8):2731-9. doi: <https://doi.org/10.1590/1413-81232018238.14612016>
33. Jackson L, Pascalis L, Harrold J, Fallon V. Guilt, shame, and postpartum infant feeding outcomes: A systematic review. *Matern Child Nutr.* 2021;17(3):e13141. doi: <https://doi.org/10.1111/mcn.13141>

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