



THE INFLUENCE OF PEER GROUP METHOD OF EDUCATION ON THE KNOWLEDGE AND MOTIVATION OF PREGNANT WOMEN IN ANEMIA PREVENTION

Mariani^{1*}, Dodik Hartono², Siti Nur Hasina³

¹Diploma Nursing Study Program, Faculty of Health Science, Universitas Hafshawaty Zainul Hasan, Gerojokan, Karangbong, Pajajaran, Probolinggo, East Java 67281, Indonesia

²Ners Professional Study Program, Faculty of Health Science, Universitas Hafshawaty Zainul Hasan, Gerojokan, Karangbong, Pajajaran, Probolinggo, East Java 67281, Indonesia

³Department of Nursing, Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama Surabaya, Jl. Smea No.57, Wonokromo, Wonokromo, Surabaya, East Java 60243, Indonesia

*mariakenby@gmail.com

ABSTRACT

Anemia is a nutritional problem that needs attention and is a public health problem in Indonesia. Anemia, which is generally called anemia, is a condition when the body lacks red blood cells or hemoglobin (Hb), where the Hb in the blood is at a level lower than the normal limit. The percentage of pregnant women who experience anemia is 48.9%, this means that around 5 out of 10 pregnant women in Indonesia suffer from anemia. If anemia in pregnant women is not treated, it will result in suboptimal growth and development of the fetus in the womb and has the potential to cause complications in pregnancy and childbirth, even causing maternal death. Objective: This research was conducted to determine "Is there an influence of peer group education on the knowledge and motivation of pregnant women in preventing anemia". This research method uses a pre-experimental design using a one-group pre-post test design method. The population in this study were all pregnant women in the Pajajaran Community Health Center area. The sampling technique used was purposive sampling, namely selecting samples according to the inclusion criteria, with a sample size of 30 respondents. The data collection instrument uses a questionnaire and validity and reliability tests have been carried out with an r table value of 0,747 and cronbach's alpha 0.757. Analysis uses the Paired simple T-Test. Results The results show that the knowledge and motivation of pregnant women in preventing anemia before and after being given peer group education shows a significant influence where $P = 0.000$ is smaller than $\alpha = 0.005$. So that peer group education can be used as a solution to reduce the incidence of anemia in pregnant women.

Keywords: anemia; knowledge; motivation; peer group education; pregnant women

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INTRODUCTION

Anemia is a nutritional problem that needs attention and is a public health problem in Indonesia. Anemia, which is generally called anemia, is a condition when the body lacks red blood cells or hemoglobin (Hb), where the Hb in the blood is at a level lower than the normal limit. Anemia can be experienced by all age groups, from toddlers, teenagers, pregnant women to the elderly. Pregnant women are a group that is very vulnerable to anemia, this is due to the increasing need for the mother's body for iron, along with increasing gestational age. During pregnancy, the body will produce more blood to support the development of the fetus in the womb. However, when a pregnant woman experiences anemia, the blood does not have enough healthy red blood cells to transport oxygen to the mother's body tissues and also the fetus. During pregnancy, the need for oxygen is higher and triggers an increase in erythropoietin production, resulting in increased plasma volume and red blood cells also increase (Susanti, 2022).

The prevalence of pregnant women worldwide who experience anemia is 41.8%. Prevalence among pregnant women varies from 31% in South America to 64% in southern Asia. South and Southeast Asia combined contribute up to 58% of the total population experiencing anemia in developing countries. In North America, Europe and Australia, anemia due to iron deficiency during pregnancy is rare. Even in the US, only around 5% of young children and 5-10% of women of reproductive age suffer from anemia due to iron deficiency (World Health Organization, 2021). Basic Health Research Data (Riskesdas) in 2018 states that the percentage of pregnant women who suffer from anemia is 48.9%, this means that around 5 out of 10 pregnant women in Indonesia suffer from anemia. Riskesdas data for 2018 also shows that 23 percent of babies born in Indonesia are stunted. The 2018 Riskesdas results also showed that 84.6% of pregnant women aged less than 25 years experienced anemia and 57.6% of pregnant women aged more than or equal to 35 years experienced anemia (Ministry of Health of the Republic of Indonesia, 2018). Based on the results of a preliminary study conducted on January 23 2024 at the Pajarakan Community Health Center, data on pregnant women was 60 respondents. From the results of interviews with 5 people who experienced anemia, it was found that 3 pregnant women said they did not know about anemia and its prevention.

Anemia in pregnant women occurs due to several factors, including a less diverse diet, lack of intake of iron-rich foods, repeated pregnancies in a short period of time, pregnant women who experience infections that cause iron loss such as worms and malaria and pregnant women who experiencing Chronic Energy Deficiency (KEK) (Ministry of Health, 2020). Symptoms of anemia in pregnant women are usually not obvious and are often ignored, but as pregnancy progresses the symptoms can get worse. Pregnant women should be alert and recognize the symptoms of anemia they are experiencing. If anemia in pregnant women is not treated, it will result in suboptimal growth and development of the fetus in the womb and has the potential to cause complications in pregnancy and childbirth, even causing maternal death. Anemia in pregnant women is caused by a lack of nutritional intake, especially iron during pregnancy, the need for which continues to increase according to gestational age. If pregnant women do not get enough iron or other important nutrients, the body will not be able to produce red blood cells. This can have an impact on babies in the womb who are the forerunners of children experiencing stunting, apart from being a result of nutritional needs not being met during their growth and development period.

Efforts to prevent anemia in pregnancy can be made by increasing knowledge and changing attitudes to be positive through education about adequate nutritional intake during pregnancy, where education can be given during ANC visits, where pregnancy checks in the era of adapting to new normal habits are carried out at least six visits during pregnancy. , consume blood supplement tablets at least 90 tablets during pregnancy, carry out Hb checks in the first and third trimesters, immediately check yourself if you feel unusual complaints, increase the knowledge and behavior of pregnant women and families in choosing, processing and serving food and improve the quality of health services and community nutrition. (Putu Erryca, et al, 2020). Health workers can intensively provide education to pregnant women in efforts to prevent and treat anemia in pregnant women (Safitri, 2020). Apart from that, Peer group education can also be used as an alternative in natural learning efforts with peers who have similarities so that they can strengthen each other and learn from each other and share experiences related to the knowledge they have (Desnita, 2019). Health promotion through peer education turns out to be the most effective among other public health efforts, especially in developing healthy living behavior, because peer education is carried out with people closest to you and who are trusted by the community, so it is easy to reach in public health

efforts and it is hoped that it will become more sensitive to accept changes or updates ((Hadi AJ, et all. 2019). Based on the phenomenon of increasing prevalence of anemia in pregnant women, researchers are interested in conducting this research with this aim determine the influence of Peer Group Education on the Knowledge and Motivation of Pregnant Women in Preventing Anemia

METHOD

This study used a pre-experimental design using a one-group pre-post test design method, namely measurements were taken before and after treatment. The population in this study were all pregnant women in the Pajarakan Community Health Center area. The sampling technique used was purposive sampling, namely selecting samples according to the inclusion criteria, with a sample size of 30 respondents. The data collection instrument uses a questionnaire and validity and reability tests have been carried out with an r table value of 0,747 and cronbach’s alpha 0.757. Analysis uses the Paired simple T-Test. The independent variable is Peer Group Method Health Education. And the dependent variable is Knowledge and Motivation of Pregnant Women in Preventing Anemia. This research has received and ethical feasibility test from the Health Research Ethics Committee of Hafshawaty Zainul Hasan University Number : 222/KEPK-UNHASA/VII/2024.

RESULT

Table 1 shows that most respondents are 21-30 years old (60%), most of the mother's education level is Senior School (56.7%), most of the respondents are not working (housewife) (63,3%),

Table 1.
Respondents Characteristics Based on Age, Education Level, Occupation

Respondent characteristics		f	%
Age	≤ 20 year	2	6,7
	21 - 30	18	60
	31 - 40	10	33,3
Knowledge	Primary School	2	6,7
	Junior School	7	23,3
	Senior School	17	56,7
	College	4	13,3
Occupation	Housewife	19	63,3
	Enterpreneur	4	13,3
	Swasta	5	16,7
	PNS	2	6,7

Table 2.
Level of Knowledge Before and After Giving Peer Group Education to Pregnant Women

Level of Knowledge	Pre test		Post test	
	f	%	f	%
Good	10	33,3	22	73,3
Enough	13	43,4	8	26,7
Less	7	23,3	0	0

The results of the statistical analysis show that knowledge of pregnant women in preventing anemia before being given peer group method education and after being given education shows a significant influence with a p value = 0.000 which is smaller than $\alpha = 0.005$. So it can be concluded that providing peer group education can increase pregnant women's knowledge in preventing anemia.

Table 3.
Motivation of Pregnant Women in Preventing Anemia Before and After Being Given Peer Group Education

Motivation of Pregnant Women	Pre test		Post Tes	
	f	%	f	%
Good	6	20	25	83,3
Enough	20	66,7	5	16,7
Less	4	13,3	0	0

The results of the statistical analysis show that the motivation of pregnant women in preventing anemia before being given peer group method education and after being given education shows a significant influence, with a p value = 0.000 which is smaller than $\alpha = 0.005$. So it can be concluded that providing peer group education can increase the motivation of pregnant women in preventing anemia.

Table 4.
Analysis of the Effect of Peer Group Education Method on the Knowledge and Motivation of Pregnant Women in Preventing Anemia

		N	Mean Rank	Sum of Ranks	Z	Asymp. Sig. (2-tailed)
Knowledge After Being Given Peer Group Method Education - Knowledge Before Being Given Peer Group Method Education	Negative Ranks	0 ^a	.00	.00	-4.359 ^b	.000
	Positive Ranks	19 ^b	10.00	190.00		
	Ties	11 ^c				
Motivation After Being Given Peer Group Method Education - Motivation Before Being Given Peer Group Method Education	Negative Ranks	0 ^d	.00	.00	-4.796 ^b	.000
	Positive Ranks	23 ^e	12.00	276.00		
	Ties	7 ^f				

The results of the analysis of the influence of peer group method education on the knowledge and motivation of pregnant women in preventing anemia were obtained with a p value of $0.000 < \alpha = 0.005$. So the results of this study show the influence of peer group education on the knowledge and motivation of pregnant women in preventing anemia.

DISCUSSION

Knowledge of Pregnant Women in Preventing Anemia

The results of the statistical analysis show that the knowledge of pregnant women in giving exclusive breastfeeding before and after education shows a significant influence where $P = 0.000$ is less than $\alpha = 0.005$. So it can be concluded that the provision of lactation management education can increase the knowledge of pregnant women in providing exclusive breastfeeding. In line with research conducted by (Tay, 2018), it shows that there is an influence of peer group health education on pregnant women with anemia on knowledge of recognizing the danger signs of pregnancy, childbirth, and the postpartum period. Education or Peer Group (peer education) is education that has been trained before and has the task of providing health education to its peers. Peer education is needed because peer education uses almost the same language so that the information received will be easily understood by peers, besides that peers easily incorporate their thoughts and feelings into peer education so that sensitive messages can be discussed more openly and casually. (Evi Rinata & Gita Ayu. 2018). The statement shows that the provision of peer group method education can increase the knowledge of pregnant women in the prevention of anemia. So pregnant women are encouraged to educate each other about the prevention of anemia, especially for pregnant women who are pregnant for the first time and have no experience in dealing with their

pregnancy period. Because the decrease in the incidence of anemia in pregnant women has a great impact on the health of the mother and her fetus.

Motivation of Pregnant Women in Preventing Anemia

The results of the study show that before the peer group method education was carried out, most of the mothers' motivation was sufficient, which was as much as 66.7%, after being given peer group method education, most of the mothers' motivation was good, which was as much as 83.3%. The results of the analysis showed that the knowledge of pregnant women in providing exclusive breastfeeding before and after education showed a significant influence where $P = 0.000$ was smaller than $\alpha = 0.005$. So it can be concluded that the provision of peer group method education can increase maternal motivation in preventing anemia. In line with research conducted by Fitrianingrum, A. (2016), it shows that the experience of a person or group in this case, namely the role of peer group, has an influence in supporting or inhibiting a person to increase motivation in using IUD contraception. According to Purwanto, (2014). Motivation is the view of an effort to influence a person's behavior so that he is moved to act to do something so as to achieve a certain result or goal. In general, motivated people will certainly make a greater effort than those who do not.

In the opinion of researcher a, pregnant women who have been given peer group method education have experienced an increase in motivation due to several factors, including age, education level and occupation. Where the younger a person's age, the greater their curiosity, so it affects their motivation. Likewise with the level of education, the higher a person's education, the better it will be in receiving information. The increase in maternal motivation in preventing anemia is due to the receipt of information provided by peer group educators as informants, so that the effective peer group education method can be used as one of the information media to increase motivation in the prevention of anemia in pregnant women.

Analysis of the Influence of Peer Group Method Education on Pregnant Women's Knowledge and Motivation in Preventing Anemia

The results of the statistical analysis show that the influence of peer group education on the knowledge and motivation of pregnant women in the prevention of anemia with a p value of $0.000 < \alpha = 0.005$. So the results of this study have the influence of peer group method education on the knowledge and motivation of pregnant women in the prevention of anemia. Maternal groups are a stimulating coexistence and bonding space for sharing knowledge and experiences, which is very important These groups encourage the exchange of experiences, learning and reflection on the possibilities and limitations of health-disease processes, reduce anxiety and contribute to empowerment in decision-making (Alves, 2019). Peer group method education is one of the means used to discuss with each other, exchange ideas, share experiences, exchange information or education about problems that are often faced by pregnant women, so that through this peer group can get satisfaction and success in getting through their pregnancy well. This peer group or peer group aims to help each other solve problems faced by the group and is a learning or educational process, where the orientation is an activity that can increase knowledge, besides that it is also a form of social support given to friends.

CONCLUSION

The knowledge and motivation of pregnant women in preventing anemia before and after being given peer group education shows a significant influence where $P = 0.000$ is smaller than $\alpha = 0.005$. So that peer group education can be used as a solution to reduce the incidence of anemia in pregnant women

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