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# MOTHER'S PERCEPTIONS BASED ON THE HEALTH BELIEF MODEL ABOUT EXCLUSIVE BREASTFEEDING IN PREVENTING STUNTING AT KAMPUNG BARU PUBLIC HEALTH CENTER, MEDAN MAIMUN DISTRICT MEDAN CITY, NORTH SUMATRA PROVINCE, 2025

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## ABSTRACT

Sustainable Development Goal (SDG) number two aims to create a healthy and productive society free from hunger. According to SDG data, the stunting rate among children under five decreased from 24.4% in 2021 to 21.6% in 2022. However, disparities remain across provinces, and national targets have not yet been achieved. Stunting is characterized by a Z-score less than -2 SD (moderate) and less than -3 SD (severe). One of the main obstacles to achieving this goal is the prevalence of malnutrition among children under five, which is a major factor contributing to stunting (Bappenas, 2023). This study aims to explore mothers' perceptions using the Health Belief Model (HBM) regarding exclusive breastfeeding in preventing stunting at the Kampung Baru Health Center in 2025. The research method is analytical, using a cross-sectional design with a Chi-Square test to analyze the influence between variables. The population consists of all mothers with toddlers, with a total of 149 visits recorded in the past year. A sample of 60 mothers was selected. Primary data were collected using questionnaires, and secondary data were obtained through interviews. The results showed that most respondents were aged 31–40 years (66.7%), had a high school education (66.7%), and were housewives (91.7%). There was a statistically significant relationship between perceived susceptibility (p=0.009), perceived severity (p=0.024), and perceived benefits (p=0.013) with the practice of exclusive breastfeeding in preventing stunting. In contrast, perceived barriers did not show a significant influence (p=0.709). Conclusion: There is a significant relationship between mothers' perceptions of susceptibility, severity, and benefits and the practice of exclusive breastfeeding in preventing stunting, while perceived barriers had no significant impact. Educational interventions should focus on enhancing mothers' positive perceptions of the importance of exclusive breastfeeding.

**Keywords:** Perception, Exclusive Breastfeeding, Stunting

## Introduction

*Sustainable Development Goals* (SDGs) number two is to create a healthy and productive society free from hunger. SDGs data on Child Mortality Rate according to sustainable development (SDGs), stunting toddlers have decreased from 24.4% in 2021 to 21.6% in 2022, however, there are gaps in

various provinces and the set targets have not been achieved. Stunting is characterized by a *Z-score* value of less than -2 SD (moderate) and less than -3 SD (severe), the inhibition of the occurrence of this goal is due to the average toddler experiencing malnutrition which is a factor that causes stunting (Adriani, P., Aisyah, I. S., Wirawan, S., Hasanah, L. N., Idris, Nursiah, A., Yulistianingsih, A., & Siswati, 2022)

Based on data from the *United Nations Children's Fund* (UNICEF) in 2022, Indonesia is the country with the highest rate of child malnutrition with the prevalence of stunting ranked 27th out of 154 countries and 5th in Southeast Asia. This high number makes maternal and child malnutrition a top priority in 2022 to revitalize and improve essential nutrition services that are being intensified to prevent stunting (Pangaribuan, I. K., Said, F. M., Dewi, E. R., Siahaan, N., & Simbolon, 2022).

*The Association of Southeast Asian Nations Sustainable Development Goals Snapshot* (ASEAN SDG Snapshot Report) in 2022 shows the prevalence of stunting in Southeast Asia. Cambodia, the Philippines, Vietnam, and Myanmar experienced a decrease in stunting rates, while the prevalence of stunting in Malaysia increased from 17.7% in 2016 to 21.8% in 2020. Thailand also experienced an increase from 10.5% (2016) to 13.3% (2020). Indonesia showed a slight increase from 27.5% (2016) to 27.7% (2020), the average stunting rate in Southeast Asia is 25.4%. In 2022, Indonesia is estimated to contribute 4.7% to the total global stunting cases (Asrori, 2020).

According to the 2023 Indonesian Health Survey (SKI), the stunting rate in Indonesia is around 21.5% of children under five experiencing stunting. There is a significant disparity between provinces with the lowest stunting prevalence of 7.2% and the highest at 37.9%. North Sumatra has a stunting prevalence of 18.9% in 2023, making it one of the contributors to the high stunting rate in Indonesia (Yellisni, I., & Kalsum, 2023).

Government Regulation of the Republic of Indonesia No. 28 of 2024 Article 25, Breast Milk (ASI) is a baby's need that provides nutrients in the growth and development of the baby during the first 6 months (Maryuni, 2024).

Breast milk contains antibodies that help babies fight diseases so as to reduce the risk of illness, protect babies from non-communicable diseases in adulthood, such as diabetes and heart disease to infant death. The main causes of stunting include chronic malnutrition, recurrent infections, and an environment that is not supportive of child development.

Exclusive breastfeeding according to WHO *(World Health Organization)* is important to overcome the problem of stunting in Indonesia. Exclusive breastfeeding during the first 6 months of a baby's life is essential to support optimal child growth and development (WHO, 2024). The National Exclusive Breastfeeding Fulfillment Rate for Infants is 80%. North Sumatra based on maternal and child health profiles in 2024. Data shows an increase in breastfeeding in children aged 0-23 months with 78.66% or around 79 out of 100 children who have been and are still breastfed (Kurniawati, D., Hardiani, R. S., & Rahmawati, 2020). Although this figure is positive, it is important to ensure the sustainability of exclusive breastfeeding because it is very important in preventing stunting in children (Ayu, D. P., Fajar, N. A., Munadi, M. C., & Ananingsih, 2024).

Stunting is characterized by the inhibition of children's growth and

development at the age of 1-3 years due to malnutrition in early life (Mustakim, M. R. D., Irwanto, Irawan, R., Irmawati, M., & Setyoboedi, 2022). Nutrition plays a very important role in the maturation period of the central nervous system and brain. Children who experience stunting experience delays in gross motor development and imperfect fine motor development, resulting in abnormalities in child development, the main cause of malnourished children is limited milk production on the first day of a child's life (Mustakim, M. R. D., Irwanto, Irawan, R., Irmawati, M., & Setyoboedi, 2022).

Research by Ingka, et al. states that toddlers who are stunting have a history of non-exclusive breastfeeding. On the other hand, babies who receive exclusive breastfeeding do not experience stunting. This suggests that exclusive breastfeeding can play an important role in preventing stunting because breastfeeding provides optimal nutrition for child growth and development (Noor, R. I., & Muniroh, 2023).

Based on Inayah's research, et al show that the perception that affects breastfeeding in infants is the attitude of mothers (65.6%) to have a supportive attitude towards exclusive breastfeeding. However, 34.4% of mothers showed a less supportive attitude, that lack of knowledge about exclusive breastfeeding and an environment that does not support exclusive breastfeeding can be a factor causing a less supportive attitude between mothers' attitudes towards exclusive breastfeeding and their seriousness in stunting prevention (Maryuni, 2024).

Equivalent to *the Health Belief Model Theory* (HBM) related to the prediction of health behavior, the perceived barriers to exclusive breastfeeding in stunting prevention are influenced by maternal attitudes, knowledge, and educational status. Of these three factors, the mother's attitude is the dominant factor. Mothers with attitudes that are less supportive of exclusive breastfeeding have a 5.8 times higher risk of experiencing perceptual barriers compared to mothers who have a positive attitude towards exclusive breastfeeding according to research by Ayu, et al (Ayu, D. P., Fajar, N. A., Munadi, M. C., & Ananingsih, 2024).

Breast milk (breast milk) is given exclusively in the first 6 months without co-existing with other supplements, followed by providing additional complementary foods until the age of 2 years to prevent stunting in toddlers. Based on the research of Desi Amelia, et al., the pattern of exclusive breast milk consumption with the incidence of stunting in toddlers who are not given exclusive breastfeeding has the potential to be stunting compared to babies who receive exclusive breastfeeding without additional food at the age of 0-6 months (Desi, A., Nainggolan, Anna Waris, S. N. S., & Marjuang, 2024).

Based on the results of an initial survey conducted by researchers at the Kampung Baru Health Center, Sei Mati Village in October 2024, it shows that there are 5 children under five who are stunted in the Kampung Baru area and 2 children under five with 149 mothers under five in Sei Mati Village. The survey also found data from the profile of the new village health center that the fulfillment of the Exclusive Breastfeeding target in the region was not achieved because of public belief that nutrition for toddlers can be done by mixing drinking water with sugar and then dissolving, which is believed to meet the nutritional needs of toddlers without exclusive breastfeeding for 6 months for babies.

Based on this presentation, the author is interested in conducting a case study on

"Maternal Perception with Health Belief Theory about Exclusive Breastfeeding in Preventing Stunting at the Kampung Baru Health Center, Medan Maimun District, Medan City, North Sumatra Province in 2025".

## Research Methods

This study aims to explore mothers' perceptions using the Health Belief Model (HBM) regarding exclusive breastfeeding in preventing stunting at the Kampung Baru Health Center in 2025. The research method is analytical, using a cross-sectional design with a Chi-Square test to analyze the influence between variables. The population consists of all mothers with toddlers, with a total of 149 visits recorded in the past year. A sample of 60 mothers was selected. Primary data were collected using questionnaires, and secondary data were obtained through interviews.

## Results And Discussion

The understanding of respondent characteristics in the study is not only about data, but also about valuing human diversity. By understanding attributes such as age, education, and occupation, researchers can dig deeper into their meanings and ensure each voice is fairly and accurately represented in the research results:

**Table 3** ***Age, Education and Employment Characteristics Test Results***

| **Age** | | | |
|---|---|---|---|
| | | **Frequency** | **Presentase** |
| | 20-30 | 18 | 30% |
| Valid | 31-40 | 40 | 66.7% |
| | 41-50 | 2 | 3.3% |
| **Education** | | | |
| | SD | 5 | 8.3% |
| Valid | SMP | 13 | 21.7% |
| | SMA | 40 | 66.7% |
| | S1 | 2 | 3.3% |
| **Work** | | | |
| | IRT | 55 | 91.7% |
| Valid | Entrepreneurial | 4 | 6.7% |
| | Guru | 1 | 1.7% |

This study analyzed data from 60 samples of mothers under five and found that the majority of respondents were aged 31-40 years old (66.7%), had a high school education (66.7%), and worked as housewives (IRT) (91.7%). These demographic characteristics can affect perceptions and practices of exclusive breastfeeding, which has an impact on stunting prevention. These findings suggest that factors such as age, education, and employment need to be considered in stunting prevention efforts

**Table 4** ***Frequency Distribution of Respondents Based on Perception of Vulnerability, Severity, Benefits, Barriers and Exclusive and Non-Exclusive Breastfeeding***

| **Perception of Vulnerability** | | |
|---|---|---|
| | **Frequency** | **Presentase** |
| Keep | 58 | 96.7% |
| Low | 2 | 3.3% |
| Total | 60 | 100% |
| **Perception of Severity** | | |
| Low | 7 | 11.7% |
| Keep | 53 | 88.3% |
| Total | 60 | 100% |
| **Perception of Benefits** | | |
| Low | 9 | 15% |
| Keep | 51 | 85% |
| Total | 60 | 100% |
| **Perception of Barriers** | | |
| Tall | 36 | 60% |
| Keep | 24 | 40% |
| Total | 60 | 100% |
| **Exclusive Breastfeeding and Non-Breastfeeding** | | |
| Probably Esclusif | 14 | 23.3% |
| Not Exclusive Breastfeeding | 46 | 76.7% |
| Total | 60 | 100% |



The results showed that most of the respondents (96.7%) had a moderate perception of vulnerability to exclusive breastfeeding, the rest (3.3%) had a low perception. The majority (91.7%) assessed the severity of the impact of not providing moderate exclusive breastfeeding, the rest (8.3%) were low. Perceived benefits were mostly (93.3%) moderate and (6.7%) low. Perception of high (60%) and moderate (40%) resistance. The majority of respondents (76.7%) did not exclusively breastfeed, while (23.3%) did not breastfeed exclusively

**Table 5. Bivariate *Influence of Perception of Vulnerability, Severity, Benefits, Barriers in Exclusive and Non-Exclusive Breastfeeding***

| Characteristics | Probably Esclusif | | Not Exclusive Breastfeeding | | Sum | | p-value |
|---|---|---|---|---|---|---|---|
| | n | % | n | % | n | % | |
| Perception of Vulnerability Keep Low | 12<br>2 | 20<br>3.3 | 46<br>0 | 76.7<br>0 | 58<br>2 | 96.7<br>3.3 | 0.009 |
| Perception of Severity Low Keep | 4<br>10 | 6.7<br>16.6 | 3<br>43 | 5<br>72.7 | 41<br>19 | 11.7<br>88.3 | 0.024 |
| Perception of Benefits Low Keep | 5<br>9 | 8.3<br>15 | 4<br>42 | 6.7<br>70 | 4<br>56 | 15<br>85 | 0.013 |
| Perception of Barriers Tall Keep | 5<br>9 | 8.3<br>15 | 19<br>27 | 31.7<br>45 | 24<br>36 | 40<br>60 | 0.709 |

Table 5 shows the effect of the perception of vulnerability, severity, and benefits of exclusive breastfeeding on stunting prevention at the Kampung Baru Health Center, Medan Maimun, in 2025. Perception of vulnerability (p=0.009) and severity (p=0.024) had a significant effect on exclusive breastfeeding in preventing stunting. Perception of benefits also had a significant effect (p=0.011). However, the perception of resistance (p>0.05) did not have a significant effect. Respondents with low exclusive breastfeeding amounted to 12 (20%), while those who did not breastfeed exclusively amounted to 46 (76.7%)

**Conclusion**

This study analyzes the relationship between maternal perceptions (vulnerability, severity, benefits, barriers) and exclusive breastfeeding in stunting prevention in the working area of the Kampung Baru Health Center, Medan, using valid and reliable research instruments:

1. Research at the Kampung Baru Health Center, Medan, showed that the majority of respondents were 31-40 years old (66.7%), had a high school education (66.7%), and most were housewives (IRT) at 91.7%. The rest have diverse educational and employment backgrounds.
2. This study found a significant relationship between maternal perception of vulnerability and exclusive breastfeeding in preventing stunting (p=0.009). Mothers with a perception of moderate vulnerability are more likely to give exclusive breastfeeding, so the zero hypothesis is rejected.
3. This study found that the perception of vulnerability, severity, and benefits had a significant influence on exclusive breastfeeding in preventing stunting, with p values of 0.009, 0.024, and 0.011, respectively. These results suggest that mothers with proper perceptions of vulnerability, severity, and benefits are more likely to give exclusive breastfeeding. The alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected.
4. This study found that there was a significant relationship between benefit perception and exclusive breastfeeding (p=0.013). Respondents with a perception of moderate benefits were more likely to provide exclusive breastfeeding, with the majority of respondents (85%) having a perception of moderate benefits. These results show that the proper perception of benefits about exclusive breastfeeding has a significant effect on exclusive breastfeeding. The alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected.
5. This study found that the perception of barrier did not have a significant effect on exclusive breastfeeding in preventing stunting (p=0.709). Perceived barriers were divided into high (60%) and medium (40%) categories, but there was no significant association with exclusive breastfeeding. Thus, the alternative hypothesis (Ha) is rejected and the null hypothesis (H0) is accepted.

**Reference**

Adriani, P., Aisyah, I. S., Wirawan, S., Hasanah, L. N., Idris, Nursiah, A., Yulistianingsih, A., & Siswati, T. (2022) "Stunting Pada Anak. In PT Global Eksekutif Teknologi," 124.

Asrori (2020) *Psikologi Pendidikan Pendekatan Multidisipliner*.

Ayu, D. P., Fajar, N. A., Munadi, M. C., & Ananingsih, E.S. (2024) "Analisis Persepsi Hambatan Berdasarkan Teori Health Belief Model dengan Pemberian ASI Eksklusif dalam Pencegahan Stunting," *Jurnal Penelitian* [Preprint].

Desi, A., Nainggolan, Anna Waris, S. N. S., & Marjuang, E.P. (2024) "Hubungan ASI Eksklusif dan Pola Konsumsi dengan Kejadian Stunting Pada Balita di Wilayah Kerja Puskesmas Idi Rayeuk Kabupaten Aceh Timur Tahun 2023."

Kurniawati, D., Hardiani, R. S., & Rahmawati, I. (2020) "Buku Air Susu Ibu," 42(4).

Maryuni, D. (2024) *BUTATING Buku Pintar Cegah Stunting.*

Mustakim, M. R. D., Irwanto, Irawan, R., Irmawati, M., & Setyoboedi, B. (2022) "Impact of Stunting on Development of Children between 1-3 Years of Age."

Noor, R. I., & Muniroh, L. (2023) "Hubungan Antara Persepsi Ibu Dengan Kejadian Stunting Berdasarkan Teori Health Belief Model."

Pangaribuan, I. K., Said, F. M., Dewi, E. R., Siahaan, N., & Simbolon, M.L. (2022) "Factors Affecting the Event Stunting in Tolls At Sei Bamban Health Center Batang Satan District Langkat District Year 2020."

Yellisni, I., & Kalsum, U. (2023) "Hubungan Pemberian ASI Eksklusif dengan Kejadian Stunting Pada Balita di Kelurahan Kemang Agung."