



# The Perception of Breastfeeding Mothers toward the Comfortable Aspects of Ergonomic Chair

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## ABSTRACT

Breastfeeding is an activity that a mother must do for her child. The correct way of breastfeeding is the process of breastfeeding by adjusting the position of the mother and baby so that they feel comfortable and the milk comes out smoothly and has good quality. The smoothness of the breastfeeding process is determined by the comfort of the mother's position. Most mothers when breastfeeding is mostly done in a sleeping position, not a sitting position. This study aims to discover the comprehensive overviews on the perception of breastfeeding mothers toward the comfortable aspects of the ergonomics chair. This method of this research was a descriptive survey. The design method used in this study was the Sequential Explanatory Mixed Methods Design from McMahon. Data collection was conducted by distributing questionnaires via google form to prevent transmission of COVID-19. The variables measured in this study were the ergonomic seats position for breastfeeding mother. There was an overview of the need for an ergonomic chair that provided a comfortable sitting position for breastfeeding mothers. Breastfeeding mothers really need the support of facilities in the form of an ergonomic chair to support a comfortable sitting position while breastfeeding.

**Keywords:** *Breastfeeding; Position; Ergonomic Chair*

## 1. INTRODUCTION

Babies get nutrition through breast milk given by their mothers. Exclusive breastfeeding should be given for 2 years and for the first 6 months of the child's age, only breast milk should be given without other complementary foods (MPASI). The content of breast milk includes building blocks (proteins, minerals), regulatory substances (vitamins, minerals, protein, water), fat energy substances. Breast milk can also protect against various diseases that can attack the body [1]. Exclusive breastfeeding for babies is important, especially for the growth and development of the baby [2] Breast milk is an ideal food for babies where breast milk itself is clearly safe, clean and contains antibodies such as DHA, AA, Omega 6, lactose, taurine, protein, lactobacilli, vitamin A, colostrum, fat, iron, lactoferrin and lysozyme which are all in the right dosage and composition for babies. Therefore, breast milk is very important in forming the immune system in infants which can help protect children from many common diseases.

Breast milk itself contains all the energy and nutrients a baby needs for the first months of life, and it continues

to provide the child's nutritional needs. Exclusive breastfeeding is highly recommended to be carried out for 6 months of the baby's age, after 6 months the baby can be given complementary foods according to age while still being breastfed until the age of 2 years. Although breastfeeding can only be employed by a mother, the support and involvement of many parties is needed from the family, public places, companies, and the government so that every mother can breastfeed her baby exclusively and comfortably. In accordance with the theme of World Breastfeeding Week 2021, Protect breastfeeding: a shared responsibility, that breastfeeding mothers are given more attention and are more facilitated for their comfort in breastfeeding.

Breastfeeding is an activity that is carried out every day for hours and many times by mothers after giving birth. Three positions that can be done by mothers while breastfeeding include lying, standing and sitting positions. But all of these positions require technique and are not arbitrary so as to provide comfort for both mother and baby. Because failure in breastfeeding is often caused by an incorrect breastfeeding position, causing sore nipples and the baby is reluctant to breastfeed [8].

Ergonomic sitting position can provide comfort. In addition, comfort itself can be determined by the balance between human factors and environmental factors that influence it. Many musculoskeletal injuries originate from discomfort [8].

The uncomfortable position when the mother is breastfeeding is one of the things that affects the activity of the breastfeeding process, such as reducing the duration of breastfeeding or breastfeeding being not optimal. One of the causes of maternal discomfort when breastfeeding is ergonomic principles that have not been implemented. So that the problem that arises is the support for the discomfort of breastfeeding mothers in a sitting position assisted by the existence of facilities, namely an ergonomic chair.

## 2. METHOD

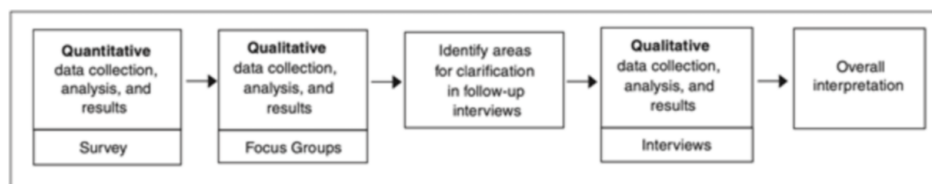
This research method was a descriptive survey with a sample of 30 breastfeeding mothers at Ummi Hasanah Hospital, Bantul Yogyakarta in 2021. Data collection was carried out by distributing questionnaires via google form to prevent transmission of COVID-19. The variable measured in this study was the proper position (ergonomic seats) for breastfeeding mothers.

The research method employed was a survey method followed up with a qualitative exploration of the issues that arose related to the research topic. Accurate data were obtained through in-depth interviews and adapted to

field conditions. Documentation studies were conducted to gain an understanding of breastfeeding mothers and the dynamics of developing breastfeeding methods. The type of sampling used was non-probability sampling with purposive sampling technique. The design method used in this study was the Sequential Explanatory Mixed Methods Design from McMahon [4], which are elaborated as seen in Figure 1.

Stages in this research:

- a. In the first stage, this research required an understanding of the dominant characteristic patterns of the research population. Meanwhile, the population of this study was patients who gave birth in Bantul Regency, with a sample of patients who gave birth at RSKIA Ummi Khasanah.
- b. In the second stage, this research development required completeness of information, deepening of understanding and dissemination of information to completion to be interpreted validly. Therefore, the list of closed questions was provided. The survey was conducted by completing an open column to accommodate free answers and information about cases that had occurred (experienced) by the respondent/informant. Free answers and interesting cases were disseminated to be applied as materials for in-depth interviews and focus group discussions (FGD) to strengthen the validity of the results of this study.
- c. The next source of data were obtained from the related authorities in the area.



**Figure 1** Sequential Explanatory Mixed Methods Design (reprinted with permission from McMahon, 2007)

## 3. RESULT AND DISCUSSION

The results showed that 66.7% of mothers strongly support the existence of an ergonomic chair that ensures the comfort of the mother when breastfeeding in a sitting position. Moreover 66.7% of mothers want to be invented ergonomic seats to support their convenience in fulfilling exclusive breastfeeding for babies. The following is a table of the results of filling out the questionnaire via google form which was distributed to 30 breastfeeding mothers at RSKIA Ummi Hasanah.

Table 1 shows that the educational background characteristics of breastfeeding mothers are the most

educated in colleges at 68.9%. So that mothers have got some of the knowledge that must be understood when breastfeeding a baby because the level of curiosity is also high. The age of children who are still breastfeeding is mostly at the age of > 1 year so that children have received complementary foods even though they must still be given exclusive breastfeeding until the age of 2 years.

Table 2 can be concluded that 66.7% of mothers strongly support the support of assistive devices to facilitate and provide a sense of comfort to mothers while breastfeeding.

**Table 1** Distribution of Breastfeeding Mother Profile at RSKIA Umami Hasanah Bantul Yogyakarta

No.	Characteristics	Percentage
1	Educational Background	
	SMA (Senior High School)	31.1%
	Academic/College	68.9%
	Total	100.0%
2	Number of children owned	
	1 child	73.3%
	2 children	22.2%
	>2 children	4.4%
	Total	100.0%
3	Youngest child's age	
	0-6 months	16.7%
	7-12 months	33.3%
	>1 year	50.0%
	Total	100.0%

**Table 2** Distribution of the Need for Assistive Devices that Support the Comfort of Breastfeeding Mothers at Umami Hasanah Hospital, Bantul Yogyakarta

Characteristics	Percentage
Strongly Agree	66.7%
Agree	33.3%
Less disagree	0.0%
Disagree	0.0%
<b>Total</b>	<b>100.0%</b>

**Table 3** Distribution of Support for Breastfeeding Mothers at RSKIA Umami Hasanah Bantul Yogyakarta

Characteristics	Percentage
Psychological support (husband or family support)	24.4%
Environmental support	2.2%
Facility support (ergonomic chair)	66.7%
Nutritional support	2.2%
Knowledge support	4.4%
<b>Total</b>	<b>100.0%</b>

Table 3 shows that there are five supports that play an important role in the comfort of mothers while breastfeeding. The first is the support of facilities in the form of seats or chairs that are ergonomic by 66.7%. The importance of an ergonomic chair because it can provide comfort and increase the smoothness of breastfeeding for babies. Breastfeeding mothers should use a seat that can provide comfort and freedom to move during breastfeeding [6]. Second, psychological support by 24.4%. Practical and emotional breastfeeding support, easing the burden on the wife in having a family, and appreciating and encouraging her to become a wife's strength to successfully breastfeed [3]. Third, knowledge support is 4.4%. The correct breastfeeding technique is how to give breast milk to the baby with the attachment and position of the mother and baby correctly. To achieve successful breastfeeding, knowledge of correct breastfeeding techniques is needed [5]. Fourth, environmental support is 2.2%. The social environment affects the support of breastfeeding mothers and accepts breastfeeding as part of a woman's nature [6]. The last

support is nutrition, which is 2.2%. Diet is one of the determinants of a mother's success in breastfeeding because it is related to the mother's milk production [7].

The results of in-depth interviews with breastfeeding mothers demonstrated that basically there were no separate provisions for getting a comfortable position while breastfeeding. The *mother's* position follows the right position of the baby. Some excerpts from interviews delivered by breastfeeding mothers are elaborated as follows:

*"It is not possible for me to breastfeed while leaning on my back. I follow the baby's position, when it's asleep, I can only calm down a bit" (Mother "A")*

Other mothers reported that discomfort occurred after five to ten *minutes*.

*"Hands feel tingling, back feels sore if it's been more than five or ten minutes (Mother "B")*

*"When my baby was just born, I was still strong enough to hold my baby while breastfeeding for up to 10 minutes but when my baby was 4 months old, I couldn't hold it for that long anymore." (Mother C)*

In general, mothers find some difficulties in the early stages of breastfeeding, such as difficulty in carrying and confused in determining the position to breastfeed. Breastfeeding techniques are things that can affect the success of mothers in breastfeeding.

*"It's my first-time giving birth so I'm confused about how to hold my baby. I am afraid if I am in the wrong position in carrying." mother D.*

Correct breastfeeding is influenced by the correct timing and technique of breastfeeding. Low milk production can be caused by improper breastfeeding technique. Improper breastfeeding technique can cause sore nipples so the mother is reluctant to breastfeed and the baby will breastfeed less and less. This can cause problems in fulfilling nutrition for babies.

In the technique of breastfeeding, it is necessary to pay attention to the position and attachment. Mothers must understand the importance of a comfortable position and maintain it when breastfeeding to avoid an inappropriate breast position that results in ineffective breastfeeding. Mothers can breastfeed their babies in a sitting position. The sitting position is intended to provide support or support for the mother's back in a position perpendicular to her lap. This position can be done by sitting on a chair.

The research findings show that the use of an ergonomic chair can help the mother's success in providing exclusive breastfeeding for her baby because it can reduce skeletal muscle complaints.

*"Breastfeeding on the bed is not comfortable at all, Ms. I find it difficult to determine the right position so that the baby can reach the nipple. So sometimes I have to bend down,*

*Of course, it makes me feel tired quickly..." (Mother E) "...if I breastfeed while sitting it feels comfortable and happy. It's normal if I feel tired or sore because maybe my baby's weight continues to increase. For me, the important thing is to just enjoy it, don't feel like it's a burden." (Mother F).*

*"...it is better to breastfeed while sitting so that the baby doesn't choke. The mother can also feel more relaxed." (Mother G)*

*"...I'm afraid Ms. if I breastfeed while lying down. I'm worried that my baby's nose will be covered by the breast. I think it's more comfortable to sit, so I can control it so that doesn't happen." (Mother H).*

Based on some of the opinions expressed by breastfeeding mothers, it was found that the sitting position is very important to support exclusive breastfeeding. Therefore, the authors were motivated to design a device that can facilitate mothers in breastfeeding in a sitting position. It was expected that the finding of an ergonomic seat as a breastfeeding aid can make it easier for mothers to provide exclusive breastfeeding for their babies.

#### 4. CONCLUSION

The conclusion of this study is that the support of facilities (ergonomic chairs) which strongly supports the comfort of mothers when breastfeeding in a sitting position is needed by breastfeeding mothers. But other support is also needed to support exclusive breastfeeding smoothly. Such support includes psychological support that breastfeeding mothers need the assistance of their husbands or families as a support system. The next support is knowledge because breastfeeding requires the correct technique, time, position to optimize exclusive breastfeeding. Nutritional support is important because it will facilitate the production of breast milk so that the baby does not lack breast milk. Finally, environmental support is also needed because babies can ask for breastfeeding anywhere, so the existence of space for breastfeeding mothers is also important. Mothers still need to be motivated to breastfeed in the right position to prevent musculoskeletal injuries.

#### ACKNOWLEDGMENT

The greatest gratitude goes to the Ministry of Research, Technology and Higher education who has provided funding resources. Then the greatest gratitude also goes to RSKIA Ummi Khasanah who has facilitated the provision of respondents for breastfeeding mothers as a source of data in this study.

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