Stunting Prevention Intervention In Pregnant Women In 2023

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Abstract.

Stunting is a disorder of growth and development of children due to chronic malnutrition and repeated infections, which are characterized by their length or height being below standard. Malnutrition-free children are a commitment with the world, including Indonesia. The international world's commitment, contained in the second point of the Sustainable Development Goals, emphasizes the importance of "ending hunger, achieving food security and improving nutrition, and promoting sustainable agriculture". To achieve this goal, tackling the problem of malnutrition, including malnutrition, needs to be improved. Toddlers with malnutrition have short and long term impacts, in the form of growth and development disorders, including impaired cognitive function, morbidity, risk of degenerative diseases in the future and death. Stunting can be prevented early on during pregnancy, one of the interventions is good nutrition during pregnancy. Knowledge of nutrition during pregnancy is important for pregnant women to prevent stunted children from being born. Many pregnant women do not pay attention to nutritional intake during pregnancy so that their child can be born with stunting. Therefore, every pregnant woman must know about good nutritional intake during pregnancy to prevent stunting.

Keywords: *Stunting, pregnant women and nutritious food.*

I. INTRODUCTION

Stunting is a disorder of growth and development of children due to chronic malnutrition and repeated infections, which are characterized by their length or height being below standard. Furthermore, according to WHO (2020) stunting is short or very short based on length/height for age that is less than -2 standard deviations (SD) on the WHO growth curve that occurs due to irreversible conditions due to inadequate nutritional intake and/or repeated/chronic infections that occur within 1000 HPK (Ministry of Health RI, 2022).Malnutrition-free children are a commitment with the world, including Indonesia. The international world's commitment, contained in the second point of the Sustainable Development Goals, emphasizes the importance of "ending hunger, achieving food security and improving nutrition, and promoting sustainable agriculture". At the national level, this is in line with the Nawacita and the National Medium Term Development Plan. To achieve this goal, tackling the problem of malnutrition, including malnutrition, needs to be improved. Toddlers with malnutrition have short and long term impacts, in the form of growth and development disorders, including impaired cognitive function, morbidity, risk of degenerative diseases in the future and death. The situation of undernutrition (wasting) and severe wasting in toddlers in the Southeast Asia and Pacific region in 2014 was still far from expectations. Indonesia ranks second highest for wasting prevalence among 17 countries in the region, namely 12.1%. In addition, the average case handling coverage in 9 countries in the region only reached 2%.

Malnutrition is one of the priorities in health development, according to the 2020-2024 RPJMN policy directions, the target for 2024 is to reduce the prevalence of wasting to 7% and stunting to 14%. Stunting or often called stunting or stunting is a condition of failure to thrive in children under five years of age (toddlers) due to chronic malnutrition and repeated infections, especially during the 1,000 First 8 Days of Life (HPK) period, i.e. from fetus to 23 month old child. Children are classified as stunted if their length or height is below minus two standard deviations in length or height for children of the same age. If measured using the growth curve for body length/height based on age (TB/U) from WHO (World Health

Organization), a child is considered stunted if the results of the plot for body length/height at the current age of the child are below –2 SD (Standard Deviation). The results of the 2018 Basic Health Research (Riskesdas) showed a decrease in the prevalence of stunting at the national level by 6.4% over a 5 year period, from 37.2% (2013) to 30.8% (2018).

Whereas for toddlers with normal status there was an increase from 48.6% (2013) to 57.8% (2018). The rest experienced other nutritional problems. Stunting and other nutritional deficiencies that occurred in 1,000 HPK aside from being at risk of hindering physical growth and children's susceptibility to disease, also caused barriers to cognitive development which would affect the level of intelligence and productivity of children in the future. Stunting and other nutritional problems are estimated to reduce gross domestic product (GDP) by around 3% per year. Stunting is chronic, which lasts for quite a long time, generally several months or more. Sometimes, after the age of 2 years, the symptoms of stunting become apparent. Unfortunately, because the process takes a long time or is repeated, it is difficult for stunted children to return to their normal growth and development phase.Stunting can be prevented early on during pregnancy, one of the interventions is good nutrition during pregnancy. Knowledge of nutrition during pregnancy is important for pregnant women to prevent stunted children from being born. Many pregnant women do not pay attention to nutritional intake during pregnancy so that their child can be born with stunting. Therefore, every pregnant woman must know about good nutritional intake during pregnancy to prevent stunting. Based on the description above, researchers are interested in researching Stunting Prevention Interventions in Pregnant Women.

II. METHODS

This study uses the literature review method. In searching for literature, researchers use keywords (AND, OR NOT or AND NOT) which are used for more detail in journal disbursement and can facilitate the search for the desired journal. The keywords used are “Intervention AND Stunting AND Pregnant Women. The data sources used are Google Scholar, Pubmed, Scopus e-resources databases in the form of articles or journals. After getting some results from the literature search that has been found, then selection is carried out and selects some of the most relevant and topical literature with the availability of full text.

III. RESULTS AND DISCUSSION

In the search process from Google Scholar, Pubmed, Scopus, 25 journal articles were found. After going through a systematic selection process, 8 journals were obtained that were feasible and appropriate and had full texts. The number of article selection from the first stage to the last stage is summarized in Table 1.Alfi's research, et al (2022) examined the effectiveness of education regarding stunting prevention for cadres. In this study, the results showed that there was an increase in knowledge in education regarding stunting prevention given to cadres. The methods used vary widely and produce an increase in knowledge that also varies. In research using the lecture and discussion method, the increase in knowledge reached 70%. In studies with only guidebooks, scorecards and growth mats, knowledge increased by 40.6%, while studies involving audiovisual media increased knowledge by 54.5%. The new information obtained from this study is that education for cadres can increase the knowledge of cadres with the lecture method and audiovisual media.Research by Azrimaidaliza, et al (2022) on Preventing Stunting Through Balanced Nutrition Education for Pregnant Women and Mothers of Toddlers at the Lapai Health Center. From the results of the activities that have been carried out, information is obtained that the community, especially mothers, still do not fully understand stunting and the importance of a healthy and nutritious diet and good health patterns to prevent stunting in toddlers. Health education in the form of counseling is carried out directly and indirectly. Direct counseling was carried out face to face to 16 pregnant women and mothers under five, then pretest and posttest before and after the activity, the result was 56.3% there was an increase in knowledge of pregnant women.

Research by Novery, et al (2021) on Efforts to Prevent Stunting in Toddlers Using Nutritional Health Education Interventions in Pregnant Women. The results showed that nutritional health education interventions for pregnant women could prevent stunting in toddlers by increasing the knowledge, attitudes

and practices of pregnant women. This study used 12 articles in its research, one of which was conducted by Khoramabadi et al., (2015), in Iran. This study used a randomized controlled trial design. The sample in this study was 130 pregnant women. The instrument used was a questionnaire with the intervention given combining two health education interventions, namely education about nutrition and dietary behavior in pregnant women and was carried out twice, the results found showed that the average score for each variable before the intervention, except for the performance guidance variable, was not significantly different between the two groups ($p < 0.05$). One month after the intervention, the mean knowledge score, the benefits felt by each group, differed significantly ($p<0.05$). Based on this, it can be concluded that the more varied the interventions given, the more effective it will be in increasing stunting prevention from gestational age.Nyna, et al's research (2020) regarding Preventing Stunting Early on with Nutritious Food for Pregnant Women.

The implementation of this activity succeeded in achieving the expected target and outcome, namely that there was an improvement in the mother's diet after being given counseling using the food recall technique. Food recalls are carried out at posyandu for pregnant women. As well as seeing an increase in pregnant women's weight when counseling began until February 2020. There was an increase in participants' understanding regarding maternal nutritional knowledge during the problems indicated by the accuracy of pregnant women's answers to questions given by community service officers directly after being given counseling. Pregnant women and cadres are also able to practice or modify how to make nutritious food for pregnant women. The method used in this study was counseling and demonstration, the material given to pregnant women in this study included the definition of stunting, risk factors for stunting, the dangers of stunting, prevention of stunting, nutritional needs of mothers during pregnancy, types of food with nutritional content needed by pregnant women, and guiding and practicing how to make nutritious food for pregnant women.Research by Sukmawati, et al (2018) on the Nutritional Status of Mothers During Pregnancy, Birth Weight of Babies with Stunting in Toddlers. Based on statistical tests, it was obtained that the value of p = (0.01) was smaller than the value of α (0.05), which means that there was a relationship between the nutritional status of mothers based on LILA and the incidence of stunting. This research is in line with that conducted in Madiun by Ismi Trihardiani in 2011 which stated that pregnant women who experience Chronic Energy Deficiency (CED) have an 8.24 times greater risk of giving birth to babies with LBW babies which will have an impact on stunting in their children in the future.

Anita's research, et al (2020) concerning Nutrition Education for Pregnant Women Using Media Booklets About the Behavior of Prevention of Stunting Toddlers in the Undaan Health Center, Kudus Regency. The results of the analysis of the paired t test showed that the difference between the pre-test and post-test of nutrition education using booklet media was $p = 0.000 < \alpha\ 0.05$. Thus Ho is rejected, which means there is an effect of nutrition education on pregnant women using booklets on the behavior of preventing stunting in toddlers in the Undaan Health Center, Kudus Regency. The results of this study are supported by previous researchers Setyawati et al. (2015) which shows that nutrition education using booklets for mothers can increase mothers' knowledge about nutrition in children.This is also supported by Zulaekah (2012) which shows that providing nutrition education to mothers using the booklet method can improve the level of mother's knowledge as an effort to prevent stunting toddlers. Booklets have two advantages compared to other media, namely they can be studied at any time because they are designed in book form and contain more information (Roza, 2012). Booklet media was chosen as a media for health education because it is able to disseminate information in a relatively short time, so that it can increase the knowledge of pregnant women.Ringgo's research, et al (2019) Nutritional Status of Pregnant Women Can Cause Stunting Incidents in Toddlers found a significant relationship between maternal nutritional status during pregnancy and the incidence of stunting with a p-value of 0.005 (0.005 <0.05).

Based on the research results, it is known that there are still some nutritional status of mothers during their pregnancies with normal LiLA but still have stunting toddlers as many as 51 (33.6%) toddlers. This condition is possibly caused by other factors that contribute to the incidence of stunting such as the mother's lack of education where the mother cannot absorb and understand the nutritional knowledge obtained.Nilfar's research, et al (2018) concerning the relationship between the status of pregnant and underweight women and the incidence of stunting in toddlers at the Tawiri Health Center in Ambon City, the results of an

analysis using the Chi Square test showed that there was a significant relationship between CED in pregnant women and the incidence of stunting which can be seen from the value of p = 0.00 and OR = 4.85 (95% CI; 2.70 – 8.72). So it can be interpreted that pregnant women with CED during pregnancy have a 4.85 times greater chance of causing a stunted child compared to mothers who are not CED.Research conducted by Alfi, et al (2022), Azrimaidaliza, et al (2022), Novery, et al (2021), Nyna, et al (2020), Sukmawati, et al (2018), Anita, et al (2020), Ringgo, et al (2019) and Nilfar, et al (2018) showed that counseling about nutritional status in pregnant women can prevent children from being born stunted.

Journal	Study/Author	Research place	Sample	Research methods	Outcome
The Effectiveness of Education Regarding Stunting Prevention for Cadres: Systematic Literature Review	Alfi Sina Vinci1, Adang Bachtiar, Isidora Galuh Parahita	Bandung, Jawa Barat	270	The research method used is literature review	There is an increase in knowledge obtained by health cadres after receiving education or training regarding stunting prevention.
Preventing Stunting Through Balanced Nutrition Education for Pregnant Women and Mothers of Toddlers at the Lapai Health Center	Azrimaidaliza, Welly Femelia, Nadia Chalida Nur, Rahmi Putri	Padang, Sumatera Barat	16	There are two methods used in the implementation This activity is direct and indirect counseling	The education given to the target group is quite effective. From the results of the activities that have been carried out, information is obtained that the community, especially mothers, still do not fully understand stunting.
Efforts to Prevent Stunting in Toddlers Using Nutritional Health Education Interventions in Pregnant Women	Novery Harizal, Meri Neherta, Fitra Yeni	Padang, Sumatera Barat	1105	The research method used is literature review	Nutritional health education interventions for pregnant women can prevent stunting in toddlers by increasing the knowledge, attitudes and practices of pregnant women.
Prevent Stunting Early on with Nutritious Foods for Pregnant Women	Nyna Puspita Ningrum, Nina Hidayatunnikmah, Tetty Rihardini	Surabaya, Jawa Timur	40	The research method used is Direct Research	The implementation of this activity succeeded in achieving the expected target and outcome, namely that there was an improvement in the mother's diet after being given counseling using the food recall technique.
Nutritional Status of Mothers During Pregnancy, Birth Weight of Babies with Stunting in Toddlers	Sukmawati, Hendrayati, Chaerunnimah, Nurhumaira	Maros, Sulawesi Selatan	1717	This research is an observational study with a cross sectional study design	The results of this study explain that there is a significant relationship between the nutritional status of pregnant women based on LILA and the incidence of stunting in toddlers 06-36 months in the working area of the Bontoa Health Center, Maros Regency.
Nutrition Education for Pregnant Women Using Media Booklets About Stunting Toddler Prevention Behavior in the Undaan Health Center, Kudus Regency	Anita Dyah Listyarinia, Yayuk Fatmawati	Kudus, Jawa Tengah	54	This type of research is a quasi-experimental research using the One Group Pretest-Postest Design method	This study can be concluded that there is an effect of nutrition education on pregnant women using booklets on stunting prevention behavior in the working area of the Undaan Health Center, Kudus Regency.
The Nutritional Status of Pregnant Women Can Cause Stunting in Toddlers	Ringgo Alfarisi, Yesi Nurmalasari, Syifa Nabilla	Lampung Tengah	237	This research is a correlative observational analytic study with a cross sectional approach	Based on the research results, it is known that there are still some nutritional status of mothers during their pregnancies with normal LiLA but still have stunting toddlers as many as 51 (33.6%) toddlers. This condition is likely caused by other factors that contribute to the incidence of stunting such as the mother's lack of education where the mother cannot absorb and understand the nutritional

					knowledge obtained.
Correlation between KEK status of pregnant and LBW women and stunting in toddlers at the Tawiri Health Center, Ambon City	Nilfar Ruaida, Octovina Soumokil	Ambon, Maluku	1417	This type of research is retrospective observational with a case control design	Based on the research results, it can be concluded that: 1) The risk of stunting in children under five is 4.85 times greater in mothers who experience CED during pregnancy and there is a statistically significant relationship. 2) The risk of LBW events in toddlers is 5.93 times greater in mothers who experience CED during pregnancy and there is a statistically significant relationship. The risk of stunting is 29.39 times greater in children born with LBW and there is a statistically significant relationship

IV. CONCLUSION

Based on the results of the research and discussion as described regarding Stunting Prevention Interventions in Pregnant Women. Furthermore, the author can draw the following conclusions:

1. Health nutrition education interventions for pregnant women can prevent stunting in toddlers by increasing the knowledge, attitudes and practices of pregnant women.
2. Mothers who experience CED during pregnancy are more at risk of giving birth to stunted children. Stunting in toddlers is influenced by the mother's nutritional history such as chronic energy deficiency (CED) and iron nutritional anemia.

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