

Whatsapp Group Based Education To Improve Pregnant Women's Knowledge About Stunting Prevention

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ABSTRACT

Background: Stunting is a chronic condition that describes stunted growth in children due to long-term malnutrition. Stunting not only causes delays in physical development but also threatens cognitive development which has an impact on reducing children's productivity in adulthood. Sriharjo village is the village with the highest number of stunting cases in Bantul district. For this reason, researchers are interested in conducting research in the village

Methods: This study used the Pre-Experiment research method with the type of one group pretest and post-test design. The sample consisted of 41 pregnant women in the first, second and third trimesters in Sriharjo Village, Imogiri Subdistrict. The samples were taken using purposive sampling. Analyzed using the Wilcoxon test.

Results: The research results obtained on the characteristics of the respondents that of the 41 respondents, the majority of respondents (61%) were aged 20-29 years, most (53.7%) had high school education, almost all respondents (63.4%) had jobs taking care of the house. knowledge before being given education with media posters through the WhatsApp group was the average knowledge of mothers before being given education through the Whatsapp Group about stunting prevention was 7.32 and after it was 9.46. There is an effect of education with media posters through WhatsApp groups on mothers' knowledge about stunting at the Bengkulu City Health Center, which can be seen from the results of the Wilcoxon test with a p value of $0.000 < 0.05$.

Conclusion: Based on this study it can be concluded that there is an effect before and after being given education through the WhatsApp group on pregnant women's knowledge about stunting prevention in Sriharjo Village, Imogiri District, Bantul Regency, which has increased.

Keyword : Stunting, Whatsapp Grup

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Background. Nutritional problems in developing countries are dominated by malnutrition, including Indonesia. The problem of malnutrition is a problem that requires special attention. (Dwihestie and Hidayati, 2021) Stunting is a chronic nutritional problem in children which is characterized by shorter height growth compared to children of their age.(Kemenkes, 2016) Many aspects trigger stunting, indicating that stunting is a complex nutritional problem. Prevention of stunting can be done through nutritional and non-nutritional approaches, the importance of improving nutrition and health in women of reproductive age, teenagers, prospective brides, pregnant women, and postpartum mothers. (Jurnal *et al.*, 2020) Stunting can also occur before birth

due to lack of nutritional intake during pregnancy, poor diet, low quality food in line with infection, which can inhibit the growth of the fetus in the womb. (Kementrian Kesehatan RI, 2018) The health condition and nutritional status of the mother during pregnancy greatly affect growth and fetal development, mothers who experience anemia during pregnancy will give birth to LBW babies, low birth weight is very closely related to low body weight or stunting. (Futihatul Baidho¹, Wahyuningsih, Febrina Sucihati, 2021) The first 1000 days of life (HPK) or golden age is the period that starts from the womb or 0 days until the child is 2 years old. This period is the most important period to meet nutritional adequacy in children, if nutritional adequacy is not met, it

can cause stunting. This results in impaired intelligence, can have an impact on future human resources as well as an increased risk of non-communicable diseases as adults. The future (even the nation) can be determined by the nutritional quality at 1000 HPK. During this period, development and growth of body systems and all organs occur to support life in the future. (Husnah, 2017)

Based on Juvenile Myoclonic Epilepsy (JMC) stunting data, the United Nations International Children's Emergency Fund (UNICEF) World Bank in 2020 the prevalence of stunting in Indonesia is in 115th position out of 151 countries in the world. As a result of the COVID 19 pandemic, acute malnutrition is predicted to increase by 15% in the first year of the pandemic. (Unicef, 2020) The prevalence of stunting in the province of the Special Region of Yogyakarta is 19.8% and the Bantul district is one of the 160 priority cities for stunting management in Indonesia, with a prevalence of 22.89. In 2022, there are 35 villages in Bantul Regency that are focused on accelerating the handling of stunting and Sriharjo Village, Imogiri District, is the village with the highest number of stunting cases, namely 20.95%. (Futihatul Baidho1, Wahyuningsih, Febrina Sucihati, 2021)

Mother's knowledge regarding nutritional intake in children is an important factor in preventing stunting. Likewise, knowledge related to stunting prevention in pregnant women is very important because it affects the baby to be born. (Unicef, 2020). Based on the results of Angraini's research (2020) it states that there is a relationship between mother's knowledge of the incidence of stunting. (Anggraini, Haninda and Rusdi, 2020) Ferdiana's states that online media that is most in demand is Whatsapp group media by 41.7% and for media zoom by 28.2%. Whatsapp media itself is in demand because its use does not really suck up quota so that WhatsApp media is often used by all age groups (Ferdiana, 2020)

Based on the description above and the data above, the researchers were interested

in learning how the effect of education through WhatsApp groups on pregnant women's knowledge about stunting in the working area of the Imogiri II Health Center, namely Sriharjo Village, Bantul Regency.

Methods. This study used the Pre-Experiment research method with the type of one group pretest and posttest design. This research was conducted in January - February 2023. The research location was in Sriharjo Village, Imogiri District, Sriharjo Village is the village with the most cases of stunting with a percentage of 20.95%. as the Village with the highest number of stunting cases in Bantul district. The sample size was determined using the slovin formula, the result was 41. The sample consisted of 41 pregnant women in the first, second and third trimesters in Sriharjo Village who met the inclusion criteria, Imogiri Subdistrict. The samples were taken using purposive sampling sampling, with criteria: pregnant women tm 1, 2, 3 in the village of Sriharjo, pregnant women who have WhatsApp, and who are willing to be respondents. Using a questionnaire consisting of 10 questions wich has been tested valid with value $r \text{ count} > r \text{ table}$, and reliable because value cronbach Alpha $> 0,60$. The normality test uses the Kolmogroff Smirnov test, and there are data that are not normally distributed, the analytical test used in the Wilcoxon test.

Result and Discussion.

Table 1. Characteristic frequency distribution pregnant women by age

Variabel	N	%
<20	0	0
20 - 29	25	61.0
30 - 45	16	39.0

The results showed that the majority of respondents (61%) were aged 20-29 years.

Table 2. Distribution of the frequency of characteristics of pregnant women according to last education

Variabel	N	%
Junior high school	6	14.6
Senior high school	22	53.7
Associate degree	1	2.4
Bachelor	11	26.8
Magister	1	4.2

The majority (53.7%) have high school education, 22 pregnant women. This is in line with research by Olsa et al which showed that the majority (56%) of mothers were high school graduates, with 130 people.(Olsa, Sulastrri and Anas, 2017) This is supported by research conducted by Picauly in Kupang and East Sumba, NTT, which shows that mothers with low levels of education have a 0.049 times greater chance of experiencing stunting than mothers with higher education . This shows that the mother's education level has an influence on the chances of stunting occurring. (Picauly, 2013) and almost all of them (63.4%)

Table 3. Frequency distribution of maternal characteristics according to occupation

Variabel	N	%
Housewife	26	63.4
Civil servant	1	2.4
Private employee	9	22.0
businessman	5	12.2

Mother's pregnant have household chores. This is in line with Syntia Yudistira's research, most (86.7%) have household jobs.(Syntia Yudistira, 2021) This is in line with Picauly's research which states that working mothers have a greater chance of their children experiencing stunting compared to mothers who do not work, because if working mothers their children receive less attention. In this case it shows that the chance of a child experiencing stunting is 3.623 for working mothers.(Picauly, 2013)

Table 4. Average knowledge of pregnant women before and after being given stunting prevention education

Variabel	N	Mean	SD
Before	41	7.32	1,274
After	41	9.46	0,711

Table 5. Effect of stunting prevention education on pregnant women

Variabel	knowledge		
	Mean	Mean	p-value
Before (pre-test)	7.32	2.14	.000
After (post-test)	9.46		

The COVID 19 pandemic is causing the world to face new challenges in the health system. As a result of the COVID 19 pandemic, acute malnutrition is predicted to increase by 15% in the first year of the pandemic. (Unicef, 2020) for this reason, prevention efforts are needed, one of which is by providing stunting prevention education for pregnant women based on whatsapp groups.

The results showed that the majority of respondents (61%) were aged 20-29 years. The majority (53.7%) have high school education, 22 pregnant women. This is in line with research by Olsa et al which showed that the majority (56%) of mothers were high school graduates, with 130 people.(Olsa, Sulastrri and Anas, 2017) This is supported by research conducted by Picauly in Kupang and East Sumba, NTT, which shows that mothers with low levels of education have a 0.049 times greater chance of experiencing stunting than mothers with higher education . This shows that the mother's education level has an influence on the chances of stunting occurring. (Picauly, 2013) and almost all of them (63.4%) mother's pregnant have household chores. This is in line with Syntia Yudistira's research, most (86.7%) have household jobs.(Syntia Yudistira, 2021) This is in line with Picauly's research which states that working mothers have a greater chance of their children experiencing stunting compared to mothers who do not work, because if working mothers their children receive less attention. In this case it shows that the chance of a child experiencing stunting is 3.623 for working mothers.(Picauly, 2013)

Based on the results of the research above, it is known from the Wilcoxon test that the results obtained are p-value = 0.000, so it can be concluded that there is an effect of stunting prevention education through WhatsApp groups on the knowledge of pregnant women in Sriharjo Village, Imogiri District after being given an intervention. In table 5, the average before being given education was 7.32 and the average after education was 9.46. Based on these results,

it can be seen that the mean value of maternal knowledge after being given stunting prevention education for pregnant women using the WhatsApp group has increased. This research is in line with the research of Angraini, et al. There was an increase in the average score of knowledge before being given education about stunting, which was 4.95 and after being given education about stunting, which was 7.89, meaning that education had a positive effect on knowledge. (Angraini, Haninda and Rusdi, 2020). The results of this study are expected to serve as information and a reference source for future researchers regarding pregnant women's knowledge about stunting. The research was supported by Ika Melati et al's research entitled Nutrition Education on Prevention of Stunting based on the WhatsApp Group to increase the knowledge of pregnant women and attitudes of pregnant women. with the results of a significance value of $p = 0.000$. there is an increase in knowledge of pregnant women. (Melati, Anna and Afifah, 2021)

Based on the research that has been done, it can be concluded that the use of Whatsapp Groups has a positive effect on stunting prevention knowledge when accessing online social support. This online social support is complementary or complements the support they already get offline. Environmental support has a direct influence without being mediated by online social support. The results of this study are also in line with research from the journal Mohammed Jawad, et al, London, stating that social media is a popular medium of communication and a source of information on a regular basis for internet users, including being useful in providing health information. Social media is appropriate and tends to be effective in increasing health awareness. (Jawad *et al.*, 2020)) and supported by Hamimah's research entitled Effects of Health Education Through Sparkol Videoscribe-Based Explainer Media on Mother's

Knowledge About Stunting shows that there are differences in mother's knowledge about stunting before and after health counseling through Sparkol Videoscribe-based explainer videos (Hamimah, 2019). According to research from Ika's 2021 steats that whatsapp groups as an affective educational tool to increase the knowledge and attitude of pregnant women's nutrition. (Melati, Anna and Afifah, 2021)

Conclusion and Suggestions

Based on the research that has been done, it can be concluded that there was an effect before and after being given education through the WhatsApp group on pregnant women's knowledge about stunting prevention in Sriharjo Village, Imogiri District, Bantul Regency. Suggestion for Health Service Agency. The results of this study are expected to be a reference for health workers in providing health promotion to increase pregnant women's knowledge about stunting prevention by using effective media so that early detection of stunting can be carried out

For Educational Institutions. This research is expected to be used as a reference and add to knowledge for students of the Ummi Khasanah Health Polytechnic, especially the DIII Midwifery study program, in an effort to increase pregnant women's knowledge about stunting by using whatsapp group.

For Other Researchers The results of this study are expected to serve as information and a reference source for future researchers regarding pregnant women's knowledge about stunting

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