

Profile of Breastfeeding Practice among Mothers of Brazilian Children Attended in a Dentistry Preventive Program

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ABSTRACT

Objective: To evaluate the breastfeeding practice of mothers of children assisted in the educational and preventive dentistry program to create actions to promote, protect and support breastfeeding. **Material and Methods:** This is a cross-sectional study with a quantitative approach carried out in a dental clinic for babies. A questionnaire was applied to the mothers containing 10 multiple choice questions about breastfeeding practices and attitudes. Data were stored in a Microsoft Excel database for descriptive statistical analysis. **Results:** 614 mothers answered the questionnaire. It was found that 96.4% of mothers considered breastfeeding the best way to feed a baby and the child's health benefits stood out as the main reason (98.7%) for breastfeeding. According to 82.9% of mothers, the ideal time to breastfeed the baby is up to 2 years of age; 81.8% breastfed or intended to breastfeed their children up to this age, finding it perfectly natural to breastfeed in public (72.1%). The greatest fear of mothers was not being able to breastfeed their child long enough (61.4%), feeling guilty about it (77%). On the other hand, breastfeeding in public was considered a fantastic attitude (56.8%). **Conclusion:** Mothers in this sample have information about the recommendations of the health agencies regarding breastfeeding; however, there was a large weaning index among them.

Keywords: Infant Nutritional Physiological Phenomena; Breast Feeding; Age Groups.

Introduction

Breast milk is the ideal food for the healthy growth of newborns, as it aids the child's motor and cognitive development, as well as protects them from chronic and infectious diseases. Among infants under three months, 55% of deaths from diarrheal disease and respiratory infections would be prevented [1]. Because of all the benefits, the World Health Organization (WHO) recommends that children be exclusively breastfed without complementary foods until the sixth month of life. After this age, other foods should be introduced into the infant's diet, with breastfeeding maintained for up to 24 months or more [2]. WHO also recommends that mothers with suspected or confirmed COVID-19 continue to breastfeed their children since the benefits of breastfeeding substantially outweigh the potential risks for transmission [3]. Extreme precautions must be taken to minimize the risk of contagion. Among these precautions, mothers should wash their hands with soap and water before touching the baby and wearing a mask. The baby needs close contact with its mother and must suckle directly. If the mother's health status does not allow direct breastfeeding, the newborn should be fed breast milk previously expressed by the mother and without pasteurization, highlighting the potential passage of antibodies against SARS-CoV-2 through breast milk [4].

In addition to the advantages for the baby, breastfeeding also benefits the mother, such as reducing the risk of ovarian cancer, prevent breast cancer, and strengthen the relationship between mother and child [5,6].

Recent studies also correlate advantages of breastfeeding practice with good oral health. Babies who were exclusively breastfed for the first 6 months were less likely to have tooth alignment problems, such as open bites, crossbites, and overbites, than those who were exclusively breastfed for shorter periods or not, and had greater protection against dental caries in deciduous teeth [7,8]. Despite all the knowledge regarding the benefits of breastfeeding, it is still very difficult for women to perform breastfeeding exclusively, frequently occurring early weaning, understood as the interruption of breastfeeding before the infant is six months old, regardless of the reason, being an undesirable reality. However, a significant association is present between the mother's young age and interruption of breastfeeding, as well as a situation of low income and early weaning [9].

For more than two decades, the Baby Clinic of the Faculty of Dentistry of Araçatuba - São Paulo State University, Brazil (FOA - UNESP), has been developing actions in favor of establishing good habits for the maintenance of oral health in children aged 0 to 3 years, especially in the prevention of dental caries with excellent results. To integrate and create actions to promote, protect, and support breastfeeding, this work was carried out to describe and analyze the profile of breastfeeding practice among mothers of infants treated in the educational and preventive project in dentistry.

Material and Methods

Ethical Clearance and Study Design

This research was approved by the Research Ethics Committee (CAAE: 22352713.7.0000.5420). This is a cross-sectional study of a quantitative approach conducted in a dental care clinic for babies aged 0 to 60 months of both sexes. In the present study, the participants were the mothers of the babies assisted in that institution, who could or could not be breastfeeding and the baby had normal general health.

We selected the samples for convenience and approached the mothers before the routine baby dental appointment when they received information about the research and the invitation to participate. Patients

whose guardians did not sign the Informed Consent Form (ICF) were not included. We performed data collection after the baby received dental care.

Data Collection

For data collection, conducted during January to December 2018, a questionnaire was applied to a global breastfeeding survey [10], containing 10 multiple-choice questions that addressed mothers' practice and attitudes toward breastfeeding and their breastfeeding experience. The questions about breastfeeding aimed to obtain information such as: ideal time for breastfeeding and time the mothers intended to breastfeed; main reason for breastfeeding; the biggest challenge for the mother to breastfeed the baby; the fears surrounding breastfeeding and the predominant feeling if she could not breastfeed; question about maternal reactions to breastfeeding in public.

We have also previously tested this questionnaire on a small number of mothers as a pilot study to test the reliability of the questions and the time required to conduct an interview with a mother. This contributed to make some adjustments. The questionnaire was administered by a single postgraduate student (DAC) in dentistry who participated in this study, previously trained and supervised during the data collection process by the research professor (RFC).

Data Analysis

After reviewing and coding the data, they were typed, stored and structured in a spreadsheet in Microsoft Excel, which provided reports on prevalence indicators. The analysis was based on descriptive statistics, and the answers were grouped and quantified by thematic categories that corresponded to the content of the information presented.

Results

This study involved 614 mothers of children participating in a preventive program where the prevalent age of these children was 6 months of life (7.2%), followed by the age of 24 months of life (6.4%). It revealed a virtually unanimous number of mothers (96.4%) who believe that breastfeeding is the best way to feed the baby. Although this optimistic data and considering the age range of the babies of the mothers who participated in this research, it was found that only 43.2% of them were still breastfeeding at the time of this research.

Most mothers think that the ideal time for their child to be breastfed corresponds to the age range of 6 to 24 months, with 39.7% judging to be the ideal time of 12 to 24 months, and 31.1% from 6 to 12 months (Table 1). It was also verified that the real time that the interviewed mothers breastfed their babies was from 6 to 12 months (28.2%) and 12 to 24 months (23.5%). However, a significant number of mothers also breastfed only for 3 to 6 months (17.6%). Of the 614 mothers interviewed, 349 (56%) no longer breastfed their babies. Although many mothers cannot breastfeed their children for the correct time, established by experts, 98.7% believe that the main reason for breastfeeding is due to the benefits that this kind of benefit can cause to health.

Table 1. Percentage indicating the ideal time for breastfeeding and that actually practiced according to the interviewed mothers' point of view.

Questions	Breastfeeding Time (Months)					
	0-3	3-6	6-12	12-24	More 24	Never
How long should a baby be optimally breastfed?	2.30%	9.8%	31.1%	39.7%	17%	<1%
How long did you breastfeed your baby?	12.5%	17.6%	28.2%	23.5%	14%	4.2%

Asked about the feeling of guilt if they could not breastfeed the baby, 77% of the interviewed mothers stated that they would exhibit this feeling because they could not breastfeed. Regarding the most challenging part of breastfeeding, 30% of mothers responded that breastfeeding their child would never be a challenge, while 24.8% reported the pain associated with breastfeeding, followed by the need to learn breastfeeding early (18.6%). The frequent complaint that many of these mothers have regarding breastfeeding, that is, their main fears were the inability to feed the baby long enough (61.4%), mainly due to the return to work, because they have insufficient milk to nourish the baby properly, thus introducing early, complementary feeding to the child's diet; as well as the fear of their children not being able to make the right catch (17.9%) (Figure 1).

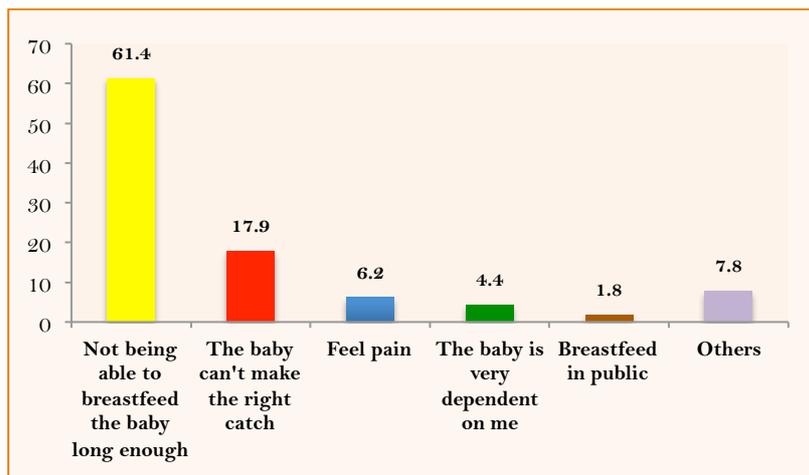


Figure 1. Main fears of mothers about breastfeeding.

For most mothers interviewed, breastfeeding in public is seen as perfectly natural (72.1%), while only 14.3% think that breastfeeding in public is embarrassing and compelling (Figure 2).

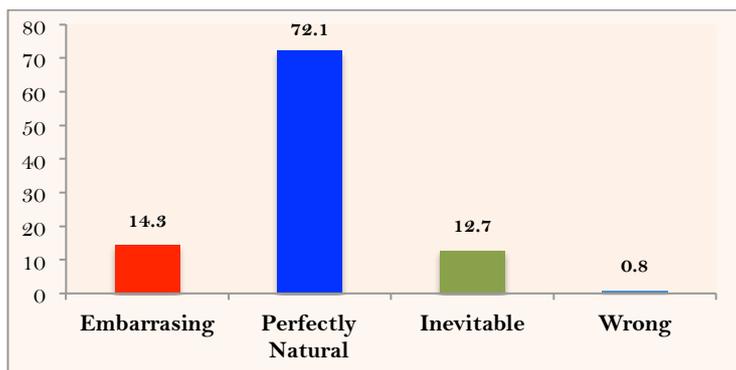


Figure 2. Opinions about breastfeeding in public.

Regarding what mothers think about seeing other women breastfeed in public, 56.8% of respondents said that if they saw a woman breastfeeding a 2-year-old child in public, they would find this mother's dedication and perseverance fantastic. However, although they consider it a great example to publicly breastfeed a 2-year-old child, 29.2% of respondents think that breastfeeding up to 2 years would be a very long time (Figure 3).

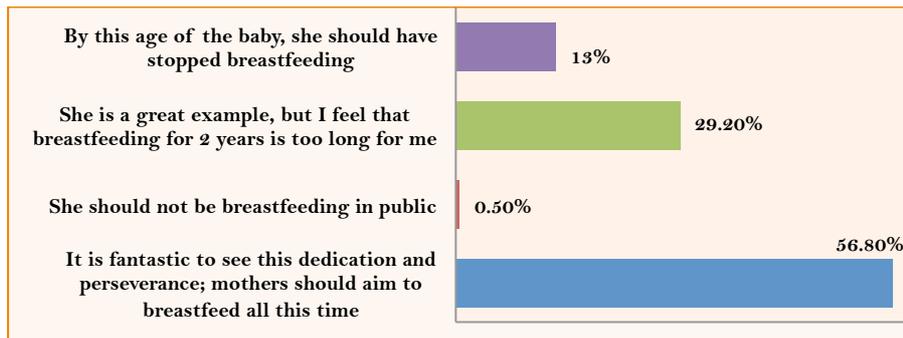


Figure 3. First thought of mothers seeing women breastfeeding in public.

Discussion

Considering the importance of breastfeeding and knowing its benefit to the health of the baby through information given during pregnancy based on WHO recommendations, most mothers interviewed in this research agree that the ideal time for their baby to be breastfed is between 6 and 24 months. Although mothers participating in this project also considered breastfeeding the best way to feed a baby (96.4%), many did not breastfeed for as long as they would like. Approximately 40% of women interviewed stated that the optimal breastfeeding time is 12 to 24 months, but only 23.5% achieved this goal. Aspects such as work away from home or even housework end up causing early weaning or breastfeeding for a minimum period of time, according to WHO recommendations [2].

A similar survey conducted in a community-based study of 307 mothers who had children aged 2 years and under showed that the mothers studied knew that breastfeeding is the most important nutritional source for the baby, but 92.5% of mothers defined weaning as the cessation of breastfeeding, and it was clear that they interpreted the introduction of food as a period to extinguish breastfeeding for the child, resulting from insufficient knowledge about complementary nutrition [11].

Most mothers in this survey, represented by 56.8%, no longer breastfed their children. Factors such as household chores, away-from-home work and consequently the need to leave children in the nursery at a very young age indicate a frequent and undesirable reality because, despite all the knowledge regarding the benefits of breastfeeding, there is still great. Moreover, it is difficult for these mothers to breastfeed exclusively until the child's 6 months of life, and it is easier and more viable at the moment to often introduce artificial milk or other foods into the diet, thus leading to early weaning.

Regarding the benefit of breastfeeding, that is, the main reason for breastfeeding, 98.7% said they breastfeed because this act causes health benefits to the baby, which is real, since there are reports that predominant breastfeeding for at least six months proved to be a significant protective factor, reducing the frequency of medical appointments and hospitalizations, particularly for upper tract respiratory infections [12,13]. Breastfeeding, in addition to the many advantages referred to health as a whole, plays a preventive role in the occurrence of dental malocclusions [14]. However, we know that this practice benefits both children and mothers, with protection against breast cancer, intrapartum spacing, and probable protection against ovarian cancer and type 2 diabetes [5,15].

The fact that the mother often fails to breastfeed and feels guilty if she cannot breastfeed (77% of them would feel guilty), despite a strong desire to do so, may be due to lack of access to guidance and adequate support professionals or more experienced people inside or outside their family [16,17]. Knowledge of breastfeeding management must be acquired to be successfully prolonged, so nursing mothers need continuous

stimulation and support without having to deal with their own needs, difficulties that may happen during the breastfeeding period [18,19].

A study of 76 industrial worker mothers showed that 97% started breastfeeding, but although 55% still breastfeed after the fourth and fifth month of birth when they returned to work, only 12% did it exclusively [20]. However, this is not a frightening fact since the global average of exclusive breastfeeding in children under six months is low, 36%, and improving this rate is a worldwide challenge [15].

Although 30% of the sample reported not being a breastfeeding challenge, 24.5% and 18.6% respectively reported pain associated with breastfeeding and having to learn to breastfeed as challenges to be faced. Thus, pain, reported by mothers as the most challenging part of breastfeeding, is the main difficulty in breastfeeding in the postpartum period, followed by breast engorgement, inadequate positioning of the newborn to the breast, and the belief that not having enough milk [21,22].

In several studies and in the present research, women showed fears about breastfeeding, among which are “I cannot breastfeed long enough, that is, having low milk (61.4%)”, “my baby unable to make the correct grip” (17.9%), “feel pain” (6.2%). These situations demonstrate the insecurity of women regarding breastfeeding and can, in many cases, contribute to the early interruption of breastfeeding [22].

Another aspect pointed out in this research was breastfeeding in public, considered perfectly natural for most mothers (72.1%), even if the child is around 24 months of age (56.8%). Women should know that breastfeeding to the age of two or older does not let the child become dependent on the mother, as psychological dependence is determined by the type of relationship between the two. Breastfeeding should be viewed positively, not as a type of blackmail or reward, and should not be breastfed every time the child has a setback, but in times or situations that are comfortable for the woman [10].

The preventive educational program for clinical babies primarily aims to prevent dental caries; however, a constant concern also involves breastfeeding because it is directly associated with the baby's oral health. In the present study, the main limitation was that we did not associate the data found with the oral situation of the children whose mothers were evaluated. For this reason, new research has been carried out for this purpose.

Many efforts are being made in Brazil to implement breastfeeding incentives and support policies. The data from this research will serve to redirect the work of Baby Clinic to improve strategies to increase the prevalence of breastfeeding among mothers who use this service.

Conclusion

The results revealed, in the studied sample, that weaning is high. However, it is clear that even for mothers who know the guidelines of the World Health Organization, it is necessary to reevaluate the stimulation and monitoring of them during breastfeeding.

Authors' Contributions

DAC  <https://orcid.org/0000-0003-0622-8236> Formal Analysis, Investigation, Writing - Original Draft and Writing - Review and Editing.

RFC  <https://orcid.org/0000-0002-0849-3247> Conceptualization, Methodology, Writing - Review and Editing and Supervision.

All authors declare that they contributed to critical review of intellectual content and approval of the final version to be published.

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Conflict of Interest

The authors declare no conflicts of interest.

Data Availability

The data used to support the findings of this study can be made available upon request to the corresponding author.

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