Correlation Between Level Of Knowledge About Anemia In Pregnant Women And Compliance In Consuming (FE) Tablets At Sukadana Health Center In 2023

Fitriani[1]*, Masluroh[2]

[1,2]Abdi Nusantara College of Health Sciences, Indonesia
*Coresponding Author:
Email: Fitrianiii0309@gmail.com

Abstract.
Background Pregnancy is the condition of a woman carrying a fetus in the uterus which is the result of sperm cells and ovum cells which will then develop into a baby and will be born at 40 weeks of gestation. Anemia is a condition in which the body has too many red blood cells (erythrocytes). Based on WHO data in 2011, 38.2% of anemia occurs in pregnant women Research objective: To find out the management of the relationship between the level of knowledge about anemia in pregnant women and adherence to consuming tablets (Fe) at the Sukadana Health Center in 2023. Research methodology: The design in this study was to use a quantitative research method with a cross sectional approach. The analysis technique used is the chi square test (X2). Results: analysis using SPSS with a significant level (a = 0.05) obtained results with a p value of 0.014 <0.05 so that ha was accepted which stated that there was a relationship between the level of knowledge of anemia in pregnant women and adherence to consuming FE tablets at the Sukadana Health Center year 2023.

Keywords: *Knowledge about anemia and adherence to consuming Fe tablets.*

I. INTRODUCTION

Mother's knowledge plays a very important role in fulfilling good nutrition for pregnant women so that the growth of the fetus runs fast and does not experience obstacles. Lack of knowledge of pregnant women about the benefits of nutrition during pregnancy can cause pregnant women to lack nutrition, if malnutrition, especially iron, can cause iron deficiency anemia (Purwaningrum, 2017).The incidence of anemia in pregnant women in West Kalimantan Province has increased. Based on data from the West Kalimantan Provincial Health Office from 2014 to 2016 the increase reached 5.74%. Data for the last 3 years has shown a significant increase in anemia in pregnant women, namely in 2014 there were 104,762 pregnant women and 6,105 cases of anemia with a proportion of 5.82%, in 2015 there were 112,925 pregnant women, and 8,701 cases of anemia in pregnant women with a total proportion of 7.70% and in 2016 there were 116,458 pregnant women, and 13,463 cases of anemia with a total proportion of 11.56%.Based on data from the Sukadana Health Center in 2022, from 7 villages there were 499 pregnant women (TM 160 people, TM II 142 people) and Hb examination results, namely that 172 pregnant women had mild anemia, 79 pregnant women had severe anemia, 198 pregnant women not have anemia.According to Aryanti et al (2013) in Willy Astriana (2017), anemia in pregnancy is called "potential danger to mother and child" (potentially harmful to mother and child). The impact of anemia in pregnancy can occur abortion, premature delivery, inhibition of growth and development of the fetus 2 in the uterus, easy infection, antepartum bleeding, premature rupture of membranes (PROM), during labor can cause His disorders, the first stage can last a long time, and parturition occurs neglected, and during the puerperium uterine subinvolution occurs causing postpartum hemorrhage, facilitating puerperal infection, and reduced milk production.

Prolonged, and neglected parturition occurs, and during the puerperium, uterine subinvolution occurs, causing postpartum hemorrhage, facilitating puerperal infection, and reduced milk production.According to Lailiyana (2010) Anemia can be caused by iron deficiency. Iron deficiency anemia is what often occurs in pregnant women today. If pregnant women can meet the need for iron, the risk of developing iron anemia can be prevented. The need for iron during pregnancy will certainly increase for the purposes of forming the placenta and red blood cells and even for the preparation of blood that will be lost during childbirth.Anemia in pregnant women besides being caused by poverty where nutritional intake is very lacking, can also be caused by gender inequality and ignorance about proper diet. Pregnant women need

a lot of nutrients to meet the body's needs for themselves and their fetus. Iron deficiency results in a deficiency of hemoglobin (Hb). Where iron as one of its constituent elements. Hemoglobin functions as a binder of oxygen which is needed for cell metabolism (Tarwoto, 2013).Fe tablet supplementation is one of the most effective prevention and control programs for iron deficiency anemia in increasing hemoglobin levels in pregnant women and can reduce the prevalence of anemia in pregnant women by 20-25%. This program has been implemented in Indonesia since 1974 and the percentage of pregnant women in West Sumatra consuming Fe tablets has reached 75.8%. Fe tablets contain 200 mg of ferrous sulfate and 0.25 mg of folic acid bound with lactose. Pregnant women are advised to consume Fe tablets of at least 90 tablets at a dose of 1 tablet per day continuously for 90 days during pregnancy.Overcoming the problem of iron nutritional anemia in pregnant women, the government through the Ministry of Health (DepKes) of the Republic of Indonesia implemented a program of giving iron supplement tablets to pregnant women. Supplementation of blood-boosting tablets and improving nutrition is an important effort in preventing and treating anemia.

Even though the program for giving iron tablets to pregnant women has been running since 1970, there are still a number of cases caused by anemia during pregnancy. Only a few pregnant women in developing countries like Indonesia can meet their iron needs during pregnancy through daily food, because the main source of iron that is easily absorbed by the body, namely animal protein such as fish and meat, is relatively expensive and not fully accessible to the public. Although there are plant sources of iron-rich foods such as green vegetables and beans, the iron in these foods is more difficult to absorb. Therefore, the supplementation program for blood-boosting tablets during pregnancy is an alternative to treat anemia. The large number of pregnant women who suffer from anemia is most likely influenced by the lack of adherence of mothers taking Fe tablets. The total requirement for iron during pregnancy ranges from 580-1340 mg, and 440-1050 mg of which will be lost in the body during childbirth. To counter this loss, pregnant women need an average of 3.5-4 mg of iron per day.From a preliminary study conducted by researchers in the working area of the Sukadana Public Health Center, Sukadana Subdistrict, Kayong Utara District in December 2022, there were 50 pregnant women experiencing mild anemia, 12 pregnant women experiencing severe anemia and there were pregnant women who were not diligent in taking Fe tablets for the reason different because they forgot and were lazy to take them because of nausea and 8 people who diligently consumed Fe tablets but in the wrong way, namely drinking them with tea or milk, which affected the absorption of Fe tablets.

II. METHODS

The design in this study is to use a quantitative research method with a cross sectional approach. The samples taken were all pregnant women who had an examination on December 15 2022 to January 15 2023 at the Sukadana Health Center with a total of 35 pregnant women. The analysis technique used is the chi square test (X2).

III. RESULT AND DISCUSSION

1. Univariate analysis

From the results of a study of 35 respondents regarding the relationship between the level of knowledge of anemia in pregnant women and adherence to consuming FE tablets at the Sukadana Health Center in 2022, the following results were obtained:

a. Frequency Distribution Level of knowledge of anemia in pregnant women with adherence to consuming FE tablets at Sukadana Health Center in 2022 It can be seen from the table below that based on the results of completing the questionnaire by 35 respondents, the distribution of knowledge levels of anemia in pregnant women is as follows:

Table. Frequency distribution of knowledge level of anemia in pregnant women

No	Knowledge	Amount	
		N	%
1	Not enough	3	8,6
2	Enough	25	71,4

3	Good	7	20,0
	Total	35	100,0

From the table above it can be seen that very few of the respondents, namely 3 respondents (8.6%) had less knowledge and most of the respondents, namely 25 respondents (24.8%) had good knowledge.

b. Distribution of the frequency of adherence to consuming FE tablets at the Sukadana Health Center in 2022 It can be seen from the table below that based on the results of completing the questionnaire by 35 respondents, the distribution of adherence to consuming FE tablets is as follows:

Table. Frequency distribution of adherence to consuming FE tablets

No	Obedience	Amount	
		N	%
1	Not obey	10	28,6
2	Obey	25	71,4
	Total	35	100,0

From the table above it can be seen that a small portion of the respondents, namely 10 respondents (28.6%), did not adhere to consuming FE tablets and a small portion of the respondents, namely 25 respondents (71.4%) adhered to consuming FE tablets.

2. Bivariate analysis

Bivariate analysis was performed to show the relationship between the independent variable and one dependent variable. In this analysis the researcher conducted statistical tests with the Chi Square test (X2). With a degree of confidence of 95% with an error level of 5% (α = 0.05). After conducting research on the relationship between the level of knowledge of anemia in pregnant women and adherence to consuming FE tablets with a total of 35 respondents at the Sukadana Health Center in 2022, the results were obtained:

Table. Relationship between knowledge level of anemia in pregnant women and adherence to consuming FE tablets

No	Knowledge	Obey				Amount		*P value*
		Not Obey		Obey				
		N	%	N	%	N	%	
1	Not Enough	0	0	3	8,6	3	8,6	
2	Enough	5	14,3	20	57,1	25	71,4	0,014
3	Good	5	14,3	2	5,7	7	20,0	
	Total	10	28,6	25	71,4	35	100,0	

Based on the table above the results of the analysis of the cross table between the level of knowledge and compliance found that of the 3 respondents who had less knowledge it was known that none of the respondents did not comply as many as 0 people (0%) and very few of the respondents namely 3 respondents (8.6%) complied consuming FE tablets.Of the 25 respondents who had sufficient knowledge, it was known that very few of the respondents were not compliant, as many as 5 people (14.3%) and some of the respondents, namely 20 respondents (57.1%) adhered to consuming FE tablets.Meanwhile, from the 7 respondents who had good knowledge, it was known that very few of the respondents were not compliant as many as 5 people (14.3%) and very few of the respondents, namely 2 respondents (5.7%) adhered to consuming FE tablets.After analysis using SPSS with a significant level (a = 0.05) results were obtained with a p value of 0.014 <0.05 so that ha was accepted which stated that there was a relationship between the level of knowledge of anemia in pregnant women and adherence to consuming FE tablets at the Sukadana Health Center year 2023

Discussion

1. Univariate analysis

a. Level of knowledge of anemia in pregnant women

Based on the research results, it was found that very few of the respondents, namely 3 respondents (8.6%) had less knowledge and most of the respondents, namely 25 respondents (24.8%) had good knowledge. This is caused by several factors that influence the knowledge of pregnant women, namely the level of education, age, and maternal health behavior.This research is in line with research conducted by (Purwaningtyas & Prameswari, 2017) that knowledge has a relationship with maternal health. The higher the knowledge, the more information about health will be received. In addition, education also greatly influences

the ability to receive information about health and nutrition. Education also affects the ease with which a person receives knowledge. Usually a well-informed pregnant woman can balance her consumption pattern.If the consumption pattern is appropriate, then the intake of nutrients obtained will be sufficient, so that it is likely to avoid the problem of anemia. The low level of knowledge of pregnant women can cause limitations in efforts to deal with nutrition and family health problems and can also affect the reception of information so that knowledge about iron (Fe) becomes limited and has an impact on the occurrence of anemia in pregnant women. (purwaningtyas & prameswara, 2017).

b. Compliance consuming FE tablets

In this distribution, it was found that a small portion of the respondents, namely 10 respondents (28.6%), did not adhere to consuming FE tablets and a small proportion of respondents, namely 25 respondents (71.4%) adhered to consuming FE tablets.This is in line with research (triyani & purbowati) that efforts to treat iron nutritional anemia in Indonesia are still prioritized on giving Fe tablets to pregnant women and counseling on iron-rich foods. In fact, giving Fe tablets has not been effective in reducing the prevalence of anemia. The main reason for the ineffectiveness is the low adherence of pregnant women in consuming Fe tablets. Low adherence is related to several factors, including side effects caused when taking Fe tablets, inadequate supply of Fe tablets, inadequate counseling by health workers regarding the benefits of Fe tablets, lack of knowledge of pregnant women about Fe tablets, public trust regarding inappropriate behavior. raises different perceptions of pregnant women about anemia who consider it a common disease. (triyani & purbowati, 2016).

2. Bivariate analysis

a. Relationship between knowledge level of anemia in pregnant women and adherence to consuming Fe tablets.

Based on the results of the analysis of the cross table between the level of knowledge and compliance, it was found that of the 3 respondents who had less knowledge, it was known that none of the respondents were disobedient as many as 0 people (0%) and very few of the respondents namely 3 respondents (8.6%) adhered to taking tablets FE.Of the 25 respondents who had sufficient knowledge, it was known that very few of the respondents were not compliant, as many as 5 people (14.3%) and some of the respondents, namely 20 respondents (57.1%) adhered to consuming FE tablets.Meanwhile, from the 7 respondents who had good knowledge, it was known that very few of the respondents were not compliant as many as 5 people (14.3%) and very few of the respondents, namely 2 respondents (5.7%) adhered to consuming FE tablets.After analysis using SPSS with a significant level (a = 0.05) results were obtained with a p value of 0.014 <0.05 so that ha was accepted which stated that there was a relationship between the level of knowledge of anemia in pregnant women and adherence to consuming FE tablets at the Sukadana Health Center year 2023.

The results of this study are in line with research conducted by (Shafa & Putri, 2017) obtained p volume results of 0.000, where there is a significant relationship between pregnant women's knowledge about anemia and adherence to consuming Fe tablets at the Sukadana Health Center. This research was also conducted by (Citra Kowel, Pelealu & Pangemanan, n.d., 2014) regarding the relationship between knowledge of pregnant women and adherence to consuming Fe tablets in Tarenan District, the results obtained were p volume 0.000, which means that there is a significant relationship between knowledge of pregnant women and adherence to consuming Fe tablets. Supported by research from (Hastanti, 2016) which was carried out on pregnant women in the working area of the Lawangan Public Health Center, Poso Regency, where there was a significant relationship between knowledge of pregnant women and adherence to consuming Fe tablets. By concluding that the better the knowledge of pregnant women, the more obedient they will be in consuming Fe tablets. And vice versa, if the knowledge of pregnant women is lacking, the tendency to consume Fe tablets will also be increasingly disobedient.

IV. CONCLUSION

Based on the research entitled "The relationship between the level of knowledge about anemia in pregnant women and compliance in consuming FE tablets at the Sukadana Health Center" in this study was conducted at the Sukadana Health Center while the results of this research were:

1. Univariate analysis
   a. Knowledge of ANC

It was found that very few of the respondents, namely 3 respondents (8.6%) had less knowledge and most of the respondents, namely 25 respondents (24.8%) had good knowledge.

   b. Compliance in consuming FE tablets

It was found that a small portion of the respondents, namely 10 respondents (28.6%) were not obedient in consuming FE tablets and a small portion of the respondents, namely 25 respondents (71.4%) were obedient in consuming FE tablets.

2. Bivariate analysis

Based on the results of the study using the SPSS 16.0 program, it was found that the results of the p value were $0.014 \geq 0.05$, which means that there is a relationship between the level of knowledge about anemia in pregnant women and adherence to consuming FE tablets at the Sukadana Health Center.

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