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THE CONTROL MANAGEMENT OF INCIDENCE OF ANEMIA THROUGH CONSUMPTION COMPLIANCE OF BLOOD SUPPLEMENTING TABLETS IN PREGNANT WOMEN IN COMMUNITY HEALTH CENTER

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ABSTRACT
Compliance with iron tablets consumption is one of the factors associated with the incidence of anemia in pregnant women. Anemia is an indicator for poor nutrition and poor health. Anemia in pregnant women is strongly associated with maternal and infant mortality and morbidity, including the risk of miscarriage, stillbirth, prematurity and low birth weight (LBW). This study aims to determine the management of anemia control through adherence to the consumption of blood-added tablets in pregnant women at the Way Laga Health Center Bandar Lampung City in 2021. This type of research is quantitative with a cross sectional design, the population of this study is all pregnant women in the third semester as many as 47 people. with total sampling technique. Data were obtained by using a questionnaire sheet and analyzed by univariate and bivariate with chi square test. The results showed that pregnant women who adhered to the consumption of iron tablets were 44.7%. The results of statistical tests showed that there was a relationship between adherence to iron tablets consumption and the incidence of anemia in pregnant women with a p value of 0.029 (< 0.05).

Keywords: anemia; blood supplementing tablets; pregnant women

INTRODUCTION
The Maternal Mortality Rate (MMR) is one indicator to see the health status of women and is a component of the development index and quality of life index (Sumarmi, 2017). Maternal mortality rate is death during pregnancy within 42 days after termination of pregnancy, caused by the pregnancy itself. Based on the 2014 WHO, it is known that the prevalence of iron deficiency anemia in Asia is >75%, in Indonesia cases of nutritional anemia reach 63.5%. Based on Riskesdas data in 2018, the anemia rate in pregnant women was 48.9%. This shows that anemia is quite high in Indonesia. This condition can cause 3-7% of mothers to die due to indirect causes, namely anemia.

Anemia is a condition in which the number and size of red blood cells or the concentration of hemoglobin is below the normal limit, which can interfere with the capacity of the blood to carry oxygen around the body. Anemia is an indicator for poor nutrition and poor health. Anemia in pregnant women is strongly associated with maternal and infant mortality and morbidity, including the risk of miscarriage, stillbirth, prematurity and low birth weight (LBW) (WHO, 2014). Several factors that can cause anemia in pregnancy include gravida, age, parity, education level, economic status, compliance with Fe tablet consumption and diet (Krisnawati, et al. 2015).

Iron has a function for the formation of hemoglobin, minerals and the formation of enzymes. Hemoglobin acts as the oxygen-carrying unit of the blood that carries oxygen to the lungs, as well as carries CO2 back to the lungs. The impact of iron deficiency on pregnant women is that they can have miscarriages, give birth prematurely, babies are born with abnormal weights, bleeding before and during childbirth and in severe anemia can cause maternal and infant

mortality. In children can experience growth disorders, do not reach optimal height and children become less intelligent. Anemia in pregnant women also increases the risk of maternal death. The direct causes of death for pregnant women are bleeding, eclampsia, prolonged labor, abortion complications, and infection, but the risk of death increases if the mother suffers from anemia (Waryana, 2010).

In Indonesia, the program to prevent anemia in pregnant women is by giving additional blood (Fe) tablets to pregnant women. However, many pregnant women refuse or do not comply with this recommendation for various reasons. According to the Ministry of Health, adherence to taking Fe tablets is consumed as much as one tablet every one day in a row for 90 days during pregnancy. Obedience of pregnant women to take iron pills is an important factor in ensuring an increase in hemoglobin levels of pregnant women (Indonesia Health Ministry, 2015).

According to the Lampung Provincial Health Office Performance Report in 2019, K1 visits to pregnant women accounted for 95.89% and K4 visits to pregnant women accounted for 91.88%. For data on the number of pregnant women in the Way Laga Health Center Area in 2019 as many as 170, while pregnant women who underwent examinations in July - December 2019 were 69 people, meaning that only 40.8% carried out laboratory tests, of the 69 examined 20 people had anemia or 29% . In 2020, from the target of 229 pregnant women, only 198 or about 86.3% of KN 3 data or who had their pregnancy checked. Based on these data, researchers are interested in looking at the management of anemia control through adherence to Fe tablet consumption

METHOD

Research conducted by Wiwit Hidayah and Tri Anasari, 2012 with the title Relationship of Obedience to Pregnant Women Consuming Fe Tablets with the Incidence of Anemia in Peger Aji Village, Cilongo District, Banyumas Regency, showed that there was a relationship between the compliance of pregnant women taking Fe tablets with the incidence of Anemia in Pager Aji Village with p-value < 0.05.The results of a similar study conducted at the Kembang Bahu Lamongan Health Center in 2020 showed that there was a relationship between the regularity of pregnant women consuming Fe tablets and the incidence of anemia.

Sr Maywati and Siti Novianti conducted a study on Behavioral Analysis of Fe Tablets with the Incidence of Anemia in Pregnant Women at Karang Anyar Health Center Tasikmalaya City in 2019 using univariate and bivariate tests with chi square. Consumption of vitamin C with p value < 0.05. The type of research used in this study was quantitative with a cross sectional design, the population of this study was all pregnant women in the third semester as many as 47 pregnant women obtained by total sampling technique. Data was obtained by using a questionnaire sheet and analyzed by univariate and bivariate with Chi square test. This research was carried out at the Way Laga Health Center, Bandar Lampung City in June - July 2021

RESULTS

Univariate Analysis

Respondent's Characteristic

Table 1.
Frequency Distribution of Respondents Based on Age, Occupation, Education, Gestational Age and Family Income of Pregnant Women

Characteristic	f	%
Age		
< 20 tahun	13	27.7
20-34	34	72.3
Occupation		
Working	3	6.4
Not Working (IRT)	44	93.6
Education		
< High School/Vocational High School	22	46.8
.≥ High School/Vocational High School	25	53.2
Gestational Age		
7-8 Months	37	78.7
> 8 Bulan	10	21.3
Family Income		
≤ Rp. 2.500.000	36	76.6
Rp. 2.500.000 - Rp. 5.000.000	11	23.4

Table 1, it can be explained that judging from the age of pregnant women aged 20-34, as many as 34 (72.3%). A total of 44 (93.6%) pregnant women who did not work/IRT, namely 44 people (91.6%), the most type of education was the type of education High School/Vocational School, namely 25 people (53.2%), the third trimester of pregnancy age 7-8 months as many as 37 people (78.7%) and the most family income of pregnant women is < Rp. 2,500,000 as many as 36 people (76.6%).

Table 2.
Frequency Distribution of Compliance with Blood Supplementing Tablets for Pregnant Women

Category	f	%
Disobey	21	44.7
Obey	26	55.3

Table 2, the results of the study in table 2, it is known that from 47 pregnant women as many as 21 people (44.7%) were classified as non-compliant while 26 people (55.3%) were classified as obedient.

Tabel 3.
Distribution of the Frequency of Anemia in Pregnant Women

Category	f	%
Anemia < 11 gr/dl	16	34.0
Normal ≥ 11 gr/dl	31	66.0

Table 3 the results of the study in table 3, it is known from 47 pregnant women as many as 31 people (66.0%) had anemia and 16 pregnant women were included in the normal category (34.0%).

Bivariate Analysis

Table 4.
Analysis of Compliance with Blood Supplementation Tablets with the Incidence of Anemia in Pregnant Women

Consumption Compliance TTD	Incidence of Anemia				P-value	OR
	Anemia < 11 gr/dl		Normal ≥ 11 gr/dl			
	f	%	f	%		
Disobey	11	52.4 %	10	47.6 %	0.029	4.62
Obey	5	19.2 %	21	80.8 %		
Total	16	34 %	31	66 %		

Table 4 the results of the study in table 4 with hypothesis testing using the Chi-Square method, the p-value <0.05 is 0.029, this proves that adherence to taking blood-supplementing tablets is significantly related to the incidence of anemia in pregnant women.

DISCUSSION

Anemia is a nutritional problem that needs special attention. The results of the 2013 Rikesdas, the prevalence of anemia nationally for women is relatively higher (23.9%). The value of hemoglobin (Hb) levels in the blood of pregnant women is normal 11 g/dl and abnormal is < 11 g/dl (Kemenkes RI, 2015). The results of the 2018 Riskesdas, the anemia rate in pregnant women was 48.9%. The results of the incidence of anemia at the Way Laga Health Center were 47 pregnant women, from all samples of third trimester pregnant women studied, 16 (34%) pregnant women experienced anemia and 31 people (66%) did not experience anemia or normal. This shows that the incidence of anemia at the Way Laga Health Center is still a nutritional problem that needs attention, because the prevalence is still high, above 20%.

Several factors that can cause anemia in pregnancy include gravida, age, parity, education level, economic status, compliance with Fe tablet consumption and diet (Krisnawati, et al. 2015). Iron nutritional anemia actually does not need to occur if the daily food intake contains enough iron, especially animal foods that are rich in iron. Efforts that can be made to prevent and overcome anemia are practicing a balanced nutritious diet such as iron-rich foods such as animal sources, and fruits containing high vitamin C to increase iron absorption. In addition, fortification of food ingredients to increase the nutritional value of food and then consuming iron on a regular basis for a certain period of time aims to increase hemoglobin levels quickly (Health Ministry, 2015).

According to several studies, adherence to taking Blood Supplement Tablets (TTD) is one of the factors associated with the incidence of anemia in pregnant women. As in the research of Desi Ari Madi Yanti et al (2015) which mentions several factors related to the incidence of anemia in pregnant women, namely education, economic status, and compliance with Fe tablet consumption with the incidence of anemia in pregnant women. Compliance of pregnant women in consuming iron can be measured from the exact number of tablets consumed, the accuracy of how to consume and the frequency of consumption per day, which is one of the important efforts in preventing and overcoming anemia, especially iron deficiency anemia (Utami Lisma, 2017). Compliance with taking Fe tablets is defined as the behavior of pregnant women who comply with all the instructions recommended by health workers in consuming Fe tablets.

The results showed that there was a relationship between adherence to taking iron tablets and the incidence of anemia in pregnant women at the Way Laga Health Center in 2021. A total of 11 of 21 or 42.4% of pregnant women who did not comply with taking iron tablets had anemia, while 10 of 21 or 47.6% of pregnant women who did not obedient to taking TTD have normal Hb. On the other hand, only 5 out of 26 or 19.2% of pregnant women who adhered to TTD had anemia, while 21 of 26 or 80.8% of pregnant women who complied with TTD had normal Hb. Thus, pregnant women who are obedient to taking iron tablets tend to have normal Hb. Thus, pregnant women who do not comply with taking iron tablets tend to experience anemia.

The results of this study are in line with the results of research conducted by Rosyda Fitria Rahmi, 2019 entitled "The Relationship between the Level of Adherence to Dosage, Time. And How to Take Fe tablets with the incidence of anemia in pregnant women with gestational age 28-31 weeks at the Semanu Health Center with Chi-Squre analysis stated that there was a relationship between adherence, dose, time and method of consuming Fe tablets with the incidence of anemia in pregnant women. In addition, Rosyda Fitria Rahmi (2019) also stated that mothers who obediently consume Fe tablets include the number of tablets, dosage, and the remaining tablets taken. Similarly, the results of a study conducted by Ida Ayu Kadek, 2014 with the title The Relationship of Consumption of Iron (Fe) Tablets with the Incidence of Anemia in Private Practice Midwives (BPS) Nengah Astiti Siderejo Lampung with Bivariate Test analysis stated that there was a close relationship between consumption of Fe tablets with incidence of anemia.

CONCLUSIONS

Based on the results of research on the management of the incidence of anemia on compliance with the consumption of blood-added tablets (TTD) with pregnant women at the Way Laga Health Center in 2021, the following conclusions were obtained: Based on the age of the majority of pregnant women aged 20-34 years as many as 34 people (72.27%), Work as IRT/Housewife as many as 44 (93.6%), Education SMA/SMK as many as 25 people (53.2%), family income < IDR 2,500,000 less than the minimum wage for 36 people (76.6%), for pregnancy check-ups in health facilities as many as 47 people (100%), and 37 people with gestational age 7-8 months (78.7%). Based on the incidence of anemia from 47 pregnant women experienced anemia as many as 16 people (34.0%) and did not experience anemia (normal) 31 people (66.0%). Based on the relationship between adherence to the consumption of blood-added tablets and the incidence of anemia, there is a relationship where the P-value is 0.029 (< 0.05).

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