



Breastfeeding in the context of visual impairment: maternal perception^a

Aleitamento materno no contexto da deficiência visual: percepção materna

La lactancia materna en el contexto de la discapacidad visual: la percepción materna

Anny Karolainy da Silva Sousa¹
 Camila Chaves da Costa¹
 Livia Karoline Torres Brito¹
 Maria de Lourdes Leite Paiva²
 Ana Kristia da Silva Martins³
 Anne Fayma Lopes Chaves¹

1. Universidade da Integração Internacional da Lusofonia Afro-Brasileira, Programa de Pós-Graduação em Enfermagem. Redenção, CE, Brasil.

2. Universidade da Integração Internacional da Lusofonia Afro-Brasileira, Instituto de Ciências Exatas e da Natureza. Redenção, CE, Brasil.

3. Universidade Federal do Ceará, Programa de Pós-graduação em Psicologia. Fortaleza, CE, Brasil.

ABSTRACT

Objective: to understand the perception of mothers with visual impairment about the breastfeeding process. **Method:** cross-sectional, qualitative study, carried out between April and May 2024 through interviews in the state of Ceará, Brazil. The study population consisted of women with visual impairment, including those over 18 years of age. Fourteen women were eligible; however, six had stopped breastfeeding more than three years ago. Eight women participated in the study. Sampling was by convenience and exponential sampling snowball. For textual analysis, the IRAMUTEQ software was used. **Results:** The analysis generated three classes: "Learning to breastfeed", which addresses the feeling of fear and discovery of confidence during breastfeeding; "Desire and difficulties in breastfeeding", which describes the challenges faced by women such as fear, insecurity and the false idea of incapacity; and "Presence and absence of the support network", which highlights the importance of family and professional support. **Final considerations and implications for practice:** the experience of mothers with visual impairment in breastfeeding involves challenges such as insecurity, lack of guidance, and the need for adequate support. The implementation of inclusive actions in health services and the strengthening of support networks are essential to ensure safe and satisfactory breastfeeding.

Keywords: Breastfeeding; Health Promotion; People with Visual Impairment.

RESUMO

Objetivo: conhecer a percepção das mães com deficiência visual sobre o processo de aleitamento materno. **Método:** estudo transversal, qualitativo, realizado entre abril e maio de 2024 por meio de entrevistas no estado do Ceará, Brasil. A população do estudo foi composta por mulheres com deficiência visual, incluíram-se as maiores de 18 anos. Foram 14 mulheres elegíveis, contudo, seis haviam encerrado a amamentação há mais de três anos. As participantes da pesquisa foram oito mulheres. A amostragem é por conveniência e bola de neve exponencial. Para a análise textual foi utilizado o *software* IRAMUTEQ. **Resultados:** a análise gerou três classes: "Aprendendo a amamentar", que aborda o sentimento de medo e descoberta da confiança durante a amamentação; "Desejo e dificuldades para amamentar", que descreve os desafios enfrentados como medo, insegurança e a falsa ideia de incapacidade; e "Presença e ausência da rede de apoio", que destaca a importância do apoio familiar e profissional. **Considerações finais e implicações para a prática:** a experiência de mães com deficiência visual na amamentação envolve desafios como insegurança, falta de orientação e a necessidade de suporte adequado. Ações inclusivas nos serviços de saúde e o fortalecimento das redes de apoio são essenciais para garantir uma amamentação segura e satisfatória.

Palavras-chave: Aleitamento Materno; Pessoas com Deficiência Visual; Promoção da Saúde.

RESUMEN

Objetivo: comprender la percepción de las madres con discapacidad visual sobre el proceso de lactancia materna. **Método:** estudio cualitativo transversal, realizado entre abril y mayo de 2024 mediante entrevistas en el estado de Ceará, Brasil. La población del estudio fueron mujeres con discapacidad visual, incluyendo mayores de 18 años. Catorce mujeres fueron elegibles; sin embargo, seis habían interrumpido la lactancia materna hacia más de tres años. Los sujetos de la investigación fueron ocho mujeres. El muestreo se realizó por conveniencia y por efecto bola de nieve exponencial. Para el análisis textual, se utilizó el *software* IRAMUTEQ. **Resultados:** el análisis generó tres clases: "Aprendiendo a amamentar", que aborda el sentimiento de miedo y el descubrimiento de la confianza durante la lactancia; "Deseo y dificultades en la lactancia materna", que describe los desafíos que enfrentan las mujeres como el miedo, la inseguridad y la falsa idea de incapacidad; y "Presencia y ausencia de red de apoyo", que destaca la importancia del apoyo familiar y profesional. **Consideraciones finales e implicaciones para la práctica:** la experiencia de las madres con discapacidad visual en la lactancia materna implica desafíos como la inseguridad, la falta de orientación y la necesidad de apoyo adecuado. La implementación de acciones inclusivas en los servicios de salud y el fortalecimiento de las redes de apoyo son esenciales para garantizar una lactancia materna segura y satisfactoria.

Palabras clave: Amamantamiento; Personas con Discapacidad Visual; Promoción de la salud.

Corresponding author:
 Anne Fayma Lopes Chaves.
 E-mail: annefayma@unilab.edu.br

Submitted on 04/15/2025
 Accepted on 07/03/2025.

DOI: <https://doi.org/10.1590/2177-9465-EAN-2025-0050en>

INTRODUCTION

According to the first report on vision studies published by the World Health Organization (WHO) in 2019, globally, at least 2.2 billion people have Visual Impairment (VI). In addition, the report states that these people are mostly concentrated in low- and middle-income countries and among vulnerable populations, such as women, migrants, indigenous peoples, people with other types of disabilities, and rural communities.¹

A portion of this population is made up of women with VI, who face several challenges, including reduced opportunities for employment and education, environmental restrictions, and difficulties in fulfilling roles imposed by society about gender and social obligations, such as breastfeeding. Linked to this is a misperception that individuals with VI are asexual and less likely to marry, have children, or care for children.²

Women with disabilities face many barriers to accessibility, including architectural, attitudinal, instrumental, and especially communicational obstacles that prevent or limit their access to health services, including prenatal, pre-delivery, intrapartum, and postpartum care. In addition, these women often have difficulty accessing the facilities of hospital buildings and other health services, thus creating the need for a guide to assist them in accessing these services.^{2,3}

Blind women, as part of normal human development, may have children at some point in their lives and are capable of caring for and monitoring their growth, even if this requires accessibility in terms of family support and healthcare teams.⁴

For blind moms, breastfeeding can be a challenge, since simple tasks like bathing, feeding, and giving medicine can get complicated, causing stress and uncertainty about caring for their kids. In general, blind parents experience difficulties similar to those of sighted parents, compounded by the insecurity of providing care without the sense of sight and the precariousness of the social support network in guiding them properly.⁵ This support network can be formed not only by the family unit but also by the multidisciplinary team that promotes care at various stages of this process and by society, which plays an important role in affirming that these women are capable of fully experiencing the process of pregnancy, childbirth, and breastfeeding.

At the same time, women with VI may suffer prejudice when it comes to motherhood and face society's disbelief that they can take on roles as caregivers, wives, and mothers. In this context, it is common for these women's families to react with surprise to their decisions to be sexually active, have children, and breastfeed.⁶

A study aimed at qualitatively exploring the experiences of women with disabilities related to breastfeeding highlighted that blind or visually impaired mothers show strong determination to breastfeed, often motivated by the desire to strengthen the bond with their baby and ensure adequate nutrition, even in the face of barriers such as the lack of accessible guidance.⁷

Accessibility is a dimension within its specificities that is more widespread in the Unified Health System (UHS), despite

the fact that women with VI represent a minority of the population served, they are still ignored and do not receive care according to their specific individualities, where they need planning directed at caring for their unique circumstances.³

It is observed that several Assistive Technologies (AT) have been developed in the field of sexual and reproductive health and disease prevention for people with VI, including accessible materials in audio, rhyming texts, *Braille*, and ink, as well as inclusive online courses. However, only one, the cordel literature "*Amamentação em Ação*" (Breastfeeding in Action), was developed to promote breastfeeding, proving to be innovative and efficient in disseminating accessible information to blind women.⁸

Therefore, it is essential to follow the precepts established by the Sustainable Development Goals (SDGs), which reinforce the urgency of reducing inequalities in all their forms, promoting social, economic, and political inclusion for all people, regardless of age, gender, disability, race, ethnicity, origin, religion, or economic status, by the year 2030.⁹

Research conducted in the Americas found that nurses discouraged blind mothers from breastfeeding, reinforcing the ableism and exclusion experienced by these women in postnatal care.¹⁰ These findings highlight the urgent need for training focused on inclusive care, empowering nurses to offer adequate, accessible support and guidance, with the support of assistive technologies, to prevent early weaning and promote breastfeeding in this population.

In view of the above, this study seeks to answer the following guiding question: What is the perception of VI mothers about the breastfeeding process? Understanding the views, feelings, and difficulties faced by VI mothers during the breastfeeding process is necessary to promote the creation of an adequate and inclusive care plan that meets the specific demands of these women before and during the breastfeeding process.

Understanding these barriers allows for the implementation of interventions that promote specialized and sensitive support for the needs of this population, helping them to experience breastfeeding fully and satisfyingly and contributing to the health and well-being of individuals.⁹

In addition, the results can serve as a basis for improving the multidisciplinary team, which can offer care based on the specific needs of these women and through reports provided by those who experience this process. Thus, the objective of this research is to understand the perception of VI mothers about the breastfeeding process.

METHOD

This is a cross-sectional study with a qualitative approach, conducted between April and May 2024 at the homes of women with VI and at the Association of the Blind of the State of Ceará (*Associação de Cegos do Estado do Ceará* - ACEC). This study follows the guidelines of the Consolidated Criteria for Reporting Qualitative Research (COREQ), an EQUATOR Network editorial guide for reporting qualitative studies.

The study population consisted of women with VI. Women over 18 years of age were included, and women with previous breastfeeding experience more than three years ago were excluded, according to a study that also investigated mothers' experiences with the breastfeeding process¹¹ and women with associated disabilities.

The research was conducted with blind women who were being monitored and maintained ties with ACEC. Based on this data, 14 mothers were eligible for the study. However, during telephone contact, it was found that six women had previous breastfeeding experience more than three years ago.

Sampling was done for convenience, as it's known that obtaining representative samples of this population is challenging due to social and stigmatizing issues that hinder access. Also, since it's hard to recruit a sample for convenience, exponential snowball sampling was used.¹²

The saturation criterion was also used to determine when data collection should be terminated. Saturation refers to the point at which the addition of data and information in a study does not alter the understanding of the phenomenon being studied. It is a criterion that allows the validity of a set of observations to be established.¹³ Thus, the final sample consisted of eight women, an adequate number to ensure the depth and quality of the qualitative analysis in this study.

Of the women who agreed to participate in the research, six were interviewed at their homes and only two at ACEC. Initially, the Free and Informed Consent Term (FICT) was read by the researchers, then, with the help of a ruler, the location where the participant should sign was indicated. Subsequently, the semi-structured interview began using a data collection instrument that contained data on sociodemographic characteristics, obstetric history, and guiding questions involving the perception of mothers with VI about the breastfeeding process. The interviews were recorded using the Automatic Call Recorder app (downloaded for free) and lasted about 20 minutes. The transcripts were prepared by the researchers and sent to the participants via WhatsApp, who used the accessibility feature on their cell phones to provide comments and suggestions. However, no adjustments to the transcripts were necessary.

Given this, the textual corpus is assembled from the transcription of the interviews conducted. Thus, data analysis is performed using IRAMUTEQ (*Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires*) software version 0.7 alpha 2. Then, Descending Hierarchical Classification (DHC) is performed. DHC organizes the textual corpus into classes of Text Segments (TS) that have similar vocabulary among themselves and are different from other classes. Thus, DHC is performed on TS, based on Reinert's method. This classification method is recommended when long texts are available.¹⁴

Consequently, the research complied with the ethical aspects of Resolution 466/2012 and was approved by the Research Ethics Committee of the Universidade da Integração Internacional Afro-Brasileira, under opinion number 6,660,892.

RESULTS

The sample consists of eight women with VI, who had a mean age of 39.5 years ($SD = \pm 9.41$). Among the participants, five had congenital blindness and three had low vision.

In terms of education, two had incomplete elementary school education, three had completed high school, one had incomplete higher education, and two had completed higher education. In terms of marital status, five were single, two were married, and one was divorced.

In terms of obstetric characteristics, four were primiparous and the other four were multiparous. The majority (six) had previous experience of breastfeeding for more than six months.

The corpus for analysis consisted of eight texts, separated into 379 TSs, with 82.1% of these TSs being used. In addition, there are 13,181 occurrences (words, forms, or vocabulary), with 1,734 distinct words and 854 with a single occurrence.

In DHC, the corpus generated three classes, numbered 1, 2, and 3. Figure 1 shows the dendrogram resulting from the analysis, which illustrates the three proposed classes.

Each class was composed of words associated with the content. Below are descriptions of each of the classes found.

Class 1 – “Learning to breastfeed: fears and discoveries”

This class comprises 20.26% ($f = 63$ TS) of the total corpus analyzed. It consists of words and roots in the range between $\chi^2 = 27.48$ (put) and $\chi^2 = 4.04$ (eat). This class is composed of words such as burp ($\chi^2 = 20.0$), wrong ($\chi^2 = 15.95$), perceive ($\chi^2 = 15.23$), choke ($\chi^2 = 15.07$), release ($\chi^2 = 15.07$), suckle ($\chi^2 = 9.31$), fear ($\chi^2 = 8.29$), pick up ($\chi^2 = 7.43$), breast ($\chi^2 = 6.07$), and uncomfortable ($\chi^2 = 4.04$).

Class 1 brings together women's reports on how they gained more confidence in breastfeeding and what their main fears were during this process. This aspect can be observed in the following statements:

“During the process, I was afraid I wouldn't have enough milk. I always said that I thought I didn't have enough.”
(Participant 2)

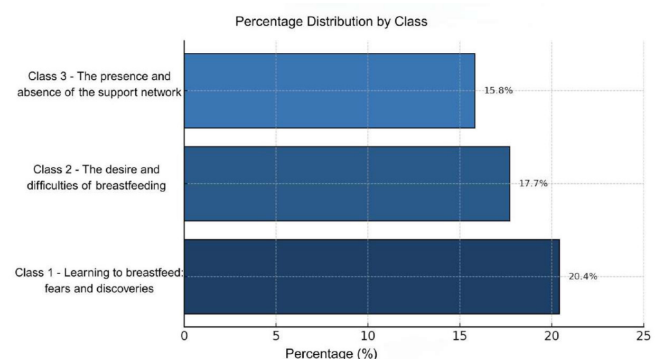


Figure 1. Dendrogram of the descending hierarchical classification.

"When I arrived at the hospital to have my baby, the nurses there tried to put the baby to my breast and everything. And I was very nervous, with all the comments I heard, because breastfeeding means you have to relax, you have to want to relax, you have to relax, you have to, because it's already tiring, the baby crying there, it's a new baby, the baby arrives, it's new to you...". (Participant 3)

The participants reported that, because it is something new, they have some fears, but that they have learned through their relationship with the baby to identify when it was feeding and when it was satisfied.

"So I got afraid when I saw that it was hurting a lot, then I (thought), "no, that's wrong", I would put it back on when it wasn't hurting so much, when the pain was bearable—so, that's right.". (Participant 6)

"The strategy I found to overcome these obstacles during the breastfeeding process was exactly what the girls were talking about. I had to touch her face to see if she was grasping it, if she was actually sucking on my breast. I also had to figure out when she was satisfied. She would nurse and then stretch as if she wanted to burp, things like that. Then I knew she didn't want any more. So, for me, I gradually learned these things. It was a process that took time.". (Participant 2)

Class 2 – "The desire and difficulties of breastfeeding"

This class comprises 17.68% ($f = 55$ TS) of the total corpus analyzed. It consists of words and roots in the range between $\chi^2 = 48.09$ (nipple) and $\chi^2 = 4.99$ (suffer). This class is composed of words such as difficulty ($\chi^2 = 38.55$), give ($\chi^2 = 37.15$), breast ($\chi^2 = 36.76$), give up ($\chi^2 = 32.28$), bottle ($\chi^2 = 23.65$), want ($\chi^2 = 17.73$), breastfeed ($\chi^2 = 12.26$), stimulate ($\chi^2 = 11.33$), pick up ($\chi^2 = 9.09$), and insist ($\chi^2 = 4.99$).

Class 2 deals with women's desire to experience breastfeeding and, even in the face of difficulties, not giving up on trying to breastfeed. In addition, Class 2 includes the main difficulties faced during the breastfeeding process that are mentioned by the participants.

The participants emphasized the satisfaction that breastfeeding can bring:

"It got to the point where I almost gave up, not for myself, but for him, who wouldn't take the breast. But I breastfed with great pleasure. For me, it was a precious experience.". (Participant 5)

Many participants revealed that they had a good experience with breastfeeding; however, some difficulties were reported. The main difficulties observed in these mothers' reports are teaching the child to "latch on to the nipple," followed by breast pain the first few times, and identifying whether the child was

actually "sucking milk." The statements that represented such an aspect were:

"I had the first problem, which was his difficulty in latching onto my breast. But the nurse at the clinic helped me, and I was able to breastfeed him.". (Participant 5)

"[...] You have to want to breastfeed, because breastfeeding really is about wanting to do it. Because if you don't, you'll give up at the first sign of difficulty because it hurts too much. As soon as the baby latches on, you feel like slapping them. Really. Because it hurts a lot, and it's not because you want it to. It's a pain that makes you want to go somewhere else, anywhere but here. Don't give up. Keep trying, even if it's not working. Even if you have to supplement, don't give up, because it will work.". (Participant 3)

Class 3 – "The presence and absence of the support network"

This class comprises 15.76% ($f = 49$ TS) of the total corpus analyzed. It consists of words and roots in the range between $\chi^2 = 27.77$ (girl) and $\chi^2 = 3.96$ (call). Class 5 consists of words such as to stay ($\chi^2 = 26.38$), father ($\chi^2 = 21.67$), postpartum confinement ($\chi^2 = 21.67$), to take care of ($\chi^2 = 19.7$), to sleep ($\chi^2 = 18.1$), companion ($\chi^2 = 16.72$), to wake up ($\chi^2 = 15.8$), alone ($\chi^2 = 13.52$), live ($\chi^2 = 11.95$), attention ($\chi^2 = 10.72$), and work ($\chi^2 = 7.58$).

Class 3 depicts women's experiences with access to a support network during the breastfeeding process. In the participants' reports, it is observed that some had support from their partner and family members, while others were more alone. However, in general, they emphasized how the support of family members and close friends, and adequate guidance from professionals, can bring more security to mothers with VI:

"When I had questions, I would call someone, like a neighbor, because when I had my children, I didn't live here. I had a girl who helped me at home, a young woman, she must have been about 15 years old, who helped me, and when she wasn't there, I called a neighbor. And today, well, today we have other means, let's say, if I'm home alone, I have an app on my cell phone that makes videos with volunteers.". (Participant 4)

The mothers interviewed pointed out the importance of support from health professionals in the breastfeeding process. The report demonstrates an understanding of the need for assistance that provides support from prenatal care, through postpartum care in the maternity ward, to home follow-up. One of the statements that highlighted these aspects is presented below:

"The nurse helped the baby latch onto my breast. But she just put it there. She didn't show me how to do it; she just put it there. I even said, well, people say it hurts so much,

but she didn't. It's fine, that's it. The previous times, my aunt was there, my uncle's wife was there, so she did it. But she didn't talk either; she just did it. I did it myself on the second day, because then my aunt went home, I was left with another woman, another companion who didn't guide me, so that's how it was. I had to do it. There was no guidance during prenatal care, none at all." (Participant 6)

DISCUSSION

The women's accounts reveal their fear and insecurity when starting to breastfeed. However, breastfeeding is often a factor that generates doubts and anxieties shortly after childbirth, with maternal insecurity being one of the causes of failure. In the context of VI, one study involving 10 blind women showed that most have high self-efficacy in breastfeeding, but there are also mothers with low self-efficacy in breastfeeding, highlighting the need to monitor this group throughout the breastfeeding period.⁵

When compared, most parents with VI will experience difficulties similar to those of sighted parents; however, in addition to this, insecurity may be accentuated when caring for their child, as they do not have visual experience, and the support network to guide them properly is precarious.¹⁵

Difficulties during the breastfeeding process often manifest themselves through adverse emotional states such as anxiety, sadness, feelings of inadequacy, and reduced self-efficacy and confidence in the breastfeeding process, which may be interpreted by these mothers as signs of personal failure. Similarly, the challenges inherent in significant VI can intensify emotional fluctuations that hinder the continuation of breastfeeding.¹⁶

It is worth noting that, in the context of blind mothers, breastfeeding can be seen as a challenge, given that simple acts such as bathing, feeding, and administering medications take on complex dimensions, leading to stress and insecurity in caring for their child.^{5,17}

In this sense, it is important for health professionals need to pay special attention to this group, given that these mothers' fear and insecurity about not knowing how to care for their babies creates a false sense of incapacity, which hinders the breastfeeding process.¹⁸

In addition, it is worth noting that encouraging breastfeeding is one of the main topics to be addressed in the postpartum period, due to the numerous benefits of exclusive breastfeeding in the first months of life for both mother and baby, as well as the possibility of complications, such as breast fissures and engorgement.¹⁹

Despite initial difficulties, participants reported a continuous learning process, developing alternative methods to identify whether the baby was breastfeeding properly. Mothers with VI replace visual observation with sensory strategies, such as touching the infant's face to feel the movement of the jaw during sucking and perceiving bodily signs, such as muscle relaxation, which indicate satiety, and also building a mental map of all the knowledge acquired during daily life.

These adjustments are not limited to touch; mothers with VI also use auditory cues, such as the rhythm of swallowing or changes in crying, to monitor the effectiveness of feeding. A study that examined verbal and nonverbal communication in mothers with VI found that during contact between mother and child in the first years of life, the senses that stood out were hearing (24.0%), speech (37.7%), and touch (38.3%) in the mother/child analysis.¹⁷ Thus, the other senses are intensified so that mothers with VI can enjoy sensations of pleasure in a similar way to sighted people.

Evidence suggested that contact with the world begins through the senses. Each sense, in its own way, is capable of conveying pleasure or displeasure. For those with healthy eyes, seeing is as natural as breathing. As a result, pleasant sensations are always preferred over unpleasant ones, and in this process of choice, the privilege assumed by vision stands out.¹⁷ Therefore, during the breastfeeding process, the mother goes through a process of discovery through interaction, which occurs by means of physical contact and auditory stimuli; thus, frequent contact and the relationship between mother and baby are important for the formation of an emotional bond during breastfeeding.²⁰

The challenges faced by mothers in the breastfeeding process, such as pain, difficulties in latching, and the need to insist that the baby adapt to the breast, are widely reported in the literature. However, research conducted at the Universidade Federal de São Paulo, intending to understand what women with physical and visual disabilities go through during pregnancy, childbirth, and postpartum, shows that breastfeeding can be more challenging for moms with VI due to a lack of proper communication and specific training for healthcare professionals in caring for this population.²¹

Sighted mothers rely mainly on visual cues (e.g., facial expressions) to perceive and respond to their children's needs and emotional state changes. On the other hand, mothers with VI may not be able to communicate with their babies as easily.²² In this sense, making eye contact as much as possible, especially during breastfeeding, strengthens communication between mother and child, can increase the release of oxytocin, and favor the breastfeeding process for these mothers.²³

One of the most common breast problems in people with VI is cracking, which can happen because it may be more difficult to perceive whether the latch is correct or whether the baby is latching onto most of the areola, which can lead to early weaning.^{7,24}

Despite reports of difficulties, the desire to breastfeed among VI mothers is evident and is often linked to biological, emotional, and social motivations similar to those of sighted mothers. However, these women face additional pressure to prove their parenting abilities in a context that often underestimates their skills.

Blind or visually impaired mothers show strong determination to breastfeed, often motivated by the desire to strengthen the bond with their baby and ensure adequate nutrition, even in the face of barriers such as the lack of accessible guidance.²⁵ In the context of a Brazilian study, which aims to investigate the influence of cultural imprinting on breastfeeding, it is pointed out that the desire to breastfeed is influenced by cultural expectations, such as the idealization of 'perfect' motherhood. This cultural pressure

can cause anxiety in mothers, especially when their individual experiences do not match the standards expected by health professionals or family members.²⁶

Breastfeeding is also influenced by the family, the woman's life history, the child's father, and the support or lack thereof from people close to the nursing mother, in addition to biological aspects.²¹ The role of family and friends is fundamental for mothers with VI during breastfeeding, providing both practical and emotional support.

In addition, partners, parents, or siblings often assist with tasks such as positioning the baby at the breast, identifying signs of hunger or satiety, and adapting the environment for greater safety (e.g., organizing bottles or breast pumps with Braille labels).²⁵ In this sense, emotional support, such as encouragement in the face of insecurities and validation of the sensory strategies developed by the mother, contributes to reducing anxiety and strengthening self-confidence.

In cultural contexts such as Brazil, the presence of family members, such as grandparents, provides essential support for breastfeeding by sharing experiences and traditional practices. This support can complement clinical guidance, creating a collaborative care network that strengthens breastfeeding and promotes a supportive environment for mothers, facilitating the practice and increasing adherence to breastfeeding.²⁷

Despite the importance of family support, the lack of preparation to understand the specific needs of mothers with VI can lead to conflicts or excessive dependence. Another important aspect mentioned by women is the importance of their partner during this challenging breastfeeding process, which is consistent with research that showed blind women with high self-efficacy, most of whom were married or living in a stable union.⁵

It is understood that the social support network, represented by family members, neighbors, and health professionals, has difficulties in passing on information about the child's health care, perhaps due to a lack of experience in providing accessible guidance to a person with a disability. In addition, the information provided does not consider the characteristics of people with VI necessary for the proper performance of activities, such as encouraging the use of touch and smell, which are the remaining senses most frequently used, and the need for spatial orientation of objects.¹⁷

In the context of professional support, the results of this study reinforce the need for greater attention to the inclusion of mothers with VI in maternal and childcare, with accessibility in the training of professionals, accessible materials, and strengthening of the support network, promoting a safer and more satisfactory breastfeeding process for this population.

Many participants reported difficulties due to the lack of adequate guidance from health professionals. Although they feel confident in advising on breastfeeding, they were unprepared to adequately support women with VI, showing that the lack of communicational accessibility compromises the quality of care provided by professionals to this audience.²⁸

A study conducted by Roscoche¹⁵ investigated the effectiveness of assistive technologies in supporting mothers and fathers with

VI in introducing food to their children, focusing on promoting the autonomy and safety of these caregivers. The results showed that the experience of motherhood/fatherhood among people with VI emphasized the constant unpreparedness of health professionals to understand and care for them in an accessible way. There are constant reports of a lack of professional support, knowledge about the needs arising from different disabilities, acceptance of the couple's sexuality, and, especially, assistive technologies viable for this audience.

A study conducted in northeastern Brazil on access to health services by blind mothers reveals that the lack of health education, including essential guidance on breastfeeding and newborn care, is a problem that requires attention from managers. Although breastfeeding is a natural practice, it is not entirely instinctive, requiring support, especially in the case of a mother with VI.⁴

The lack of support from health professionals is also reported as a determining factor for early weaning. In this context, healthcare professionals should support and encourage breastfeeding mothers, preparing them emotionally, informing them about the physiology of lactation, its benefits, breast care, and the correct positioning of both mother and baby during breastfeeding. This preparation should begin during prenatal consultations and continue through postpartum home visits.^{29,30}

FINAL CONSIDERATIONS AND IMPLICATIONS FOR PRACTICE

The experience of VI mothers in the breastfeeding process involves aspects such as fear and insecurity, adjustments and discoveries, difficulties, desire to breastfeed, and the role of the support network. These findings highlight the importance of adequate support to promote a positive breastfeeding experience among women with this disability.

Given these results, it is essential to intensify integrated and inclusive actions in health services, with an emphasis on accessibility. It is recommended to improve the training of health professionals to care for VI mothers, as well as to create and implement specific protocols for breastfeeding care for blind women. The importance of developing assistive technologies, such as informative podcasts, to guide VI women during prenatal care, childbirth, and the postpartum period is highlighted. In addition, strengthening support networks involving family members, the community, and professionals is essential to ensure continuous emotional and practical support, contributing to a safer and more satisfying breastfeeding experience.

However, this study has limitations that should be considered, such as the small sample size and the homogeneity of the participants in socioeconomic and cultural terms, which may restrict the generalization of the results. Another possible limitation refers to memory bias, since the sample included women who breastfed at different periods. Therefore, it is recommended that future research consider larger and more diverse samples, in addition to adopting mixed methodological approaches that integrate quantitative and qualitative data. Investing in longitudinal studies

may also deepen the understanding of maternal experiences over time, guiding the development of more inclusive and effective public policies and intervention strategies.

ACKNOWLEDGEMENTS

None.

FINANCIAL SUPPORT

This study was funded by the *Conselho Nacional de Desenvolvimento Científico e Tecnológico* (CNPq) [National Council for Scientific and Technological Development], through the CNPq/MCTI/FNDCT Call No. 18/2021 – UNIVERSAL, under process No. 407597/2023-9. The project entitled: “*Promoção da amamentação: desenvolvimento e eficácia de tecnologia assistiva para mães com deficiência visual (Promotion of breastfeeding: development and effectiveness of assistive technology for visually impaired mothers)*” was conducted by the *Universidade da Integração Internacional da Lusofonia Afro-Brasileira* (UNILAB), in partnership with the *Universidade Federal do Ceará* (UFC), *Universidade Federal de Sergipe* (UFS), the Association of the Blind of the State of Ceará, and the *Maternidade Escola Assis Chateaubriand* (MEAC) in Brazil. The researcher responsible for the project was Prof. Dr. Anne Fayma Lopes Chaves.

DATA AVAILABILITY RESEARCH

The contents underlying the research text are included in the article.

CONFLICT OF INTEREST

No conflict of interest.

REFERENCES

- Organização Mundial da Saúde. Relatório mundial sobre visão [Internet]. Genebra: OMS; 2019 [cited 2024 oct 14]. Available in: <https://www.who.int/publications/i/item/world-report-on-vision>
- Instituto Brasileiro de Geografia e Estatística. Censo demográfico 2010: características gerais da população, religião e pessoas com deficiência [Internet]. Rio de Janeiro: IBGE; 2010 [cited 2024 oct 14]. Available in: https://biblioteca.ibge.gov.br/visualizacao/periodicos/94/cd_2010_caracteristicas_populacao_deficiencia.pdf
- Luzia FJM, Oliveira Silva N, Barbosa Carneiro J, Sousa Silva L, Costa Rodrigues FL, Grimaldi MRM et al. Desafios no acesso aos serviços de saúde por pessoas com deficiência: revisão integrativa. *Rev Enferm Atual Derme*. 2023;97(2):e023079. <http://doi.org/10.31011/reaid-2023-v.97-n.2-art.1538>.
- Bezerra CP, Nicolau AIO, Bezerra GPP, Machado MMT, Pagliuca LMF. Acesso aos serviços de saúde por mães cegas: dos enfrentamentos aos ensinamentos. *Acta Paul Enferm*. 2020;33:eAPE2019001975. <http://doi.org/10.37689/acta-ape/2020AO01975>.
- Dias SA, Silva TQ, Venâncio DO, Chaves AFL, Lima ACMACC, Oliveira MG. Autoeficácia em amamentar entre mães cegas. *Rev Bras Enferm*. 2018;71(6):2969-73. <http://doi.org/10.1590/0034-7167-2017-0942>. PMID:30517400.
- Can M, Sahin BM. Experiências de mães com deficiência visual na amamentação. *J Hum Lact*. 2023;39(3):540-9. <http://doi.org/10.1177/08903344231156444>. PMID:36935585.
- Andrews EE, Powell RM, Ayers KB. Experiências de amamentação entre mulheres com deficiência. *Womens Health Issues*. 2021;31(1):82-9. <http://doi.org/10.1016/j.whi.2020.09.001>. PMID:33051056.
- Oliveira PMP, Pagliuca LMF, Cezario KG, Almeida PC, Beserra GL. Amamentação: validação de tecnologia assistiva em áudio para pessoa com deficiência visual. *Acta Paul Enferm*. 2017;30(2):122-8. <http://doi.org/10.1590/1982-0194201700020>.
- Organização das Nações Unidas. Objetivos de Desenvolvimento Sustentável (ODS) [Internet]. Brasília: ONU Brasil; 2025 [cited 2025 apr 9]. Available in: <https://brasil.un.org/pt-br/sdgs>
- Frederick A. Between stigma and mother-blame: blind mothers' experiences in USA hospital postnatal care. *Sociol Health Illn*. 2015 nov;37(8):1127-41. <http://doi.org/10.1111/1467-9566.12286>. PMID:25929453.
- Bernardino FBS, Gaíva MAM, Viera CS. Vivência de mães jovens sobre o processo da amamentação. *Saúde Pesqui*. 2021;14(Supl 1):1-15. <http://doi.org/10.17765/2176-9206.2021v14Supl.1.e8692>.
- Ochoa C. Amostragem não probabilística: amostra por conveniência [Internet]. 2015 [cited 2024 oct 16]. Available in: <https://www.netquest.com/blog/br/blog/br/amostra-conveniencia>
- Bezerra CP, Nicolau AIO, Bezerra GPP, Machado MMT, Pagliuca LMF. Acesso aos serviços de saúde por mães cegas: dos enfrentamentos aos ensinamentos. *Acta Paul Enferm*. 2020;33:eAPE2019001975. <http://doi.org/10.37689/acta-ape/2020AO01975>.
- Camargo BV, Justo AM. Tutorial para uso do software de análise textual IRAMUTEQ [Internet]. 2021 [cited 2025 jan 12]. Available in: http://www.iramuteq.org/documentation/fichiers/Tutorial%20IRaMuTeQ%20em%20portugues_22.11.2021.pdf
- Roscoche KGC, Oliveira PMP, Grimaldi MRM, Aguiar ASC. Validação de tecnologia assistiva para mães e pais com deficiência visual: enfoque na introdução alimentar do lactente. *Rev Bras Educ Espec*. 2024;30:e0998. <http://doi.org/10.1590/1980-54702024v30e0998>.
- Williams D, Webber J, Pell B, Grant A, Sanders J, Choy E et al. “Ninguém sabe, ou parece saber como reumatologia e amamentação funcionam”: experiências de mulheres que amamentam enquanto lidam com uma condição limitante de longo prazo: um estudo qualitativo com métodos visuais. *Midwifery*. 2019 nov;78:91-6. <http://doi.org/10.1016/j.midw.2019.08.002>. PMID:31404778.
- Wanderley LD, Barbosa GOL, Freitag Pagliuca LM, Oliveira PMP, Almeida PC, Almeida Rebouças CB. Comunicação verbal e não verbal de mãe cega durante a higiene corporal da criança. *Rev Rene*. 2010;11(esp):150-9 <http://doi.org/10.15253/2175-6783.2010011esp000017>.
- Santos RS, Ribeiro VM. Transição de mulheres cegas para a maternidade na perspectiva da Teoria das Transições. *Rev Bras Enferm*. 2020;73(Suppl 4):e20190234. <http://doi.org/10.1590/0034-7167-2019-0234>.
- Luzia FJM. Construção da escola de mensuração de autoeficácia de enfermeiros nas consultas de pré-natal e puerpério de mulheres com deficiência visual [dissertação]. Redenção: Universidade da Integração Internacional da Lusofonia Afro-Brasileira; 2021. 102 p. [cited 2025 feb 16]. Available in: <https://repositorio.unilab.edu.br/jspui/handle/123456789/4392>
- Otsuka K, Taguri M, Dennis CL, Wakutani K, Awano M, Yamaguchi T et al. Efetividade de uma intervenção de autoeficácia na amamentação: as práticas hospitalares fazem diferença? *Matern Child Health J*. 2014 jan;18(1):296-306. <http://doi.org/10.1007/s10995-013-1265-2>. PMID:23592322.
- Corrêa VCR, Jurdi APS, Silva CCB. Narrativas de mulheres com deficiência física e visual sobre suas maternidades [Internet]. São Paulo: Universidade Federal de São Paulo; 2023 [cited 2025 mar 5]. Available in: <https://www.scielo.br/j/ref/a/y4b5qkrdfXxmMnWZQjSZXx/>
- Moghadam ZB, Ghiyasvandian S, Shahbazzadegan S, Shamshiri M. Experiências parentais de mães cegas no lã: um estudo fenomenológico hermenêutico. *J Vis Impair Blind*. 2017;111(2):113-22. <http://doi.org/10.1177/0145482X1711100203>.
- Akarsu RH, Tunca B, Yüzer AS. Práticas baseadas em evidências no vínculo mãe-bebê. *Gümüşhane Univ Sağlık Bilim Derg*. 2017;6(4):275-9.
- Brito LKT, Paiva MLL, Sousa AKS, Santos LP, Chaves AFL. Experiência de mães deficientes visuais sobre o processo de amamentação com base na abordagem freireana [Internet]. 2024 [cited 2025 feb 3]. Available in: https://editorarealize.com.br/editora/anais/cintedi/2024/TRABALHO_COMPLETO_EV196_MD1_ID3088_TB764_27042024095349.pdf

25. Powell RM, Mitra M, Smeltzer SC, Long-Bellil LM, Smith LD, Rosenthal E et al. Breastfeeding among women with physical disabilities in the United States. *J Hum Lact.* 2018;34(2):253-61. <http://doi.org/10.1177/0890334417739836>. PMID:29166569.
26. Claro ML, Nobre RS, Sousa AF, Lima LHO. Imprinting cultural e aleitamento materno: determinantes e desafios. *Saúde Coletiva.* 2021;11(66):6503-18. <http://doi.org/10.36489/saudecoletiva.2021v11i66p6503-6518>.
27. Carvalho MES, Diniz LPM, Silva JBA, Santos NM, Pereira VC. Influência da rede de apoio social na promoção do aleitamento materno: percepção das nutrizes. *Rev APS.* 2023;26:e262340146. <http://doi.org/10.34019/1809-8363.2023.v26.40146>.
28. Leonardo RPS, Paula MD, Alvarez AB, Capelli JCS, Braga FAMN. Amamentação no contexto da mulher com deficiência: uma revisão bibliográfica. In: Silva CB, Bandeira GMS, Freitas PG, editores. *Educação, inclusão e diversidade: abordagens e experiências.* Rio de Janeiro: Editora e-Publicar; 2023. p. 168-82. (vol. 1). <http://doi.org/10.47402/ed.ep.c202317713684>.
29. Oliveira PMP. Amamentação em ação: validação de tecnologia assistiva para cegos [Internet]. 2013 [cited 2025 feb 18]. Available in: <https://repositorio.ufc.br/handle/riufc/7167>
30. Oliveira L. Maternidade e deficiência visual: desafios na amamentação. *Rev Bras Saúde Mater Infant.* 2021;21(2):345-59.

AUTHOR'S CONTRIBUTIONS

Study design. Anny Karolainy da Silva Sousa. Camila Chaves da Costa. Lívia Karoline Torres Brito. Anne Fayma Lopes Chaves.

Data acquisition. Anny Karolainy da Silva Sousa. Camila Chaves da Costa. Lívia Karoline Torres Brito. Anne Fayma Lopes Chaves.

Data analysis and interpretation of results. Anny Karolainy da Silva Sousa. Camila Chaves da Costa. Lívia Karoline Torres Brito. Maria de Lourdes Leite Paiva. Ana Kristia da Silva Martins. Anne Fayma Lopes Chaves.

Writing and critical review of the manuscript. Anny Karolainy da Silva Sousa. Camila Chaves da Costa. Lívia Karoline Torres Brito. Maria de Lourdes Leite Paiva. Ana Kristia da Silva Martins. Anne Fayma Lopes Chaves.

Approval of the final version of the article. Anny Karolainy da Silva Sousa. Camila Chaves da Costa. Lívia Karoline Torres Brito. Maria de Lourdes Leite Paiva. Ana Kristia da Silva Martins. Anne Fayma Lopes Chaves.

Responsibility for all aspects of the content and integrity of the published article. Anny Karolainy da Silva Sousa. Camila Chaves da Costa. Lívia Karoline Torres Brito. Maria de Lourdes Leite Paiva. Ana Kristia da Silva Martins. Anne Fayma Lopes Chaves.

ASSOCIATED EDITOR

Candida Primo 

SCIENTIFIC EDITOR

Marcelle Miranda da Silva 

^aExtracted from the Dissertation – Educational podcast on breastfeeding for people with visual impairments: health promotion and empowerment, presented to the Postgraduate Program in Nursing at Universidade da Integração Internacional da Lusofonia Afro-Brasileira, in 2025.