Specific Nutritional Intervention And Sensitive Nutrition Through The Whatsapp Group Regarding Knowledge And Attitude Of Posyandu Cadre In Preventing Stunting In Toddlers During The Covid-19 Pandemi In Jembrana District

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ARTICLE INFO	ABSTRACT
Keywords: *Education* *Knowledge* *Attitude* *Stunting* *Whatsapp Group*	The Covid-19 pandemic causes an increased risk of stunting prevalence in toddlers. One of the efforts that can be made to prevent stunting is through continuous education. The purpose of this research is to increase the knowledge and attitudes of posyandu cadres regarding specific nutrition and balanced nutrition messages that are given serially through social media in the Jembrana Regency area. The method used in this study is through social media (whatsapp groups) by giving messages in series according to the 4 (four) pillars of balanced nutrition which includes 1) consuming a variety of foods, 2) Clean and Healthy Behavior (PHBS), 3) weight monitoring, and 4) physical activity.an increase in the average score of knowledge regarding specific nutrition and balanced nutrition related to the prevention of stunting in toddlers from -36.99 ± -13.0 SD during the pre-test to 17.67 ± 36.32 SDduring the posttest. Posyandu cadres are expected to become agents of change in stunting prevention behavior through education for posyandu cadres to prevent stunting during the Covid-19 pandemic.
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1. INTRODUCTION

Stunting is a condition in which children experience growth disturbances, so their height does not match the average age of children. This condition occurs due to chronic nutritional problems or lack of nutritional intake in the long term. According to the 2021 Indonesian Nutritional Status Study (SSGI), the prevalence of stunting in Indonesia is 24.4%. Based on the SSGI report, 5 out of 9 districts in Bali have a prevalence of toddlers with stunting.The incidence of stunting in Indonesia is still quite high, especially in eastern Indonesia such as NTT / NTB which has the highest stunting rate of 42.3%.The stunting prevalence rate in Karangasem district was the highest at 22.9%, followed by Klungkung district at 19.4%, the three Jembrana districts at 14.3%, Bangli at 11.8% and Tabanan at 9.2%.

Indonesian people often assume that short growth or stunting is a hereditary factor, genetic factors are the least determinant of health in causing short stature.The problem of stunting is influenced by many factors, both direct and indirect. Directly, stunting is caused by nutritional intake and infectious diseases. Indirectly, stunting can be caused by improper parenting, food factors, poverty, low education, sanitation conditions, poor health services, politics, and cultural conditions. One of these two factors is due to the low level of parental knowledge in applying proper parenting to children. Recent research has shown that there is a relationship between maternal knowledge and the incidence of stunting (Ramdhani et al., 2020) mothers with low knowledge tend to have children with very short nutritional status based on anthropometric measurements compared to mothers with good knowledge (Taufiq Asri, 2020). Adequate and sufficient nutritional knowledge can influence the attitudes and behavior of mothers under five. There is a positive and significant relationship between the knowledge of mothers under five, attitudes and behavior of mothers under five towards stunting (Utari Maulina & Ana Marfari, 2021).

The First 1000 Days of Life (HPK) or golden age is the period that begins in the womb or 0 days until the child is 2 years old. This period is the most important period to meet children's nutritional

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adequacy, 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. Therefore the future (even the nation's) can be determined by the quality of nutrition at 1000 HPK. During this period, development and growth of body systems and all organs occur to support life in the future.

Efforts that can be made to reduce stunting are by carrying out specific nutritional interventions to prevent and reduce direct harm to pregnant women. This intervention was focused on the First 1000 Days of Life (HPK) group including pregnant women, nursing mothers and mothers of children aged 0-23 months, this group was chosen because stunting prevention is the most effective and appropriate to do in 1000 HPK.

Pregnancy is a time awaited by every woman, especially married women. Pregnancy is a process that starts from ovulation, growth and development until delivery. During pregnancy, there are physiological changes that make the mother feel uncomfortable and cause the mother's nutritional needs to change.

Advances in technology in communicating is very easy and more and more types. Coupled with the conditions of the Covid-19 pandemic which are not recommended for gatherings, this is a reason to take advantage of the Internet Of Thing (IoT). Internet Of Thing (IoT) is a system that can improve the ease of learning and teaching processes, by using WhatsApp groups to provide education to pregnant women which is formed as a medium for delivering material.

The choice of WhatsApp as a tool for conveying material is based on how often people access Whatsapp as a communication medium, because it is not too difficult to use, does not take up a lot of internet quota, and is easy for all levels of society to understand.the community, including posyandu cadres in every village in Jembrana District.

WhatsAppthe second mobile messenger application that appeared in Indonesia after BBM (BlackBerry Messenger). WhatsApp initially only functioned as a text and writing messaging application, but with the development of the times, with the features provided, such as the ease of creating groups, sharing information in the form of photos, images, videos, files and sounds, it can be done easily, making WhatsApp owned by almost everyone. people and used as a means of online education. Other research shows that WhatsApp is included in the social media category which is useful for learning, information and discussion media. In addition, adolescents and pregnant women prefer to receive prenatal nutrition and health information through digital media platforms.

Health, success and intelligence of toddlers can be prepared since they are in the womb. Therefore it is necessary to make efforts to increase the knowledge and attitudes of pregnant women in meeting the nutritional needs of the mother and fetus. This study aims to determine the effect of stunting prevention nutrition education through WhatsApp groups as a tool in increasing nutrition knowledge and attitudes of pregnant women.

Through the role of cadres as the prime mover and at the forefront of permanent changes in knowledge, attitudes and behavior related to nutrition, so as to reduce the prevalence of stunting in the region. Thus, based on priority issues in the region, where the prevalence is high, especially during the Covid-19 pandemic, which has not shown a decrease in epidemiological indicators, it is necessary to carry out nutrition education as one of the messages that must be given to the community, through posyandu cadres. The research objective was to increase the knowledge and attitudes of posyandu cadres regarding balanced nutrition messages that were given serially through social media in the Jembrana Regency area.

2. METHOD

This research was carried out through a community empowerment approach where technically it was operational by providing balanced nutrition education to Posyandu cadres to optimize their role as agents in promoting nutrition and health in areas that have become locus of stunting in Jembrana District. Education is provided through social media (whatsapp groups) by giving messages in series in accordance with the 4 (four) pillars of balanced nutrition which includes 1) consuming a variety of foods, 2) Clean and Healthy Behavior (PHBS), 3) monitoring weight, 4) physical activity. Messages

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were given to 42 cadres from villages in Jembrana Regency in July 2022. The questionnaire was filled out via google forms.

Data were analyzed univariately to describe sociodemographic characteristics, as well as posyandu cadres' knowledge and attitudes regarding balanced nutrition. The increase in the knowledge and attitude scores of posyandu cadres before and after being given balanced nutrition education through serial messages on social media was analyzed using the t-dependent test with a significance level of 5%.

This study uses a true experimental design, where subjects are given interventions in the form of videos, posters, ppt and voice notes to improve knowledge and attitudes. Online research was conducted in Jembrana district by involving cadres in each village. Data collection was carried out in July 2022. This study obtained the consent of the subjects by filling out the prepared informed consent.

The subjects of this study were posyandu cadres in Jembrana District. Withdrawal of subjects was carried out purposively with a total of 42 posyandu cadres who were willing to take part in this study. The total subjects were 30 posyandu cadres. The experimental group was given education via the WhatsApp Group and the control group was not.

Materials made related to stunting prevention for pregnant women such as stunting and 1000 HPK (video), calculating the ideal weight gain for pregnant women and recognizing pregnancy hormones (Posters), nutrition for pregnant women in each trimester I, II, III, pregnancy disorders, how to deal with as well as myths and facts about pregnancy (Voice note). This material is given twice a week.

The type of data used in this research is primary data and secondary data. Primary data is in the form of characteristics of pregnant women (last education, age, occupation, gestational age, order of pregnancy), while secondary data is obtained from village midwives regarding the number of pregnant women in the district.
Data on the characteristics of pregnant women were analyzed univariately and presented in tables and narratives.

Nutritional knowledge of pregnant women was measured based on scores before (pre-test) and after (post-test) nutrition education activities using an online knowledge questionnaire created using the Google form. There are 20 questions with a maximum score of 100. The attitude questionnaire also uses the Google form. With 20 point statements. This research was conducted for one week and material was given four times on different days in one week.

Knowledge results data was tested for normality by testing the normality of the data using the Kolmogrove Smirnov test with the help of SPSS obtained a sig value of 0.973 (0.973 > 0.05). These results indicate that the research data from both groups are normally distributed.
Data analysis used to see differences in knowledge scores before and after was bivariate with paired sample t-test and to see differences in attitudes using independent sample t tests.

3. RESULTS AND DISCUSSION

Based on the results in the table, there are 42 posyandu cadres from villages in Jembrana Regency who are willing to become research samples. The distribution of the characteristics of posyandu cadres in Jembrana Regency can be seen in Table 1. Characteristics of Respondents. The characteristics of posyandu cadres involved in this study were 20-40 years old. With the majority aged 20-30 years (68.4%).

Table 1. Respondent Characteristics

Category	Amount	
	n	%
Age		
20-25 years	16	38
26-30 years	26	62
Level of education		
Junior High School	10	23

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Senior High School	32	77

The education level of posyandu cadres is mostly high school, with a total of 32 people (77%). The level of education can affect a person's knowledge and attitude in dealing with an event. Knowledge will affect the formation of one's attitudes and behavior. Because the fulfillment of nutrition is also related to the level of mother's knowledge about nutrition. This is in line with research conducted by Dafiu which showed that pregnant women who had good knowledge (84.3%) had normal nutritional status or did not experience CED, while pregnant women who had sufficient knowledge and more or less experienced nutritional status KEK nutrition, namely 35.9% and 38.5%. Likewise with other studies, showing that there is a relationship between knowledge possessed by mothers about the fulfillment of nutrition to attitudes of mothers.

The difference in pre-test and post-test scores is known from the Paired Sample t-test which can be seen in table 2, the correlation value is 0.396. This shows that there is a low correlation between the results of knowledge values and mothers' attitudes in preventing stunting before and after being given the material.

Table 2.Test paired sample t-test

	n	p- value	95% CI	
			Lower	Upper
Pretest - Postest	30	0.000	-36.99	-13.0

t value count is known to be -4.378 with a significance value of p = 0.000. From these results it can be seen that the significant value is <0.05. So it can be stated that there are significant differences in the knowledge and attitudes of posyandu cadres in preventing stunting before and after being given the material (p<0.05). The difference was seen in knowledge, the experimental group had an average pre-test of 46 and experienced an increase in post-test scores, after providing education of 84. In the control group, the average pre-test score was 32.2 and the post-test without education. of 32.7. Differences were also seen in attitudes, when the experimental group was first given the questionnaire there were still many negative answers, but after being given education, the results showed a positive attitude. Unlike the control group, who showed a lot of negative attitudes at the beginning of giving the questionnaire and at the end. The results of other studies also show that education using whatsapp media has increased knowledge by 84.6% and is greater than education using other methods such as lectures and booklets.

Likewise, research conducted by Sari, et al showed that in the intervention group using Whatsapp as an educational medium, there was an increase in knowledge among mothers.While the difference in post-test scores between the experimental group and the control group which was carried out by independent sample t-test showed a tcount value of 6.110 with a significance value of 0.000 (0.000 <0.05), where the ttable value was 2.109. From these results it is known that the value of tcount > ttable is 6.110 > 2.109 and a significant value <0.05 So these results can be stated that there is a difference in the average post-test and questionnaire results between the experimental and control groups. The difference occurred in knowledge, the experimental group understood more and could answer post-test questions better than the control group. Differences were also seen in attitudes, the experimental group showed a more positive attitude than the control group, can be seen in table 3 (p <0.05).

Table 3.Independent sample t-test

	n	p-value	95% CI	
			Lower	Upper
Postestand questionnaire	30	0.000	17,67	36,32

4. CONCLUSION

The use of WhatsApp groups has an influence on increasing pregnant women's knowledge by 56.6% and positive attitudes to prevent stunting. The ease of use, as well as the ease of sharing information with various forms of media, makes this education well received by posyandu cadres. The results of this study emphasize that there is a need for similar activities to continue sharing information about stunting prevention or about pregnancy so that pregnant women stay healthy and give birth to a smart generation. Besides that, stunting prevention also needs to be done to increase human resources (HR) in increasing state revenue.

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