# **Factors Of Exclusive Breast Milk On Stunting Events**

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### **ABSTRACT**

The World Health Organizatin states that the prevalence of stunting in the world is 22.9% and the nutritional status of stunted toddlers is the cause of 2.2 million of all causes of underfive mortality worldwide. The results of Riskesdas in Indonesia in 2013 the presentation of the nutritional status of stunting toddlers was 37.2%. The prevalence of stunting did not show a decrease or improvement compared to 2010 (35%) and 2007 (36.8%). Stunting is a condition of failure to thrive in children under five years old (infants under five years old) due to chronic malnutrition so that the child is too short for his age. Malnutrition occurs since the baby is in the womb and in the early days after the baby is born, however, the stunting condition only appears after the baby is 2 years old. One of the factors in the occurrence of this stunting is exclusive breastfeeding. The purpose of this study was to determine the factors of exclusive breastfeeding on the incidence of stunting. The method in this research is literature review, which is trying to explore how the factors of exclusive breastfeeding on the incidence of stunting. The results in this study indicate that from 6 articles that have been reviewed, there is an influence of exclusive breastfeeding factors on the incidence of stunting. This is because breast milk is the best food for babies aged 0-6 months, where breast milk contains fat, carbohydrates, protein, salt and minerals and vitamins.

Keywords: Exclusive breastfeeding, Stunting

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### INTRODUCTION

Nutrition is a problem factor that is still a concern and has not been resolved is short (Stunting). Stunting is a condition where there is a mismatch between height and age. To find out, you can see nutritional status based on body length or height according to age when compared with anthropometric standards referring to the WHO Child Growth Standards, with z-score <-3 SD (very short) and z-score -3 SD << -2SD (short) (Kemenkes RI, 2020).

The prevalence of stunting under five in the world is 22.9% and the nutritional status of stunted toddlers is the cause of 2.2 million of all causes of under-five mortality worldwide. Nearly half the mortality rate in children under five in Asia and Africa is due to malnutrition. It causes the death of three million children per year. (WHO, 2016)

Based on the results of the 2013 Riskesdas in Indonesia, the presentation of the nutritional status of stunting toddlers was 37.2%. The prevalence of stunting did not show a decrease or improvement compared to 2010 (35%) and 2007 (36.8%). (Riskesdas, 2013) Stunting is a physical growth disorder characterized by a decrease in growth speed and is the impact of nutritional imbalances. (Losong NHF, at all 2017).

For infants aged 0-6 months, breast milk (ASI) is the best source of nutrition that can improve the health of mothers and children. Breastfeeding is very important, especially in the early period of life, therefore it is enough for babies to be exclusively breastfed for the first 6 months without adding and/or replacing with other foods or drinks. Breastfeeding immediately after delivery also helps uterine contractions thereby reducing maternal blood loss during the puerperium. (Central Bureau of Statistics, 2017).

Based on PERMENKES Number 33 of 2012, exclusive breastfeeding is breast milk given by mothers to babies from the time they are born until they are six months old without additional food or other drinks except vitamins and medicines. (PP Number 33, 2012).

Many of the content contained in breast milk, namely fat, carbohydrates, protein, salt and minerals and vitamins that are the most suitable compared to PASI or any complementary food for breast milk. In addition to these nutrients, breast milk also contains protective substances in the form of lactobacillus bifidus, lactoferrin, lysozyme, complement C3 and C4, antistreptococcal factors, antibodies, cellular immunity and does not cause allergies. Breast milk also has a beneficial psychological effect, when breastfeeding the baby's skin will stick to the mother's skin, so that it will provide benefits for the baby's growth and development later. This interaction will create a sense of security and affection between mother and baby. Babies who are breastfed cause good growth because they will experience appropriate weight gain after birth, growth after the perinatal period is good and reduce obesity. Breast milk also reduces the incidence of dental caries in formula-fed babies, which is higher than breast-fed, because breastfeeding with bottles and pacifiers at bedtime will cause the teeth to stay in contact with the rest of the formula and cause the teeth to become acidic, which can damage the teeth. Breastfeeding will reduce the incidence of malocclusion of jaw abnormalities caused by the habit of the tongue pushing forward due to feeding with bottles and pacifiers. (PPSDM, 2017)

The results of a study conducted by Yuniarti et al (2019) stated that children who were not given exclusive breastfeeding had a 19.5 times greater risk of experiencing stunting. The tendency of babies who do not get exclusive breastfeeding will be more susceptible to infectious diseases, this is because breast milk can function as an anti-infective so that it can prevent and reduce the risk of stunting in toddlers (Rahayu, 2011).

Marlan, et al (2017) conducted a study of the relationship between exclusive breastfeeding and the incidence of stunting in children aged 13-36 months with the results that infants who were exclusively breastfed had stunting nutritional status of 20.7% and infants who were not exclusively breastfed had stunting status. of 26.8% with a p value > 0.05, which is a p value of 0.376, which means that there is no significant relationship between exclusive breastfeeding and the incidence of stunting at the age of 13-36 months.

Another study that is in line is the results of research conducted by Indrawati (2016) with the results of the study showing that most of the respondents in the very short category did not receive exclusive breastfeeding, namely 10 respondents (7.7%). Respondents in the short category mostly received exclusive breastfeeding, namely 18 respondents (13.8%). Respondents in the normal category mostly received exclusive breastfeeding, namely 92 respondents (70.8%). Where obtained pvalue =  $0.000 \ (0.000 < 0.05)$ . It was concluded that there was a relationship between exclusive breastfeeding and the incidence of stunting in toddlers 2-3 years.

Based on this background, the author is interested in making a literature review with the title "Factors of Exclusive Breastfeeding on Stunting Incidents".

### MATERIALS AND METHODS

This study is a literature review that tries to explore the factors of exclusive breastfeeding on the incidence of stunting. Literature review is a research methodology that aims to collect and extract the essence of previous research and analyze several overviews of experts written in the text. (Snyder, 2019). Sources for conducting this literature review include systematic search studies of computerized databases (Pubmed, Pro Quest, and Google Scholar). Some of the keywords used to search for articles were: "Stunting", "Exclusive Breastfeeding", "Nutritional Status", "Mother and Child Nutrition", "Stunting in Toddlers", "Exclusive Breastfeeding", "Nutritional Status and Exclusive Breastfeeding.

## **RESULTS**

Several studies have shown that there is an effect of exclusive breastfeeding on the incidence of stunting. This can be seen in the following table

Table 1. Judgment Results from the Literature Review

Year	Author	nt Results from the Liter Reseach purposes	Method	The Result
2021	Sutarto, Adila Dwi Nur YAdika, Reni Indriyani	Analysis of History of Exclusive Breastfeeding with Stunting in Toddlers Age 24-59 Months in Working Area of Way Urang Health Center, South Lampung Regency	This research is a type of analytic observational research with a case control design.	The results of this study indicate that toddlers with a history of non-exclusive breastfeeding have an 8.2 times risk of becoming stunted compared to infants who have a history of exclusive breastfeeding
2020	Arfia Ningsih Dwi Putri, Fanny Ayudia	Relationship between exclusive breastfeeding and stunting in children aged 6-59 months in the city of Padang	Analytical observational research method with case control study or case study design Controls.	The results of this study indicate that there is a significant relationship between exclusive breastfeeding and the incidence of stunting, OR = 38.89, meaning that the incidence of stunting is 38.89 times the risk in children who are not exclusively breastfed than exclusively breastfed children.
2020	Sr. Anita SAmpe, SJMJ, Rindani Claurita Toban, Monica Anung Madi	Relationship between Exclusive Breastfeeding Status and Stunting Incidence in Toddlers Age 24-36 Months Exclusive Breastfeeding with Stunting Incidences in Toddlers	This study uses a case control study comparing the case group with the control group	This study shows there is a relationship between exclusive breastfeeding and the incidence of stunting in toddles. The OR value is 16, wich means that toddlers who are not exclusively breasted are 61 time more likely to experience stunting compared to toddler who are exclusively breastfed
2020	Erika Fitria Lestari, Luluk Khusnul Dwihestie	Exclusive Breastfeeding Associated with Stunting Toddlers	This study is a quantitative correlation study with a case-control time approach which was traced retrospectively	The results of this study indicate that there is a relationship between exclusive breastfeeding and the incidence of stunting as evidenced by the results of the chi square test, with a p-value $<\alpha$ which is 0.000 and a correlation coefficient value of 0.429.
2019	Mayang Chyntaka,	History of Exclusive Breastfeeding with Stunting Incidence in	This type of research uses a survey research type using a	The results of this study From the bivariate analysis, it is known that there is a significant

	Nanda Yansih Putri	Toddlers Age 24-60 Months	cross-sectional approach	relationship between the history of exclusive breastfeeding and the incidence of stunting in Pabean Ilir Village, Pasekan District, Indramayu Regency.
2019	Sri Handayani, Wiwin Noviana Kapota, Eka Oktavianto	The Relationship of Exclusive Breastfeeding with Stunting Incidents in Toddlers in Watu Gajah Village, Gunung Kidul Regency	This research is a quantitative descriptive correlational research with a cross sectional approach. Sampling using purposive sampling technique with a total of 44 respondents	This study shows the results of the chi square test obtained p value = 0.000 (p value <0.05) and r value = 0.609. Which means that there is a relationship between exclusive breastfeeding and stunting in toddlers aged 24-36 months in Watugajah Village, Gunung kidul Regency.

### DISCUSSION

Stunting is an acute nutritional problem caused by the intake of nutrients that enter the body that does not meet the standards for a long time, according to UNICEF stunting is a percentage of children aged 0 to 59 months. (Arisman, 2009) The mid-term impact of stunting is a decrease in productivity and competitiveness as an adult and the long-term impact is being vulnerable to metabolic disorders and degenerative diseases, such as suffering from heart disease, stroke, and diabetes. (N. K. Aryastami & I. Tarigan, 2017)

One of the factors causing stunting is exclusive breastfeeding. Exclusive breastfeeding according to WHO is giving only breast milk without giving other food and drinks to babies from birth to 6 months of age, except for drugs and vitamins. (WH, 2011) According to another definition, exclusive breastfeeding is breastfeeding only without the addition of other fluids such as formula milk, oranges, honey, tea, water and without the addition of solid foods such as bananas, papaya, milk porridge, biscuits, and team rice. (Haryono, and Setianingsih, 2014)

Breast milk is given from the age of 0-6 months without being given other additional food, this is because the baby's digestive system is still not perfect, especially the small intestine in infants is still shaped like a sand filter, the pores in the small intestine allow protein or germs to enter directly into the intestine. circulatory system and can cause allergies. Breast milk is produced in the corpus alveolus which is the smallest unit that produces milk, then from the alveolus milk will be passed into a channel called the lactiferous duct. After delivery, milk production is influenced by the baby's mouth sucking which is able to stimulate prolactin out. (Haryono, and Setianingsih, 2014)

Another advantage obtained from breastfeeding is that it makes babies much healthier, increases immunity, emotional and spiritual intelligence is better than children who when babies are not exclusively breastfed. (Mark, 2006).

The results of several studies indicate that the factor of exclusive breastfeeding can cause stunting.

## **CONCLUSION**

Based on the results of the study, it can be concluded that the factor of exclusive breastfeeding has an effect on the incidence of stunting. Breast milk is the best food for babies given at the age of 0-6 months without other complementary foods. The content in breast milk is fat, carbohydrates, protein, salt and minerals and vitamins which are the most suitable compared to PASI or any complementary food for breast milk. In addition to these nutrients, breast milk also contains protective substances in the form of lactobacillus bifidus, lactoferrin, lysozyme, complement C3 and C4, antistreptococcal factors, antibodies, cellular immunity and does not cause allergies. Based on the results of the study also stated that the factor of exclusive breastfeeding can cause stunting.

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### CONFLICTS OF INTEREST

In this study, the authors are interested in seeing how the factors of exclusive breastfeeding on the incidence of stunting.

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