



The Effectiveness of Brainstorming Methods Through KIA Book Media in Increasing Pregnant Women's Knowledge About 1000 HPK to Prevent Stunting

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ABSTRACT

In West Nusa Tenggara the prevalence of stunting is placed seventh with a frequency of 33.49%, whereas the prevalence of stunting in Indonesia is 30.8%, according to Riskesdas 2018. A useful strategy for raising awareness and preventing stunting problems is to use KIA book media to facilitate brainstorming sessions for 1000 HPK. To ascertain the impact of counseling on 1000 HPK (First Day of Life) participants' knowledge of reducing stunting at the Narmada Community Health Center Working Area through the use of the KIA book media and the brainstorming approach. Nonequivalent Control Group Design is the research method utilized in quasi-experimental design studies. There were 112 research targets as the research subjects. A questionnaire was the tool utilized. The independent sample t-test and the paired sample t-test were used to test the data. Findings from Research. There were four people (7.14%), eighteen people (32.14%), and thirty-four people (60.71%) who knew about pregnant women before treatment for the poor category. Following the intervention, it rose to fall into one of three categories: less than none, moderate (consisting of 11 individuals/19.64%), and good (consisting of 45 individuals (80.36%). The results of statistical tests utilizing the paired sample t-test show that there is a significant influence between the usage of KIA book media at 1000 HPK and brainstorming approaches, with a p value of $0.000 < 0.05$. Pregnant women's knowledge increased after counseling with the brainstorming method using KIA book media, according to the analysis's results, which also indicate a substantial difference in the women's knowledge before and after counseling.

Keywords: Stunting; Brainstorming; KIA Book

INTRODUCTION

Stunting (short toddlers) is still a priority nutritional problem in Indonesia which can have an impact on the quality of human resources (Yuwanti et al, 2022). Stunting is defined as a very short body condition that is lower than -2 SD below the median body length or height in an internationally recognized population (Zulia et al., 2017). Stunting, also known as "short body", is a condition caused by long-standing

nutritional deficiencies and it takes a long time for children to grow and recover (Sipayung, 2020).

The 2018 Riskesdas data shows that the prevalence of stunting in Indonesia is still high, namely 30.8%, while the prevalence of stunting in West Nusa Tenggara is ranked 7th for the prevalence of stunting in toddlers, namely 33.49% (Kemenkes RI, 2018). West Nusa Tenggara is the fourth province with a stunting prevalence of 32.7% and West Lombok Regency is ranked fifth with a prevalence of stunted toddlers of

34% according to SSGI in 2022 (Kemenkes RI, 2022). Although the stunting rate in West Lombok has decreased, Narmada District itself recorded a very high stunting rate, 31.3% in August 2019 (Nurbaiti et al., 2021). The West Lombok area has a stunting prevalence of 18.98% while the Narmada District area has a stunting prevalence of 24.97% according to the West Lombok Health Office in 2022. Efforts to increase maternal knowledge, health education activities must be carried out to increase public knowledge about the importance of healthy behavior for everyone. The method used is brainstorming. The brainstorming method is used for teaching and group discussions to generate new ideas, thoughts, or thoughts. Teachers or resource persons are given a problem, and pregnant women answer and comment on the problem, so that the problem can develop into a new problem to be discussed together (Harleni et al., 2022).

The KIA book contains information about balanced nutritional menu patterns. This health information can help mothers understand what they should eat every day to meet the needs of their mothers and children (Maharani et al., 2019). Utilizing a good KIA book can ensure optimal maternal and fetal health. The KIA book is a medium to increase knowledge and understanding of maternal and child health. The KIA book is also used as a tool to introduce families, mothers, health workers, and cadres because there are still many families, mothers, and health workers who have not implemented the KIA book (Simatupang, 2022).

Research conducted by Putu Ayu Intan Paramitha (2016) found that the effective utilization of the KIA book was still low, namely 21.43% (Paramitha, 2016). Maternal knowledge and support from health workers are the two most influential factors (Hutagalung, 2020). This study aims to determine the effectiveness of counseling on the First 1000 Days of Life with the brainstorming method using the KIA Book media on

the knowledge of pregnant women in preventing stunting in the Narmada Health Center work area.

METHOD

This study used a quasi-experimental approach and used an unequal control group design. The effect of 1000 HPK (First Day of Life) counseling with the brainstorming method using the KIA book on pregnant women's knowledge about how to prevent stunting.

The study was conducted at the Narmada District Health Center in February 2024. This study involved 156 pregnant women registered at the Narmada District Health Center, West Lombok Regency. The sample size was 112 pregnant women. Inclusion Criteria: Currently in the 1st and 2nd trimester of pregnancy, agree to be a research sample, can read and write, and are in good health while the exclusion criteria: pregnant women who go home or withdraw during the counseling. The instruments and tools used are counseling media, namely the KIA book, a knowledge questionnaire that is tested for validity, stationery to answer cases, a voice recorder to record each respondent's opinion, paper to answer cases using the brainstorming method.

The researcher used univariate analysis and bivariate analysis. Univariate analysis determines the nature of each variable studied. Pre-test and post-test scores, as well as descriptive distribution, mean, standard deviation, minimum and maximum will be generated by this analysis. The factor to be analyzed is the knowledge of pregnant women. The Kolmogorov Smirnov One Sample Test is used to analyze bivariate to determine the normality test. If the distribution group is considered normal, the T-pair test and independent T-test will be performed if the data shows a normal distribution (Khoironi et al., 2023).

RESULT AND DISCUSSION

In this study, 112 samples were divided into two groups: 56 people in the control group received 1000 HPK counseling with the lecture method using the KIA book, and 56 people in the treatment group received 1000 HPK counseling with the brainstorming method using the KIA book.

Table 1. Research implementation

Meeting	Kegiatan
Reasearch preparation	Sample identity interview, signing of informed consent (approval form)
Meeting I	Conducting pretest and counseling with lecture method using KIA book media
Meeting II	Counseling with brainstorming method using KIA book media
Meeting III	Seeing the final knowledge of pregnant women with post test

The research was conducted for approximately two weeks, and the meeting lasted for approximately one hour.

Sample Characteristics Based on Education Level

Most of the respondents were low education level, 5 people (8.93%) had elementary school education and 17 people (30.36%) had junior high school education, for medium education level, 23 people (41.07%) had high school education and 6 people (10.71%) had vocational high school education, and for high education level, 5 people (8.93%) had bachelor's degree in the control group. Meanwhile, for the treatment group, it was known that most of the respondents were low education level, 5 people (8.93%) had elementary school education and 9 people (16.07%) had junior high school education, for medium education level, 27 people (48.21%) had high school education and 4 people (7.14%) had vocational high school education and 1 person (1.79%) had D1

education, and for high education level, 10 people (17.86%) had bachelor's degree.

Mothers who have a good level of education can influence the way they prepare, buy, and choose healthy food for children, especially toddlers. A high level of education in mothers will also increase mothers' knowledge and attitudes about nutrition and health (Berhe et al., 2019).

According to research conducted by Fadareet al. (2019), mothers with a higher level of education will be more aware of stunting. A higher level of maternal education can significantly increase their chances of reducing the number of children experiencing stunting.

Sample Characteristics Based on Pregnancy Trimester

The research sample was obtained 24 people (42.86%) trimester 1 and 32 people (57.14%) trimester 2 for the control group with a total sample of 56 pregnant women. While for the treatment group, 22 people (39.29%) trimester 1 and 34 people (60.71%) trimester 2 with a total sample of 56 pregnant women.

The first trimester is the most important period for fetal development, while in the second trimester many uncomfortable symptoms from the first trimester disappear. Everything that pregnant women need to know and prepare to welcome the birth of their child is part of childbirth preparation. Childbirth preparation is defined as a planned and structured instruction program with the aim of meeting all needs that arise during pregnancy and during the labor process (Matterson in Naha, 2018).

Sample Characteristics Based on Respondents' Pregnancy

From the results of the study, it is known that some pregnant women in the control group for the first pregnancy were 25 people (44.64%), the second pregnancy was 17 people (30.36%), the third pregnancy was 11 people (19.64%), and the fourth

pregnancy was 3 people (5.36%). While for the treatment group for the first pregnancy were 19 people (33.93%), the second pregnancy was 22 people (39.29%), the third pregnancy was 11 people (19.64%), and the fourth pregnancy was 4 people (7.14%).

Repeated pregnancies can increase the health risks of the mother and her baby, especially recurrent pregnancies more than four times. (grande multipara). Bleeding during labor, fetal abnormalities, and tearing of the uterine wall are risks that can occur. Primigravida pregnant women do not know what will happen during pregnancy and have not prepared for childbirth. On the other hand, multigravida pregnant women already know what will happen during the previous pregnancy and have prepared for childbirth well (Mezy, 2016).

Respondents' Knowledge Level Before and After Intervention

Table 2. Sample Distribution Based on Knowledge Level Before and After Intervention

Level of knowledge	Pre				Post			
	Treatment		Control		Treatment		Control	
	n	%	n	%	n	%	n	%
Poor	3	5,4	4	7,1	0	0	0	0
Medium	23	41,1	18	32,1	4	7,1	11	19,6
Good	30	53,5	34	60,8	52	92,9	45	80,7
Total	56	100	56	100	56	100	56	100

From the table above, the results of the level of knowledge before the intervention in the highest treatment group were good as many as 30 people (53.57%), moderate as many as 23 people (41.07%), and lacking were 3 people (5.36%). The results of the level of knowledge after the intervention also increased, with 52 people (92.86%) and 4 people (7.14%). While in the control group there was no significant change, namely the category of lacking before the intervention as many as 4 people (7.14%), moderate as many as 18 people (32.14%), good as many as 34 people (60.71%) then after the intervention was carried out the moderate category as many as 11 people (19.64%) and the good category as many as 45

people (80.36%). The results of the study showed that the level of knowledge of pregnant women about 1000 HPK before the intervention in both the treatment and control groups was not good. The level of knowledge in the treatment group was 3 people (5.36%) and in the control group was 4 people (7.14%). However, 23 people in the treatment group (41.07%) and 18 people in the control group had moderate levels of knowledge, respectively. This is because most pregnant women do not understand the importance of implementing 1000 HPK to prevent stunting.

The results of the study showed that there was a significant effect on the knowledge of pregnant women samples in the Narmada Health Center work area before and after the intervention with the brainstorming method using the KIA book. The results of the paired sample t-test in the treatment group and control group showed $p < 0.05$.

This is in line with the study (Wahyurin et al., 2020), that the treatment group gained better knowledge after the intervention with the brainstorming method was given. When compared to lectures, counseling with the brainstorming method had a higher average. This shows that counseling with the brainstorming method is more effective than lectures.

Brainstroming is effective for teaching, because the brainstorming method is the most well-known method effective for generating various ideas about a problem in a short time limited through the spontaneous participation of participants.(Rizi et al., 2013) Brainstorming method is a group method for getting new ideas and solutions. In this method, participants in the group can be stimulated to show better creativity through meeting people others, and participation in group experiences. (Bonnardel & Didier, 2020)When using there are four things to pay attention to in the brainstorming method, namely: 1) it is not allowed there is criticism or negative comments from anyone in the group, 2) a state/situation that is free

and not confined, 3) quantity of ideas is very desirable, the more ideas the better, 4) Ideas from other people can be used to improve and generate new ideas. In Hisrich et al. (2008) session A good exchange of ideas (brainstorming) can be done by 1) prepare a problem statement that is neither too broad nor too narrow and did not limit the range of responses, 2) selected 6 to 12 individuals for participate, 3) avoid inhibiting responses and no members group of experts in the field, 4) all ideas (logical or illogical) must be recorded, and 5) participants must not criticize or evaluate during the brainstorming session. (Al-Samarraie & Hurmuzan, 2018)

CONCLUSION

The use of the brainstorming method with the KIA book media in 1000 HPK counseling is effective in influencing the knowledge of pregnant women. The results of the analysis showed that there was a significant difference that influenced the knowledge of pregnant women before and after counseling, so that counseling with the brainstorming method with the KIA book media increased the knowledge of pregnant women. However, this brainstorming method also still has shortcomings, namely the discussion process that is carried out requires a lot of time and energy. However, even though it takes a lot of time during the discussion process, participants are actively involved in the discussion process to express their opinions according to the problems given.

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