



Correlation between mother's knowledge about fe tablets with the incidence of anemia in pregnant women at IMP Nursyamsiah, S.ST in 2022

Rini Wahyuni¹, Siti Rohani²

^{1,2}Diploma of Midwifery Study Program, Faculty of Health

ARTICLE INFO

Article history:

Received 19 October 2022
Accepted 10 January 2023
Published 20 January 2023

Keyword:

Anemia
Knowledge
Fe Tablets

ABSTRACT

The mother's understanding of FE tablets might have an impact on anemia. Pregnant women's knowledge should increase as a result of the counseling procedure. The research objective was to determine the correlation between the level of knowledge of pregnant women about FE tablets and the incidence of anemia in pregnant women at IMP Nursyamsiah S.ST. This research was conducted because there are still many pregnant women who experience anemia, which is as much as 33%. Cross-sectional quantitative research methodology was applied in this study. All 50 pregnant women in their third trimester at IMP Nursyamsiah S.ST in January 2022 comprised the study's population. Analysis of the data used the chi-square test. This study showed that the number of pregnant women with anemia in IMP was 16 pregnant women (32%), the number of pregnant women with a lack of knowledge was 16 pregnant women (32%). There is a significant correlation between the level of knowledge of pregnant women and the incidence of anemia at the Bakung Public Health Center in Teluk Betung District in 2021 with a P-Value = 0.000. As a suggestion, health workers can increase counseling for pregnant women and increase public understanding, especially for pregnant women, of the importance of Fe tablets in preventing anemia in pregnancy.

This open-access article is under the CC-BY-SA license.



Kata kunci:

Anemia
Pengetahuan
Tablet Fe

*) corresponding author

Rini Wahyuni.,SST.M.Kes

Universitas Aisyah Pringsewu
Jl.A Yani No. 1 A Tambahrejo, Gadigrejo
Sub-District, Pringsewu Regency,
Lampung 35372

Email: rinicannywa166@gmail.com

DOI: 10.30604/jika.v8iS1.1719

Copyright 2023 @author(s)

ABSTRAK

Salah satu yang dapat mempengaruhi Anemia adalah pengetahuan ibu tentang tablet FE. Adanya proses penyuluhan diharapkan dapat meningkatkan pengetahuan ibu hamil. Tujuan penelitian ini adalah untuk mengetahui hubungan tingkat pengetahuan ibu hamil tentang tablet FE dengan kejadian anemia ibu hamil di PMB Nursyamsiah S.ST. Penelitian ini dilakukan karena masih banyak ibu hamil mengalami Anemia yaitu sebanyak 33%. Desain yang digunakan dalam penelitian ini adalah kuantitatif dengan pendekatan cross sectional. Populasi dalam penelitian ini adalah seluruh ibu hamil trimester III di PMB Nursyamsiah S.ST pada bulan Januari tahun 2022 yang berjumlah 50 orang. Analisa data yang digunakan menggunakan uji chi square. Hasil penelitian ini didapatkan jumlah ibu hamil dengan anemia di PMB sebanyak 16 ibu hamil (32%), jumlah ibu hamil dengan tingkat pengetahuan kurang sebanyak 16 ibu hamil (32%). Ada hubungan yang bermakna antara tingkat pengetahuan ibu hamil dengan kejadian anemia di Puskesmas Bakung Kecamatan Teluk Betung tahun 2021 dengan P-Value = 0,000 Meningkatkan penyuluhan kepada ibu hamil guna meningkatkan pemahaman masyarakat khususnya ibu hamil akan pentingnya tablet Fe dalam mencegah anemia pada kehamilan.

This open-access article is under the CC-BY-SA license.



INTRODUCTION

Anemia is a condition where the blood's level of hemoglobin (Hb) or erythrocytes (red blood cells) is below normal. The causes can vary, including excessive bleeding, low iron levels, folic acid and vitamin B12 insufficiency, intestinal worms, leukemia, chronic illnesses, and more (Adriani & Wirjatmadi, 2012). Anemia in pregnancy in Indonesia is determined by Hb levels <11 gr% (Kuswanti, 2014).

Anemia during pregnancy increases the chance of low birth weight and bleeding during delivery, which may possibly result in the mother's and the baby's deaths (Ministry of Health RI, 2019). Increased preterm birth, maternal and child mortality, and infectious illnesses are all linked to anemia in pregnant women. The growth and development of the fetus or newborn during and after pregnancy can be impacted by iron deficiency anemia in pregnant women (Ministry of Health RI, 2015). Pregnancy anemia negatively affects the mother during pregnancy, childbirth, the postpartum period, and in the years that follow. Miscarriage (abortion), premature birth, prolonged labor due to uterine inertia, postpartum bleeding due to lack of uterine muscle contractions (uterine atony), shock, both infections during delivery and infections after delivery, and severe anemia (4 gr%) can cause cardiac decompensation are all complications that can result from anemia. Anemia-related hypoxia can result in shock and maternal mortality during birth (Priyanti, 2020)

According to the World Health Organization (WHO), anemia affects 40% of pregnant women globally (WHO, 2021). Pregnant women in Indonesia are becoming more frequently anemic. The incidence of anemia in pregnant women was 37.1% according to the 2013 Basic Health Research/Risked data, but it rose to 48.9% according to the 2018 Baseline Health Research statistics. In Bandar Lampung alone, the anemia rate among expectant women was 28.4% in 2020.

Iron deficiency is the main cause of anemia in Indonesia. One of the dietary components that makes up Hb, or red blood cells, is iron (Fadlun & Feryanto, 2012). Pregnant women are most at risk for iron nutritional anemia, which has a prevalence of over 70% and affects all age groups (Fikawati & Syafiq, 2015). Anemia, which raises the risk of bleeding, can be brought on in women, particularly pregnant women, by inadequate iron consumption (Ministry of Health RI, 2015).

Giving pregnant women iron supplements tablets, which are available at the public health center, will help them overcome their anemia problem. Iron and folic acid anemia can be prevented with blood supplement tablets. It is advised that pregnant women take at least 90 Fe tablets during their pregnancy (Priyanti, 2020). It is quite challenging to satisfy a pregnant woman's increased iron needs only through eating. Consequently, it is necessary to use blood supplement tablets to both prevent and treat iron nutritional anemia (Ministry of Health RI, 2019).

According to certain research findings, a number of variables, including pregnant women's degree of understanding, affect the prevalence of anemia. The findings of Pubadewi's (2013) study indicate a connection between the prevalence of anemia in pregnant women and one's familiarity with the condition. In keeping with Rini's research findings from 2014, which also indicated a connection between anemia awareness and the prevalence

of anemia in pregnant women at Yogyakarta's Ngampilan Public Health Center.

Out of 10 pregnant women, TM II and TM III, it was determined from the pre-survey results at IMP Nuryamsiah S.ST that 6 mothers had strong awareness about FE pills and 4 mothers had low knowledge. Four of every ten expectant mothers have anemia.

From the description above, the authors are interested in conducting research on the correlation between mother's knowledge about FE tablets and anemia in TM II and TMIII pregnant women at IMP Nursyamsiah, S.ST in 2022.

METHODOLOGY

A cross sectional research strategy was used in the type of quantitative research that was performed in this study. 50 pregnant women in TM II and III were used as the sample in this study utilizing the complete sampling method. The Chi-square test was employed in univariate and bivariate data analysis.

This research was conducted at IMP Nursyamsiah., SST, Tanjunganom Village, Ambarawa District in 2022. The subjects in this study were all third-trimester pregnant women at IMP Nursyamsiah., SST.

RESULT AND DISCUSSION

Research results and analysis

This research was conducted to determine the correlation between mothers' knowledge about Fe tablets and the incidence of anemia in pregnant women. The number of samples taken was 50 samples. Data was collected based on the results of the distribution of questionnaires. From the results of data processing carried out, it can be presented as follows:

1. Univariate Analysis

Table 4.1
Frequency Distribution of Anemia in Pregnant Women at IMP Nursyamsiah S.ST in 2021

Group	Frequency	Percentage
Anemia	16	32%
Non-Anemia	34	68%
Total	50	100%

Based on table 4.1 above, it can be seen that the number of Trimester III pregnant women with anemia at IMP Nuryamsiah S.ST in 2021 is 16 pregnant women (32%), and the number of Trimester III pregnant women who are not anemic is 34 pregnant women (68%).

Independent Variable (Mother's Knowledge About Fe Tablets)

Table 4.2
Frequency Distribution of Knowledge Levels of Pregnant Women About Fe Tablets at PMB Nursyamsiah S.ST in 2021

Group	Frequency	Percentage
Poor	16	32
Good	34	68
Total	50	100

According to table 4.2 above, there are 16 pregnant women (32% of all pregnant women) who have a low level of knowledge, and there are 34 pregnant women (68% of all pregnant women) who have a good level of knowledge.

2. Bivariate Analysis

Table 4.3
Correlation between Mother's Level of Knowledge About Fe Tablets and Anemia Incidence in TM III Pregnant Women at IMP Nursyamsiah, S.ST in 2021

Knowledge	Anemia of Pregnant Women				Total n	P-Value	OR (95% CI)
	Anemia		Non-Anemia				
	n	%	n	%			
Poor	11	68,7	5	31,3	16	0,000	13,3 (3,1-56,8)
Good	5	14,7	29	85,3	34		
Total	16		34		50		

The results of the analysis of the correlation between the level of knowledge about Fe tablets and the incidence of anemia at IMP Nursyamsiah S.ST obtained data that out of 16 groups of pregnant women with a low level of knowledge, 11 pregnant women (68,7%) had anemia and 5 pregnant women (31,3 %) who did not have anemia. Meanwhile, of the 34 groups of pregnant women with a good level of knowledge, 5 pregnant women (14,7%) experienced anemia and 29 pregnant women (85,3%) did not experience anemia.

The statistical test results obtained a P-value = 0.000 (P <0.05), which means that statistically there is a significant correlation between the level of mother's knowledge about Fe tablets and the incidence of anemia at IMP Nursyamsiah S.ST in 2021. From the analysis results obtained the OR value of 13.3 (95% CI: 3.1-56.8) which means that mothers who have good knowledge will be more obedient in consuming Fe tablets so as to avoid anemia compared to mothers whose level of knowledge is less.

The most severe form of iron shortage, known as iron deficiency anemia, is characterized by low blood iron concentrations, low transferrin saturation, and decreased hemoglobin or hematocrit levels (Winkjosastro, 2014).

The results of this study are in line with the results of Nurfurqan's study (2017) entitled the relationship between the knowledge of pregnant women about Fe tablets and the prevalence of anemia in Midwife A, in the working area of Ciawi work area which also showed high anemia of 47,1%.

The study's high incidence of anemia—30,8%—was thought to be the result of a number of causes, including mothers' failure to take Fe tablets prescribed by doctors or midwives. Pregnant women who do not drink Fe supplements, one of which can be brought on by a lack of awareness and comprehension on the part of pregnant women regarding the significance of Fe supplements during pregnancy. The respondents to this survey had a range of educational backgrounds, and some of them still had a low level of education, which contributed to a person's knowledge level falling into the less category.

DISCUSSION

1. Univariate Analysis

a. Frequency Distribution of Anemia Pregnant Women

Based on table 4.1 above, it can be seen that at PMB Nursyamsiah S.ST in 2021, there will be 16 pregnant women in their third trimester who have anemia (32%), compared to 34 pregnant women (68%) who have not. Iron deficiency is the main cause of anemia in Indonesia. One of the dietary components that makes up Hb, or red blood cells, is iron (Fadlun & Feryanto, 2012). Both Fe-heme (an animal protein source) and Fe-non-heme forms of iron can be found in food (source of vegetable protein). The most prevalent dietary shortfall, both in industrialized and developing nations, is an iron deficiency. Anemia in pregnancy is also defined as a condition in which the mother's hemoglobin (Hb) level is < 10,5 gr% in the third trimester and <11gr% percent in both the first and third trimesters. Anemia in pregnancy is defined as an iron deficit in the blood of pregnant women (Astutik & Ertiana, 2018).

a. Frequency Distribution of Knowledge Levels of Pregnant Women

Based on table 4.2 above, it can be seen that the number of pregnant women with a low level of knowledge is 16 pregnant women (32%), and the number of pregnant women with a good level of knowledge is 34 pregnant women (68%).

Pregnant women with less awareness of anemia will act in a negative manner, whereas pregnant women with more information will act in a positive manner—behaving in a way that will either prevent or treat anemia. Therefore, it is essential to educate pregnant mothers about anemia. Increasing awareness of anemia can be accomplished through counseling based on its features, allowing all pregnant women to receive counseling materials despite the fact that their characteristics differ (Purbadevi, 2013).

The results of this study were also supported by the results of Nurfurqan's research (2017) entitled the correlation between knowledge of pregnant women about Fe tablets and the incidence of anemia in Midwife A of Ciawi

working area, where the level of knowledge of pregnant women was 56.9%.

Because mothers with good knowledge are more likely to take Fe tablets as prescribed by the officer, the incidence of anemia will decrease, and vice versa, health workers are crucial in raising pregnant women's knowledge to ensure that they adhere to the officer's recommendations, researchers believe that the high level of knowledge of mothers with less knowledge (26%) in this study has an impact on the high incidence of anemia experienced by pregnant women. Because there are still mothers in the field who are anemic, untrained, and disobedient when it comes to taking Fe tablets.

2. Bivariate Analysis

Correlation between Knowledge of Pregnant Women About Fe Tablets and The Incidence of Anemia

The results of the analysis of the correlation between the level of knowledge about Fe tablets and the incidence of anemia at IMP Nursyamsiah S.ST obtained data that out of 16 groups of pregnant women with a low level of knowledge, 11 pregnant women (68.7%) had anemia and 5 pregnant women (31.3 %) who did not have anemia. Meanwhile, of the 34 groups of pregnant women with a good level of knowledge, 5 pregnant women (14.7%) experienced anemia and 29 pregnant women (85.3%) did not experience anemia.

According to the findings of the statistical test, the incidence of anemia at PMB Nursyamsiah S.ST in 2021 and the level of mother's knowledge of Fe tablets are statistically significantly correlated (P-value = 0.000, P 0.05). The analysis results produced an OR value of 13.3 (95% CI: 3.1-56.8), indicating that mothers with greater knowledge will be more obedient in taking Fe tablets to prevent anemia than mothers with less knowledge. The distribution of iron tablets totaling at least 90 tablets during pregnancy is one of the basic health services offered to mothers (Eryando, 2017). An comprehensive preventive strategy is required due to the high prevalence of iron deficiency anemia in the local population.

Pregnant women who are less knowledgeable about anemia will act in a negative manner, whereas pregnant women who are more knowledgeable will act in a positive manner—that is, they will act in a manner that will help to avoid or treat anemia. As a result, it's important to educate pregnant women about anemia. By using counseling based on anemia's features, it is possible to spread awareness of the condition and provide all pregnant women with counseling materials, despite the fact that each of their characteristics is unique (Purbadevi, 2013).

The results of this study are supported by the results of Khoiriah's research (2020) entitled factors related to the incidence of anemia in pregnant women which shows a correlation between knowledge and the incidence of anemia at the Makrayu Public Health Center in Palembang.

Because mothers with good levels of knowledge will recognize the significance of Fe tablets for pregnancy and will take their prescribed doses of Fe tablets, researchers assume that there is a significant correlation between the incidence of anemia in this study and the level of knowledge of mothers about Fe tablets. There are still some responders with a low level of education, which contributes to certain pregnant women at the Bakung Public Health Center's lack of understanding about Fe pills. Another problem is the absence of family support, which makes it harder for women to take the Fe tablets prescribed by medical professionals.

CONCLUSION AND SUGGESTION

Based on the results of research conducted at IMP Nrsyamsiah., SST Tanjung Anom village in 2022 it was concluded that there was a significant correlation between the level of knowledge of pregnant women and the incidence of anemia at the Bakung Public Health Center in Teluk Betung District in 2021 with a P-Value = 0.000

Suggestion

The findings of this study can be used as a guide for pregnant women to encourage them to participate more actively in class activities for pregnant women at PMB Nursyamsiah, SST to be able to inform pregnant women about FE tablets in pregnancy TM II and III, and health workers to further improve counseling to mothers who are pregnant but do not frequently attend classes for pregnant women. As a result, pregnant women who exhibit anemic symptoms can seek medical attention and lower the mortality rate among pregnant women. In addition, you can develop pregnancy-related health programs or applications to make it simpler for pregnant women to get information on pregnancy health.

REFERENCES

- Andriani & Wirjatmadi, (2012). *Peranan gizi dalam siklus kehidupan*. Jakarta: Prenada Media Group
- Astutik & Ertiana, (2018). *Anemia Dalam Kehamilan*. JawaTimur: Pustaka Abadi
- BKKBN. (2017). *Promosi Dan Konseling Kesehatan Reproduksi*. Jakarta: Badan Kependudukan dan Keluarga Berencana
- Budiman & Riyanto. (2013). *Kapita Selekta Kuesioner Pengetahuan Dan Sikap Dalam Penelitian Kesehatan*. Jakarta: Salemba Medika
- Eryando. (2017). *Teori dan Aplikasi Pengumpulan Data Kesehatan Termasuk Biostatistika Dasar*. Yogyakarta: Penerbit Andi Offset.
- Fadlun & Feryanto. (2012). *Asuhan Kebidanan Patologis*. Jakarta: Salemba
- Hastono, Susanto Priyo. (2018). *Analisis Data Pada Bidang Kesehatan*. Jakarta: Rajawali Pers.
- Kemendes RI. (2015). *Infodatin. Situasi dan Analisis Gizi*. Jakarta: Pusat data dan Informasi
- Kuswanti, I. (2014). *Asuhan kehamilan*. Yogyakarta: Pustaka Pelajar.
- Kementerian Kesehatan RI. (2019). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 28 Tahun 2019 Tentang Kecukupan Gizi Yang Dianjurkan Untuk Masyarakat Indonesia*. Jakarta: Biro Hukum Dan Organisasi Sekretariat Jenderal kementerian Kesehatan
- Khoiriah. (2020). *Faktor-Faktor Yang Berhubungan Dengan Kejadian Anemiapada Ibu Hamil Di Puskesmas Makrayu Palembang*. MidwiFery Journal, Volume 5, Nomor 2.

- Manuaba. (2012). *Ilmu Kebidanan, Penyakit Kandungan & Keluarga Berencana untuk Pendidikan Bidan*. Jakarta: EGC.
- Nurfurqoni. (2017). *Hubungan Antara Pengetahuan Ibu Hamil Tentang Tablet FE Dengan Kejadian Anemia Di BPM Bidan A Wilayah Kerja Puskesmas Ciawi*. Jurnal Kebidanan Vol 3, Nomor 4.
- Notoatmodjo, (2017). *Promosi Kesehatan dan Perilaku Kesehatan*. Jakarta: Rineka Cipta
- Notoatmodjo, Soekidjo, (2012), *Metode Penelitian Kesehatan*. Jakarta; Rineka Cipta.
- Purbadevi. (2013). *Hubungan Tingkat pengetahuan Tentang Anemia Dengan Kejadian Anemia Pada Ibu Hamil*. Jurnal Gizi Universitas Muhammadiyah Semarang Volume 2 Nomor 1.
- Setiati, (2014). Buku Ajar. *Ilmu Penyakit Dalam Edisi VI*. Jakarta: Pusat Penerbitan Ilmu Penyakit Dalam
- Priyanti, (2020). *Anemia Dalam kehamilan*. Mojokerto: Stikes Majapahit

