

Effectiveness of nutrition movement counseling in the first 1000 days of life on knowledge and attitude of pregnant women

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ABSTRACT

Abstract: The Indonesian government implements the First 1000 Days Movement (HPK), to improve nutritional status during pregnancy and breastfeeding, aiming to support brain development and the immune system from pregnancy until a child's first year. This study aims to determine the extent to which nutritional counseling for the First 1000 Days of Life impacts the knowledge and attitudes of pregnant women. A quasi-experimental design with pre-test and post-test groups was used, involving 60 pregnant women. Knowledge and attitudes were measured before and after counseling. Data were analyzed using the independent t-test. The results of this study indicate that the knowledge of pregnant women in the pre-test was classified as poor for 34 people (56.7%) and sufficient for 23 people (38.3%). After being given counseling, the knowledge category became good for 32 people (53.3%). In terms of attitudes, the pre-test showed the category of poor for 35 people (58.3%). After counseling, the attitudes of respondents were in the good category for 32 people (53.3%). The effectiveness of counseling nutritional education in the first 1000 days of life on knowledge (p value $0.000 < 0.05$) and attitudes of pregnant women (p value $0.000 < 0.05$). The conclusion of this study is that it is effective in changing the knowledge and attitudes of pregnant women, so there is a need for enhancing the capacity of health educators is essential to deliver impactful education and promote positive behavioral changes in support of the HPK Movement.

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INTRODUCTION

The government in Indonesia created a movement program to accelerate nutrition improvement, namely the First 1000 Days of Life (HPK) Movement. Efforts to improve nutrition through the First

1,000 Days of Life (HPK) Movement, starting from pregnancy until the child is two years old, are intended to achieve optimal child growth. The 1,000 HPK Movement steps are implemented through two approaches, namely through specific nutrition interventions and sensitive nutrition interventions (Kemenkes RI, 2021).

Indonesia has a nutritional problem that affects the quality of human resources. There is a need to improve nutrition by increasing the quality of nutrition as stated in Law no. 36 of 2009 and presidential regulation no. 42 of 2013 concerning the acceleration of nutritional improvements in the First 1000 Days of Life (HPK). Apart from strengthening operational strategies to improve the quality and coverage of specific interventions carried out by the Directorate of Health, 4 operational strategies have been implemented which include increasing human resource capacity, improving service quality, strengthening nutrition education, and strengthening nutritional intervention management at community health centers and posyandu (Husnah, 2017).

Nutritional problems are still common in Indonesia, therefore it is necessary to address the problem immediately considering its huge impact on the survival of a nation. The nutritional problems that occur in the 1000 HPK group currently occur not only in pregnant women but also in babies and toddlers. The nutritional problems that often occur in pregnant women are Chronic Energy Deficiency (CED) and anemia. Based on data from the Indonesian Ministry of Health (2021) in Indonesia, the percentage of pregnant women with Chronic Energy Deficiency (CED) reached 9.7% from the target of 16% or a performance achievement percentage of 164.95% in line with the increasing nutritional problems among toddlers, namely the percentage of stunted toddlers reached 11.6% of the target of 24.1% or a performance achievement percentage of 207.76%, and from 34 provinces it shows that of the 11,499,041 toddlers whose nutritional status was measured based on height for age (TB/U), there were 1,325,298 toddlers with TB/U <-2 SD or it can be said that 11.6% of toddlers experience stunting (Kemenkes RI, 2021).

The percentage of pregnant women with Chronic Energy Deficiency (KEK) in Banten province has reached 8.5%, and the prevalence of toddlers experiencing stunting is 9.7%, where Banten is the 23rd province with the highest stunting problem. (Indonesian Ministry of Health, 2021) One of the districts in Banten is Pandeglang district, which has 35 sub-districts located at a distance of 23 km from the capital of Banten Province (Serang) and 111 km from the national capital, Jakarta, and in 2020 the stunting rate among toddlers in Pandeglang district reached 6,169 people, and one of the health efforts undertaken is improving basic health services, referral health services, eradicating infectious diseases, fostering environmental health, basic sanitation, and improving community nutrition. The lack of participation of pregnant women in carrying out pregnancy checks means they do not receive maximum education, including regarding the importance of 1000 HPK nutrition (Dhirah, 2020).

Nutrition education during the 1000 Days of Life (FHR) is a means of preventing nutritional problems in children. Information is delivered through various methods to ensure easy acceptance and increased knowledge, which is expected to prevent stunting. (Yuliani, 2023) The problem of poor nutritional status remains a challenge for pregnant women, breastfeeding mothers, infants, and toddlers. Undernutrition or overnutrition is one of the problems experienced by pregnant women during early pregnancy. Nutritional problems in children occur with thinness or short stature (Rahmawati, 2016).

Based on a preliminary survey, from the results of interviews with 10 pregnant women who came to the health center, and from the results of these interviews it was found that 8 pregnant women (80%) did not know about 1000 HPK nutrition, including the nutritional needs of pregnant women, and exclusive breastfeeding for babies and benefits of colostrum. Pregnant women also don't know the importance and benefits of Fe and folic acid tablets.

Based on previous research related to assistance in the First 1000 Days of Life for 33 pregnant women, with assistance for 1000 HPK for 33 pregnant women, nutrition is monitored which is expected to be adequate until the child is 2 years old so that stunting does not occur

(Dhirah, 2020). The same is true. with other research, it is clear that nutrition at 1000 HPK provides an opportunity for efforts to improve human resources so that it becomes a priority for all related sectors, and malnutrition in the 1000 HPK period will be permanent and have long-term impacts (trans-generational) (Kemenkes RI, 2017).

The success of the First 1,000 Days of Life (HPK) Program can be assessed from various perspectives, including the reduction in stunting rates. Essentially, stunting will decrease if children receive adequate nutrition during their first 1,000 days of life. Government participation and support for the program's success are also determined by the full involvement and support of all parties (Sabila, 2024).

Children who experience malnutrition during the 1000 HPK period will experience neurological problems, decreased ability to learn, increased risk of dropping out of school, decreased productivity and ability to work, decreased income, decreased ability to provide nutritious food and decreased ability to care for children. This will further result in the spread of malnutrition and poverty to the next generation (Sundari, 2017).

Nutritional improvement requires increased knowledge. Higher levels of knowledge lead to greater adherence to iron tablet consumption compared to those with lower levels of knowledge, as this can influence awareness of anemia prevention behaviors, how to take iron tablets, and a healthy lifestyle (Wulandari and Laksono, 2020).

Low maternal knowledge and attitudes toward nutrition during the first thousand days of life (1000 HPK) can lead to malnutrition problems that occur from pregnancy through early infancy, thus affecting children's future growth and development. The government has promoted the 1000 HPK Movement as an effort to improve community nutritional conditions, but nutritional problems remain unresolved. To support this policy, educational efforts are needed to improve mothers' knowledge and attitudes about the first thousand HPK (Hidayati, 2022).

RESEARCH METHOD

This research uses a Quasy Experiment design with a one group pre-posttest design. Quasi Research Experiments to evaluate the effectiveness of treatment or intervention on subjects and measure the results of the intervention. The population in this study were pregnant women in the Curug Community Health Center area. The number of respondents was 60 people. Data collection uses primary data where the samples taken use probability sampling (based on opportunity) with the stratified random sampling technique. Each group of respondents was given a pretest before the counseling was carried out, while the post-test was carried out fourteen days after the counseling was carried out. Data analysis in this study used two analyses, namely univariate analysis used to describe the data and summarize the observed data in the form of a frequency distribution. Analysis of frequency results is presented in the form of tables and figures and then interpreted. (Notoatmodjo, 2018). In this study, bivariate analysis was carried out using statistical analysis using the paired t-test. Paired simple t-test is an analysis involving two measurements on the same subject regarding the effectiveness or specific treatment. The instruments used in this research were questionnaires and leaflets.

RESULTS AND DISCUSSIONS

These are the results and discussion of research that has been carried out:

Table 1 Frequency distribution of pregnant women's knowledge about nutrition movement in the first 1000 days of life

Knowledge	Pretest		Posttest	
	n	%	n	%
Less	34	56,7	2	3,3
Enough	23	38,3	19	31,7

Knowledge	Pretest		Posttest	
	n	%	n	%
Good	3	5	39	65
Total	60	100	60	100

Based on table 1 above, it shows that of the 60 pregnant women respondents in the pretest before being given counseling had knowledge in the poor category, 34 people (56.7%), 23 people in the sufficient category (38.3%) and 3 people in the good category (5%). A posttest was carried out after being given counseling with the results of the respondents' knowledge being in the good category as many as 39 people (65%), the sufficient category being 19 people (31.7%) and the poor category being 2 people (3.3%).

Table 2 Frequency distribution table of pregnant women's attitudes regarding the nutrition movement in the first 1000 days of life

	t-count	p-values
Knowledge Pretest- Posttest	10,724	0,000
Attitude Pretest- Posttest	9,368	0,000

Table 3 Table of effectiveness of nutrition movement counseling in the first 1000 days of life on knowledge and attitudes of pregnant women

Attitude	Pretest		Posttest	
	n	%	n	%
Less	35	58,3	3	5
Enough	21	35	25	41,7
Good	4	6,7	32	53,3
Total	60	100	60	100

Based on table 2 above, it shows that of the 60 respondents from pregnant women in the pretest before being given counseling, 35 people (58.3%) had attitudes in the poor category, 21 people (35%) in the fair category and 4 people in the good category (6.7%). A post test was carried out after being given counseling with the results of the respondents' attitudes being in the good category as many as 32 people (53.3%), the sufficient category being 25 people (41.7%) and the poor category being 3 people (5%).

Based on table 3 above, it shows that the level of knowledge before the counseling and after the counseling was carried out, the t count was 10.724 and the p value (sig. 2-tailed) was 0.000 (p value < 0.05) so that H0 in this study was rejected and H1 was accepted, meaning There is a significant difference in knowledge before and after counseling, so nutritional counseling in the first 1000 days of life is effective for pregnant women's knowledge.

Analysis of the attitude value before counseling and after counseling was carried out, the t count was 9.368 and the p value (sig. 2-tailed) was 0.000 (p value < 0.05) so that H0 in this study was rejected and H1 was accepted, meaning that there was a significant difference for attitudes before and after counseling, then nutritional counseling in the first 1000 days of life is effective on the attitudes of pregnant women.

An educational approach is taken in conducting outreach. An educational approach is a series of activities carried out in a directed, planned and systematic manner with the active participation of individuals, groups or communities to solve problems by taking into account local social, economic and cultural factors (Rahayu, 2018).

Part of counseling is a change in attitude which is carried out through several stages, namely starting from the awareness stage as the importance of counseling to get the information conveyed so that it is easy to understand, the second is the interested stage where someone begins to want to know more about new things marked by asking questions when counseling, listening

and digging deeper for information through other sources, at the assessing stage someone will start assessing or even considering, connecting their own situation to carry out the 1000 HPK nutritional movement, and then at the trying stage someone will start implementing or trying on a small scale as an effort determine whether it can be continued or not, which can then be applied in everyday life (Rahayu, 2018).

The results of other research show that of the 24 respondents who had little knowledge about the first 1000 days of birth, 65% had babies with poor nutritional status, because knowledge is related to the nutritional status of babies, respondents with good knowledge have sufficient sources and information regarding matters related to nutritional needs. children and the importance of posyandu, so that the nutritional status of toddlers is in the good category. (BKKBN, 2019) Other research shows that the tendency of respondents in filling out attitude questionnaires increased after the counseling was carried out, namely at the pretest 28 respondents responded well (60.9%) then after it was carried out counseling on the posttest was 43 respondents (93.5%), where this was realized because of an action taken to carry out rules to overcome something or an action due to the close relationship between attitudes and actions (Rahmad, 2019).

Limitations in receiving information and handling nutritional and health problems are influenced by the level of education, even though in the area where one lives there is a lot of food and adequate health services available, which can convey information about how to consume healthy and nutritious food. (Trisnawati, 2016) A person's knowledge is also influences education, age and access to the media used, urban areas are places that are rich in access to information, so there is no possibility that they lack information, it is different from rural areas which have minimal access to information media, it's just that those who live in rural areas want to whether they try to find information or not, because their efforts are a way to improve their knowledge and increase their knowledge (Trisnawati, 2016).

Other research states that 1000 HPK nutritional counseling for pregnant women through booklet media is effective in increasing knowledge and attitudes towards nutritional awareness with a p value of 0.000, where attitudes before and after counseling using booklet media have increased (Nasution, 2020).

In line with other research which states that 1000 HPK nutritional counseling for pregnant women is effective in increasing knowledge and attitude of nutritional awareness, where the aim of the research is to create motivation to want to do it because 1000 HPK nutritional information is not enough to get from education but a basic knowledge and understanding is needed through counseling, Apart from that, the nutritional problems faced are more due to economic sufficiency, not due to a lack of concern for child care, so that counseling is received more effectively (Marchianti, 2017). Health education is one of the effective means to improve health aspects, especially for women with lagging education. (Hidayati, 2022), this is in line with the results of previous studies that a person's level of education can be influenced by the receipt of information, especially information related to toddler parenting patterns, which affects nutrition. (Anjani, 2024). Health education or education provided as an effort to increase the knowledge of pregnant women regarding the first 1000 days of life in preventing stunting has a significant relationship between knowledge of fine motor development in toddlers and the incidence of stunting. So that health education has an important role in stunting (Aini, 2023).

Parental understanding of nutrition plays a crucial role in improving children's nutritional status to achieve optimal growth maturity. Limited knowledge about healthy eating patterns and insufficient awareness of stunting affect mothers' attitudes and actions in feeding their children, including the selection and quantity of appropriate food for optimal growth (Noviana, 2023). Basically, counseling programs have been implemented as part of a series of activities in the *mother and toddler classes*, such as breastfeeding counseling, providing emotional support to pregnant or toddler mothers, lactation management, and the delivery of various information (Ratnasari, 2024). Additionally, the 1000 HPK educational program has shown a significant impact on the knowledge

of pregnant women, and this program is essential to be carried out continuously to improve pregnant women's understanding of the importance of nutrition during the first 1000 days of life (Purwanta, 2023).

CONCLUSION

Pregnant women's knowledge of the 1000 HPK nutrition movement, of the 60 respondents from pregnant women in the pretest before being given counseling, 34 people had knowledge in the poor category (56.7%), in the sufficient category there were 23 people (38.3%), after being given counseling there was a category 32 people (53.3%) were good and 25 people (41.7%) were in the fair category. The pretest before being given counseling had an attitude of 35 people (58.3%) in the poor category and 21 people (35%) in the sufficient category, after being given the counseling the results showed that the attitude of the respondents was in the good category as many as 32 people (53.3%) and in the sufficient category as many as 25 people (41.7%). The level of knowledge before counseling and after counseling (p-value: 0.000) means that nutritional counseling in the first 1000 days of life is effective on pregnant women's knowledge and attitudes before counseling and after counseling (p-value: 0.000), meaning that nutritional counseling in the first 1000 days of life is effective on attitude of pregnant women. Therefore, there is a need for an HPK integration program as material in education in routine PKK activities, integrated health posts (posyandu) or cadre training with success indicators in the form of PKH assistance/basic food assistance, and the use of cadres as 1000 HPK education agents by involving health workers in cross-sector teams in villages or sub-districts, this research can be evidence-based in compiling educational modules that can be used by educational agents in delivering information so that it is more effective and socially acceptable.

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