

Health Behavior and Maternal Feelings on Breastfeeding during Covid-19 Pandemic

Comportamento de Saúde e Sentimentos Maternos na Amamentação Durante a Pandemia Covid-19

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Abstract

BACKGROUND: The COVID-19 pandemic state created a scenario of difficulties, including in relation to breastfeeding. The practice of health behaviors such as social isolation and the use of masks, configured drastic changes for postpartum women. **OBJECTIVE:** The objective of the current study is to describe the consequences of those changes and its implications in the daily life of nursing women. **METHODS:** The study was carried out with a descriptive and qualitative approach, through interviews by phone calls or by Google Forms with women, which are registered in the Human Milk Bank from Cassiano Antônio de Morais's Hospital. The information analysis was carried out by categories. **RESULTS:** In the health behavior section, the main focus is on social isolation and hygiene practices. In the prevention acts section, all respondents denied the use of preventive medications and the majority showed to be in favor of the vaccine. In relation to feelings, the most common one was the fear. Social isolation was described as favorable, though, due to the opportunity to reinforce the maternal bond. **CONCLUSIONS:** In short, despite the contamination fear, nursing women reported that they adapted well to the habit changes and the longer time spent at home was popular between respondents.

Keywords: breast feeding; covid-19; feelings; attitude; behavior

Resumo

INTRODUÇÃO: A pandemia da COVID-19 configurou um cenário de dificuldades, inclusive em relação à amamentação. A prática de comportamentos de saúde, como o isolamento social e o uso de máscaras, configuraram mudanças drásticas para as puérperas. **OBJETIVO:** O presente estudo buscou descrever as consequências dessas mudanças de comportamento de saúde e suas implicações no cotidiano das nutrízes. **MATERIAIS E MÉTODOS:** Realizou-se uma abordagem qualitativa e descritiva, por meio de entrevistas via ligação ou *Google Forms* com as mulheres cadastradas no Banco de Leite Humano do Hospital Cassiano Antônio de Morais. A análise das informações foi realizada por categorias. **RESULTADOS:** Na sessão de comportamento de saúde, predominou a realização do isolamento social e práticas de higiene. Na de medidas de prevenção, todas negam uso de medicamentos preventivos e a maioria demonstrou-se a favor da vacina. Já em relação aos sentimentos, prevaleceu o medo, entretanto, o isolamento social foi dado como favorável, devido ao fortalecimento do laço materno. **CONCLUSÃO:** Em suma, apesar do medo da contaminação, as nutrízes relataram que se adaptaram bem as mudanças de hábitos e o maior tempo em casa foi bem-visto pelas entrevistadas.

Palavras-chave: aleitamento materno; covid-19; sentimentos; atitude; comportamento

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Introdução

The new coronavirus (COVID-19) pandemic was decreed by the World Health Organization (WHO) in March 2020. Since then, it has directly impacted social behaviour, due to the need for distance between people, giving that this measure is effective and capable of limiting contamination by the virus^{1,2}. This new way of human conduct has brought various social, economic and, in particular, health consequences. Among so many aspects of this new disease, a paramount issue for public health concerns the mother-baby dyad, especially regarding the experience of breastfeeding during this term³.

Exclusive breastfeeding (EBF) is recommended until six months of age and supplemented to the baby's diet until two years of age. This process is extremely important, as in addition to being a route of nutrition independent of inputs purchase, it offers anti-infectious, anti-inflammatory factors and antibodies, which are essential in mitigating infectious conditions^{4,5}. Initially, when there was no evidence regarding the presence of the virus in breast milk, Chinese health authorities did not recommend breastfeeding and advocated isolation between mothers suspected of or positive for COVID 19 and the newborn⁶. However, these measures were discouraged by the WHO, since the benefits of EBF and mother-baby interaction substantially outweigh the potential risks of vertical transmission of SARS-Cov-2⁷.

The breastfeeding process, in itself, is stated as complex and taxing, in which each woman is subject to different emotions and perceptions, by means of socioeconomic, psychological, environmental and physical niches make this period extremely particular and multidimensional^{8,9}. Thus, the pandemic situation affects lactation, whilst it has created a panorama of uncertainties, full of

negative news that shakes the aforementioned niches, and can generate emotional changes in nursing mothers¹⁰. This fact can play a significant role in early weaning as it has been shown that in periods of stress there are drops in oxytocin levels, a hormone released in situations of pleasure and happiness, which can have consequences such as low milk production seeing that it plays a fundamental role in the stimulation of the mammary glands¹¹.

Even before the COVID-19 pandemic, the vast majority of information and publications highlighted the benefits that breast milk provides to children, yet the repercussions for maternal health is badly addressed¹². The pandemic is directly and indirectly affecting mental health, and these effects are interconnected and the connotations of social distancing on the life of the postpartum woman go beyond the moment of breastfeeding, consequently, it is crucial to monitor perinatal mental health during pandemics and other social crises¹³, since this view is often neglected. Considering this neglect, the goal of this study was to describe the consequences of these changes in health behaviour and their allusions for the daily lives of nursing mothers, seeking to assess the impact on the feelings experienced by these women in the context of COVID-19.

Materiais e Métodos

Abaixo segue a sugestão das subseções e níveis que devem estar contidos na seção Material e Métodos.

Amostra e tipo de estudo

This article is derived from a larger survey called "Knowledge and attitudes of nursing mothers regarding the importance of breastfeeding in the COVID-19 context". This is a study with a qualitative, descriptive, exploratory approach and with individual interviews.



The research project was approved by the Research Ethics Committee (CEP) of Universidade Vila Velha and Hospital Universitário Cassiano Antonio de Moraes-Hucam, with opinion number 4,144,450 on July 9, 2020 and opinion number 5,137,459 on November 30, 2021 respectively. The study participants signed the Free and Informed Consent Form (TCLE).

Research design

The study was executed at the Human Milk Bank (BLH) of the Cassiano Antônio de Moraes University Hospital (BLH-HUCAM). The Hospital is located in the metropolitan region of the State and is a high-risk maternity hospital and a state reference in HMB, serving the population using the Unified Health System and supplementary care.

Participants were selected and recruited using their data registered in the BLH-HUCAM service. The registration of the interviewees was carried out using an Excel spreadsheet, containing general information, collected by the Human Milk Bank team containing personal, obstetric and neonatal data

Inclusion and Exclusion Criteria

The inclusion criteria for study participants were: aged 18 years old or over, residents of the municipalities of Vitória, Vila Velha, Cariacica and Serra, having been treated at the HMB between January and July 2021, having a child aged 0 to 12 months, own devices with internet access that can make video calls (Ipad, tablet, cell phone) or landline and who agreed to participate in the study at the time of data collection. Mothers who refused to participate in the research and/or had limitations in answering the survey that were not feasible to be resolved were excluded.

Procedures

At first, the women were contacted by voice call, those who agreed to

participate in the study chose between filling out Google Forms or continuing to be interviewed via phone call, with permission to be recorded for later transcription in full of their responses. Some of those contacted who chose to participate in the study via phone call were not available to carry it out at that time, so a convenient date and time was agreed with each of these women. The recorded calls did not have a time limit, as responses were free, however, the duration of each call was approximately 20 minutes. Regarding the researchers, in order to preserve the privacy of the interviewees, they made the calls inside a private room, located at the University of Vila Velha – ES (UVV). Each woman responded to a semi-structured script that addressed: sociodemographic profile, obstetric aspects, impact of the COVID-19 pandemic on health behavior and breastfeeding, support for breastfeeding and feelings about breastfeeding.

Semi-structured interviews were carried out, from February to April 2022, until data saturation, allowing us to understand a more in-depth contextualization of the object studied. According to Carmem Cecília Camatari Galvão¹⁴, the transcription necessarily determines the interpretation of the speech, therefore, we perform the literal transcription and in-depth reading, analyzing each narrative collected.

Following the steps of Laurence Bardin's¹⁵ content analysis: the collected data were interpreted in a comprehensive way, seeking to identify semantically similar speeches, which can be related to each other, giving rise to the categories based on the research objective. The study followed the ethical standards recommended by resolution No. 466/2012, participation was voluntary, the participant did not receive any type of financial compensation, the anonymity of the lactating women was guaranteed and they were identified by a numeric code in



ascending order, followed by the letter C, corresponding to the word collaborator such as: C01.

Resultados

A total of 261 women were selected based on data provided by the BLH. Among these, it was possible to make initial contact by telephone with 117 women. At the end of the process, 60 interviews were selected, which ensured the collection of sufficient information to understand the topic under analysis. Of these interviews, 55 women chose to fill out the Google form, while 5 chose to respond via voice call.

Regarding age and education data, 94% of the women interviewed were of the age 25 or over, and of these 63.6% had a higher level of education or equal to complete higher education, corroborating other studies that state women with a higher level of education seek more help to start or continue the exclusive breastfeeding (EBF) process^{16, 17, 18}. Greater use of HMB by this clientele signals a difference in the service provided. In the case of this study it was found that the Human Milk Bank was considered a reference service for users, being an important gateway to health promotion. Another possible explanation for this finding is the observation that people with higher levels of education prioritize breastfeeding seeking prevention and promotion of maternal and neonatal health.

In Brazil, a prospective study demonstrated the influence of education on breastfeeding, revealing that mothers who have a longer time of study have a greater capacity to solve problems and discomforts, regarding the act of breastfeeding¹⁹. This shows that mothers with a higher level of education, possibility of greater access to information, they tend to look for help to take on better security in the role of mother and provider of food for her child, in order to feel more adequately assisted and safe in

their choice in the context of the COVID-19 pandemic.²⁰

Discussão

From the data collected, three categories emerged for analysis: health behavior, prevention measures, maternal feelings,

CATEGORY 1 – HEALTH BEHAVIOR

The high transmission capacity of the coronavirus has caused the world to manage to adapt quickly and in many ways, with social isolation being one of the most effective measures indicated by health authorities. In the study carried out, women interviewed also sought ways to protect themselves from SARS-COV2 infection, being the main one of social isolation, since the repercussions of this infection for pregnant women and newborns are still little known, with little scientific evidence about their effect in mothers and children. This stance was displayed in the responses below:

“Isolation, hygiene care and not leaving the house.” (C06)

“Isolation, I spent a long time without going out, without meeting acquaintances and

relatives. All preventive care, always washing our hands, the groceries... I stopped doing some activities outside the house too.” (C02)

“Washing hands, wearing masks and avoiding crowded places and public driving.”

(C58)

The attitudes of the interviewees are in line with what is recommended since the main routes of transmission of SARS-CoV-2 are by droplets and personal contact, in addition, airborne transmission may be



possible in circumstances and settings specific areas in which aerosol generating procedures (AGP) are performed²¹. Majority of Nursing mothers mentioned the frequent habit of washing their hands, social distancing and using of masks for the prevention and control of COVID-19, this attitude is valid as the SARS-CoV-2 is inactivated by selection methods for hand hygiene in centers sanitary: washed with soap and alcohol-based preparations (PBA).

Of the women interviewed, 58.33% reported having carried out social isolation during their breastfeeding period, among which 77.15% have a higher or lower level of education. equal to complete higher education. Social isolation, the attitude of keeping a person away from other people, was one of the most adopted measures to stop the contamination with SARS-CoV-2 (Covid-19)²².

"I work from home, total isolation for 9 months, we are restricted

to this day, but less isolated."
(C14)

"During the pandemic I worked from home for almost 2 years."
(C23)

"Everything. My work needed adaptations and I started going out much less, even after the flexible permissions."
(C34)

Several studies demonstrate that the majority of nursing mothers who underwent isolation are those with the highest level of education, as they have more mechanisms to learn about the benefits of this health action^{20,21,22,23}. Furthermore, it is worth remember that education is a marker of social insertion, which influences directly in aspects of the individual's personal life, even interfering in decision-making decision in the face of the pandemic. Therefore, it can be concluded that the high degree of education of nursing mothers, enables them to have sufficient possibilities

to consider which protective measures would be effective, which they should choose to carry out, during the COVID-19 pandemic, as is the case with social isolation^{24,25}. It can then be affirmed that the people with the greatest ease of access to information are those with the greatest level of education, either because they know more possible ways to acquire information desired or because they are able to understand more robust and technical information, being, perhaps this is the point that makes it difficult for people with a lower level of education to have access to this type of knowledge²⁶.

When asked about protective measures during breastfeeding, many reported that they did nothing different due to COVID-19. It was noticed that because being more indoors (isolated), the protective measures adopted were just a more attentive hygiene and the use of masks when noticing signs of the flu:

"Yes. Wear a mask if you notice signs of the flu."
(C05)

"As I was more indoors, it didn't change much. but when I went out on the streets, I always rubbed alcohol on my hands before picking them up."
(C06)

"Just more thorough hygiene."
(C15)

Social distance and the correct use of PPE are one of the most important measures to effectively stop the spread of SARS-CoV-2 and protect the safety of health professionals and other non-health related populations. Wearing a mask can avoid inhaling large droplets and sprays and as a basic intervention of a non-pharmaceutical measure, its use is an effective means of preventing respiratory infectious diseases, which can reduce the risk of infection^{28,29}.

Two reviews, one from the US Centers for Disease Control and Prevention and another from the Royal College of

Obstetricians and Gynaecologists, in London, concluded that if the mother is willing and in clinical condition to breastfeed her child, she must be well informed and in accordance with the necessary preventive measures. On this premise, the measures adopted by women are in accordance with recommended practices for a safe breastfeeding, since for those who wish to breastfeed, precautions to limit viral spread, with strict hand hygiene before touching the baby. When a mother with COVID-19³⁰ is too sick to care for her newborn, the neonate can be treated separately and can be fed with fresh breast milk extracted, without the need to pasteurize it, as it is believed that human milk is not a vehicle for transmission of COVID-19. Additionally, the use of a face mask covering the nose and the mouth when noticing signs of the flu is the correct thing to do, to avoid infecting the baby with droplets of saliva, in addition to avoiding talking or coughing during breastfeeding and changing masks immediately in case of coughing or sneezing, or with each 3 feedings³.

CATEGORY 2 – PREVENTION MEASURES

When asked about the use of medications for immunity and prevention of virus, all responded that they did not use specific medications for the virus, just vitamins for pregnancy.

“Not for the virus. I took vitamins for the pregnancy.” (C08)

“Yes. Vitamins and nutritional supplements.” (C13)

It was possible to notice that the interviewees did not follow the pattern observed during the pandemic since hydroxychloroquine or chloroquine with or without azithromycin were widely

promoted to treat coronavirus disease 2019 after antiviral effects in vitro against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)³¹. These medications have appeared as possible low-cost treatments for individuals with coronavirus and received wide and speculative coverage from the international press and the president of the United States³². A meta-analysis study proved that the Hydroxychloroquine alone is not effective for treating people with COVID-19 and that. The combination of hydroxychloroquine and azithromycin increases the risk of mortality. Furthermore, chloroquine and hydroxychloroquine cross the placenta with a half-life of around 50 days, which can lead to a long-term effect during pregnancy³³. As a result, nursing mothers in this present study chose not to use such medications for prevention.

When asked if they had taken the vaccine, most women did not show feelings of hesitancy and fear regarding the vaccine, choosing to be vaccinated to protect the themselves and their children through breast milk.

“Yes. I’m super in favor of the vaccine.” (C07)

“Yes, because I wanted to protect myself and my son too.” (C08)

This train of thought is in line with an exploratory cohort study on the immunogenicity of the mRNA COVID-19 vaccine, demonstrating that receipt of the vaccine in pregnant women induces antibodies that are transported to cord blood infant umbilical cord and breast milk³⁴. It is worth highlighting that a small portion, just 3 women, reported that they had not yet taken it because they had doubts about its effectiveness.

After Emergency Use Authorization was granted for the Messenger RNA (mRNA) BNT162b2 (Pfizer–BioNTech) and mRNA-1273 (Moderna), the people at



higher risk of illness and death related to coronavirus disease were prioritized for vaccination. Among them were pregnant women, but they were excluded from the initial vaccine trials³⁵. A recent study reported low acceptance of vaccination for COVID-19 in a sample of pregnant women. Concern about the safety of the vaccine was the main reason for hesitation, corroborating studies by Sule Goncu Ayhan et al³⁶.

It is worth highlighting the perception by nursing mothers of breastfeeding as a measure of protection against the disease. When asked about their desire to stop breastfeeding due to pandemic, none of them reported such a need, featuring the advantages of breastfeeding for the infant. Many mentioned that breast milk provides all the nutrients the baby needs and has a protective role against diseases.

"No. Only if I contracted the disease." (C08)

"No! Because I understand that breastfeeding is the best and most

complete food that my baby has access to." (C10)

"No. I have always believed and still believe that breastfeeding is fundamental to

protect her from covid. I intend to breastfeed until she's 2 years old or beyond." (C20)

The decision to breastfeed is extremely important because breastfeeding protects against morbidity and mortality in the neonatal and post-neonatal periods, as well as throughout childhood. Currently, data suggests there is little evidence of transmission vertical for the newborn. An initial study by Huijun Chen et al³⁷ tested for SARS- CoV-2 in neonatal throat swabs from eight newborns and milk samples of three mothers, and no positive results were

reported. The mother should be encouraged to Breastfeed their child while maintaining adequate protective measures. All nursing mothers in this study understand the importance of breastfeeding and did not consider stopping breastfeeding due to the pandemic, in addition to reporting the passage of antibodies through breast milk. Such a stance is aligned with the current WHO statement that mother and baby should not be separated because of COVID-19 unless it is absolutely essential³⁸.

CATEGORY 3 – MATERNAL FEELINGS

Breastfeeding has countless benefits for the child's health, reducing the rate of infant mortality, in addition to guaranteeing vital immunological properties, bringing benefits of short and long term³⁹. During the pandemic, pregnant and postpartum women experienced fear, desires and uncertainties regarding the practice of breastfeeding and other care for the newborn. The Ministry of Health reinforced the importance of health services guaranteeing rights to humanized and safe care for pregnant women and nursing mothers. The changes made during the new coronavirus public health emergency, such as the need to suspend health services, weakened the assistance provided to this public with changes in the feelings of nursing mothers. When asked about the feelings regarding breastfeeding during the beginning and current period of the pandemic, almost half of women reported feelings of fear. The fear in most of the responses is related to the unknown, transmission and contamination.

"I felt very scared, scared that my husband would catch it and pass it on to us (because he continued working)." (C03)

"Yes, I was afraid of contracting Covid and

consequently having to interrupt breastfeeding.” (C07)

“Fear of catching COVID and also transmitting it to him, even for this reason I avoided going out as much as possible.” (C11)

According to Felipe Ornell et al⁴⁰, fear is a central emotion to consider when seeking to understand the psychological effects experienced in a threatening scenario. The scenario of Stigmatization, exposure to risk and demand for health care aggravates this feeling, considering that all services were aimed at fighting COVID-19 and the place that was supposed to welcome and enlighten nursing mothers no longer existed⁴¹. The sensitive look and the qualified listening are essential to recognize the woman in this situation and, from then on, welcome and help them.

Another recurring feeling demonstrated by nursing mothers was loneliness. The absence of a support network during the breastfeeding period worsened the feeling that some mothers They already reported feeling alone and powerless. This was possible due to the lack of friendly words coming from people close to us, such as family, who couldn't be there to encourage them and listen to them when necessary. Most women, when asked about how they felt about the presence or absence of help, they reported that had no company during the pandemic, other than those present in the same residence, to avoid the risk of contagion. Some say they received help in support groups for mothers, breastfeeding consultants and the Human Milk Bank itself, and through the contact with these professionals and institutions gave new meaning to the moment that until then was difficult. However, most women did not have this benefit and went through difficult times, especially those who have not experienced motherhood previously, and reported the development of disorders such as depression and anxiety.

“It seems like loneliness takes over (...)” (C13)

“(...) I suffered for 4 months alone, in silence (...)” (C45)

“Super lonely, I thought I was depressed, I had a lot of anxiety attacks

because breastfeeding is a very lonely period, I missed people

saying that I could handle everything.” (C59)

The feeling of loneliness is in conformity with this current literature. According to Lima et al⁴¹, the people who had to isolate, were automatically exposed to moments of stress when they lost intimate and social contact, which leads to the feeling of loneliness. Furthermore, when the feeling of loneliness results from social distancing, it is common to develop negative thoughts, depressive symptoms or even depression as reported by C08. The lonely moments and idle activities can lead to a self-evaluation of one's personal life history, converging on the sensation that life doesn't make sense, especially in a complex situation like a global pandemic^{42,43}.

Fatigue was also recurrently reported, especially by nursing mothers who were unable to count on a support network. Many women reported that they did not receive visitors, family or no other help and the absence of close people as assistants, which left them exhausted and overworked because they did not have anyone to share the tasks of the new routine.

“I felt very tired because no one came into my house except my friend and my husband. I felt very exhausted (...)” (C11)

“(...) it was very exhausting (...)” (C17)

“Very overwhelmed and tired”
(C42)

Fatigue is a physical symptom that can originate from dysfunctional thoughts and strong emotions that shake the psychic system of nursing mothers, predisposing and/or intensifying damage to mental health. In general, the postpartum period is a period of great instability and emotional and physical vulnerability that requires care from the medical decision to discharge the patient, as well as during daily interaction⁴⁴. In view of this, it is necessary that professionals are alert to signs and symptoms that may pose health risks maternal emotional. Taking this context into account, the role of health professionals, during reception and qualified listening to offer comprehensive care for maternal and neonatal health.

Some of the interviewees had positive feelings, mainly related to the fact that they are in isolation and working from home. Mothers reported feeling privileged and grateful to have had more time at home with their newborn children, so they could offer AME and on free demand more easily.

“Grateful to be able to spend more time with my son.” (C07)

“I feel privileged to be able to be fully available to offer

breast milk on demand.” (C26)

“I'm fine with that. I can breastfeed more calmly because I don't receive

visits due to the pandemic.”
(C39)

Just like the study by Isabel Rodríguez-Gallego et al⁴⁵, it was found that there was a positive influence on breastfeeding related to the fact that they stay longer in home and not receiving visitors, in addition they reported that they managed to increase the bond with your newborn. Nursing mothers associate reduced stress and fatigue with the fact of

working from home⁴⁶. In addition to less pressure to leave the house and receive visitors, the fact that partners also working from home increased positive feelings associated with support received by them⁴⁷. Thus, based on the ideal health behavior adopted by majority of the interviewees, which guaranteed a feeling of tranquility, in addition to protecting the mother-baby dyad from COVID-19, these precautions protect them from other diseases that can be transmitted to the newborn⁴⁸.

Previous studies have proven that there is a direct influence of the support network on the duration of the breastfeeding period. Women who receive support from their partner to breastfeeding and consequently emotional and practical support, breastfed for at least 6 months, confirming that encouragement is an essential aspect for continued breastfeeding^{44,48,49}.

Conclusão

The postpartum period, naturally, is a period of vulnerability and change, both in personal and family context. The COVID-19 pandemic has imposed challenges on maintaining the lifestyle of nursing mothers, as it led to uncertainty regarding the guarantee of a support, questions about the new disease and its consequences. The results of the study emphasize that the fear, mainly, of contamination was recurrent and that the measures to prevention were adopted by the majority of interviewees. Furthermore, another point noted was that the longer time at home and the restriction on visits was seen as an advantage, as this allowed them to spend more time with their children without external interventions. Furthermore, the development of the vaccine against COVID-19 was well received by the majority, who reported feelings of trust and hope, being an indirect way of protecting your children. In short, despite the fear of contamination, the nursing mothers reported that they adapted well to the changes in habits and the



challenges posed by the pandemic. Furthermore, it is important that professionals are aware of health-related events and mental health, which may negatively affect the mother's emotional

state. In this way, see if the role of health professionals as a fundamental pillar in maternal care, this way, it is possible to offer comprehensive care for maternal and neonatal health.

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