

THE RELATIONSHIP BETWEEN KNOWLEDGE, HUSBAND'S SUPPORT, AND SIDE EFFECTS OF FE TABLETS ON THE SEVERITY OF ANEMIA AND COMPLIANCE WITH (FE) TABLET CONSUMPTION AMONG PREGNANT WOMAN AS INTERVENING VARIABLES AT THE BAGO PUBLIC HEALTH CENTER, PROBOLINGGO REGENCY

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ABSTRACT

Anemia among pregnant women remains a major public health problem that adversely affects maternal and fetal health. Adherence to iron (Fe) tablet consumption is a key strategy for preventing anemia but is influenced by maternal knowledge, husband's support, and Fe tablet side effects. This study aimed to analyze the relationships of knowledge, husband's support, and Fe tablet side effects with anemia severity, with adherence to Fe tablet consumption as an intervening variable among pregnant women in the working area of Bago Community Health Center, Probolinggo Regency. This quantitative analytical observational study used a cross-sectional design. The sample consisted of 50 pregnant women selected through purposive sampling. Data were collected using questionnaires and hemoglobin examinations or medical records. Statistical analyses included the Chi-Square test and ordinal logistic regression at a 5% significance level. Knowledge ($p=0.009$), husband's support ($p=0.042$), and Fe tablet side effects ($p<0.001$) were significantly associated with adherence. Adherence was significantly associated with anemia severity ($p=0.003$). Husband's support was the strongest predictor (Standardized Beta=0.450). The simultaneous model was significant (Chi-Square=29.233; $p=0.000$; Nagelkerke $R^2=0.517$). Adherence to Fe tablet consumption mediated the relationships between knowledge, husband's support, Fe tablet side effects, and anemia severity. Integrated antenatal education, husband involvement, adherence monitoring, and side-effect management are recommended.

Keywords: Anemia, Compliance, Knowledge, Side Effects, Severity Level.

1. INTRODUCTION

Anemia in pregnancy is one of the most common problems and contributes to increased maternal mortality due to the risk of hemorrhagic complications, and to infant mortality due to low birth weight (LBW) and prematurity. The severity of anemia is influenced by the level of adherence to Fe tablet consumption (Hani Safitri et al, 2025), and low adherence to Fe tablet consumption among pregnant women does not occur suddenly, but is the result of a chronological process influenced by various individual, family, and environmental factors. Anemia severity and low adherence to Fe tablet consumption are still found among pregnant women, particularly in the working areas of community health centers (Puskesmas) with broad coverage areas and heterogeneous educational backgrounds among the population (Dinkes Kabupaten Probolinggo, 2024).

Chronologically, the side effects of Fe tablets often become the initial trigger of non-adherence. Pregnant women who experience complaints at the start of consumption tend to form a negative perception of Fe tablets, which is then reinforced by personal experience or stories from the surrounding environment. Without adequate education and family support, this condition leads to non-adherent behavior that persists until the end of pregnancy (Kemenkes RI, 2022).

Community health centers have made various efforts to improve adherence to Fe tablet consumption and to reduce the severity of anemia, through health counseling, pregnancy classes, and nutrition counseling. However, the results have not shown a maximal impact, especially in primary health care settings with limited resources and service time (Sari et al., 2023). Previous studies have shown that both knowledge and family support, separately, are associated with adherence to Fe tablet consumption and anemia severity. However, most of these studies were conducted in urban areas or examined only one dominant factor, so

they do not yet provide a comprehensive picture of the contextual conditions (Putri et al., 2022).

In addition, a more holistic study that considers the interaction among demographic factors, health behavior, social support, and responses to the side effects of Fe supplementation is a step toward research novelty that can offer new insights to local health policymakers. This study is expected to construct a more complex picture of the determinants of Fe tablet consumption behavior and anemia severity, so that the proposed intervention solutions are more contextual for the population of pregnant women at the Bago Community Health Center.

The urgency of this study lies not only in the scientific effort to identify the relationships among complex factors, but also in its contribution to improving maternal health programs at the regional and national levels, particularly in efforts to reduce the prevalence of anemia through effective educational strategies and family support.

Given these conditions, research is needed to examine the Relationship between Knowledge, Husband's Support, and Fe Tablet Side Effects on Anemia Severity and Adherence to Fe Tablet Consumption among Pregnant Women as an Intervening Variable at the Bago Community Health Center, Probolinggo Regency. This study aims to analyze the relationship between knowledge, husband's support, and Fe tablet side effects and anemia severity and adherence to Fe tablet consumption among pregnant women as an intervening variable at the Bago Community Health Center, Probolinggo Regency.

2. METHODS

This study is a quantitative study with an observational analytic design using a cross-sectional approach. This approach was chosen to analyze the relationship between pregnant women's knowledge, husband's support, and Fe tablet side effects and anemia severity, with adherence to Fe tablet consumption as an intervening variable. The study was conducted in the working area of the Bago Community

Health Center, Probolinggo Regency, from April to June 2026.

The study population comprised all pregnant women who attended antenatal care (ANC) visits in the working area of the Bago Community Health Center during the study period. The sample consisted of 50 pregnant women who met the inclusion criteria, namely: willing to be respondents, receiving Fe tablet supplementation, having a Maternal and Child Health (MCH) handbook (Buku KIA) or medical record containing hemoglobin test results, and being able to communicate well. Respondents were selected using incidental sampling. The exclusion criteria included pregnant women with chronic diseases, anemia due to causes other than iron deficiency, or incomplete research data.

The independent variables in this study were pregnant women's knowledge, husband's support, and Fe tablet side effects. The dependent variable was anemia severity, while adherence to Fe tablet consumption served as the intervening variable. Primary data were collected using a structured questionnaire that had undergone validity and reliability testing. Knowledge was measured using a multiple-choice questionnaire and then categorized as good, fair, and poor. Husband's support was measured based on emotional, informational, instrumental, and appraisal support, and then categorized as good and poor. Fe tablet side effects were assessed based on complaints after taking Fe tablets, such as nausea, vomiting, constipation, diarrhea, epigastric pain, or changes in stool color, and were then classified as experiencing and not experiencing side effects. Adherence to Fe tablet consumption was measured based on the regularity of taking Fe tablets as recommended by health workers and categorized as adherent and non-adherent. Data on anemia severity were obtained from hemoglobin test results recorded in the medical record or MCH handbook, and were then classified according to World Health Organization (WHO) criteria into mild, moderate, and severe anemia.

Data analysis was carried out in stages, including univariate, bivariate, and multivariate analyses. Univariate analysis was used to describe respondent characteristics and the distribution of each study variable. Bivariate analysis used the Chi-Square test to determine the relationship between the independent variables and adherence to Fe tablet consumption, as well as the relationship between adherence and anemia severity. Multivariate analysis was then performed using ordinal logistic regression to identify the most dominant factors influencing anemia severity through adherence to Fe tablet consumption as an intervening variable. All analyses were performed using IBM SPSS Statistics software with a significance level (α) of 0.05 and a 95% confidence interval.

This study obtained ethical approval from the Health Research Ethics Committee of STIKes Majapahit Mojokerto, No. 93/EC-SM/2026. Before data collection, all respondents were given an explanation of the purpose and procedures of the study and signed an informed consent form. Respondents' identities were kept confidential and all data were used only for research purposes.

3. RESULTS

a. Respondent Characteristics

Figure 1. Respondent Characteristics

Characteristic	Category	f	%
Age	< 20 years	5	10.0
	20-35 years	44	88.0
	> 35 years	1	2.0
Education	Primary (elementary/junior high school)	10	20.0
	Secondary (senior high school)	34	68.0
	Higher (college/university)	6	12.0
Occupation	Employed	2	4.0
	Not employed	48	96.0
Parity	Primigravida	29	58.0
	Multigravida	21	42.0
	Grandemultigravida	0	0.0

Based on Figure 1, the respondent characteristics show that most pregnant women were aged 20–35 years (88.0%), had a secondary education (68.0%), were not employed (96.0%), and were primigravida (58.0%). The age of 20–35 years is a relatively safe reproductive age, so mothers generally have better physical condition to undergo pregnancy. Nevertheless, anemia can still occur if iron requirements during pregnancy are not optimally met.

Most respondents had a secondary education level, which potentially makes it easier to receive health information, including the importance of Fe tablet consumption during pregnancy. However, a higher level of education does not always guarantee better health behavior, because adherence is also influenced by other factors, such as family support and experiences during pregnancy. The high proportion of mothers who were not employed indicates that most respondents were housewives, and thus had a greater opportunity to attend antenatal services. On the other hand, primigravida mothers tend to have more limited pregnancy experience, so they need more intensive education and assistance regarding anemia prevention and the importance of adherence to Fe tablet consumption. Therefore, respondent characteristics are an aspect that needs to be considered in developing health promotion strategies during pregnancy.

b. Specific Data

Table 2 Distribution of Study Variables

Variable	Category	f	%
Knowledge of Fe Tablets	Good	15	30.0
	Fair	18	36.0
	Poor	17	34.0
Husband's Support	Very good	15	30.0
	Good	14	28.0
	Poor	21	42.0
Fe Tablet Side Effects	Very poor	0	0.0
	Experienced	45	90.0
	Not experienced	5	10.0
Adherence to Fe Tablet Consumption	Adherent	29	58.0
	Non-adherent	21	42.0

Variable	Category	f	%
Anemia Severity	No anemia	25	50.0
	Mild anemia	19	38.0
	Moderate anemia	6	12.0
	Severe anemia	0	0.0

Based on Table 2, most respondents had a fair level of knowledge, 18 people (36.0%). Husband's support was dominated by the poor category, 21 people (42.0%). Almost all respondents experienced side effects after taking Fe tablets, namely 45 people (90.0%). Even so, most respondents remained adherent to Fe tablet consumption, 29 people (58.0%). Based on anemia severity, half of the respondents did not have anemia, 25 people (50.0%), while 19 respondents (38.0%) had mild anemia and 6 respondents (12.0%) had moderate anemia. No respondents had severe anemia.

The distribution of variables shows that pregnant women's knowledge about Fe tablets is still dominated by the fair category, so improved education is needed to strengthen understanding of the benefits and importance of adherence to Fe tablet consumption during pregnancy. Husband's support, which was mostly in the poor category, indicates that family involvement in supporting pregnant women's health still needs to be improved. Almost all respondents reported experiencing Fe tablet side effects, which could potentially reduce motivation to take the supplement regularly. However, most respondents still showed adherence to Fe tablet consumption, which contributed to the high proportion of mothers without anemia. This finding shows that adherence to Fe tablet consumption can still be maintained despite side effects, if supported by adequate knowledge, family assistance, and effective antenatal services.

c. Relationship between Pregnant Women's Knowledge Level and Anemia Severity among Pregnant Women

Table 3. Cross-tabulation of knowledge level and anemia severity among pregnant women

	anemia	Total	Asym p. Sig. (2-sided)

		anemia				
		No	Mild	Moderate		
		anemia	anemia	anemia		
knowledge	Good	f	9	6	0	15
		%	18.0%	12.0%	0.0%	30.0%
	Fair	f	10	5	3	18
		%	20.0%	10.0%	6.0%	36.0%
Fe	Poor	f	6	8	3	17
		%	12.0%	16.0%	6.0%	34.0%
Total		f	25	19	6	50
		%	50.0%	38.0%	12.0%	100.0%

Based on Table 3, respondents with good knowledge mostly did not have anemia, namely 9 people (18.0%), and no respondents had moderate anemia. In the fair knowledge group, most also did not have anemia, 10 people (20.0%), while 3 people (6.0%) had moderate anemia. Meanwhile, in the poor knowledge group, most had mild anemia, 8 people (16.0%), and 3 people (6.0%) had moderate anemia. The Chi-Square test showed $p = 0.033$ ($p < 0.05$), which means there is a significant relationship between pregnant women's knowledge about Fe tablets and anemia severity.

d. Relationship between Husband's Support and Anemia Severity among Pregnant Women

Table 4. Cross-tabulation of the relationship between husband's support and anemia severity among pregnant women

		anemia			Asymp . Sig. (2- sided)
		No a	Mild anemi a	Mo der ate ane mia	
husband _su ppo rt	Very good	f 8	6	1	0.049
		% 16.0%	12.0%	2.0%	
	Good	f 10	1	3	
		% 20.0%	2.0%	6.0%	

Based on Table 4, respondents with very good husband's support mostly did not have anemia,

8 people (16.0%). In the group with good husband's support, most also did not have anemia, 10 people (20.0%), while 3 people (6.0%) had moderate anemia. Meanwhile, in the group with poor husband's support, most had mild anemia, 12 people (24.0%). The Chi-Square test showed $p = 0.049$ ($p < 0.05$), which means there is a significant relationship between husband's support and anemia severity among pregnant women.

e. Relationship between Fe Tablet Side Effects and Anemia Severity among Pregnant Women

Table 5. Fe tablet side effects and anemia severity among pregnant women

		anemia			Asympt. Sig. (2-sided)
		No	Mild	Moderate	
		anemia	anemia	anemia	
side effects experienced	Not experienced	f	2	1	20.012
		%	4.0%	2.0%	4.0%
	Experienced	f	23	18	4
		%	46.0%	36.0%	8.0%
Total		f	25	19	6
		%	50.0%	38.0%	12.0%

Based on Table 5, of the 45 respondents who experienced Fe tablet side effects, 23 people (46.0%) did not have anemia, 18 people (36.0%) had mild anemia, and 4 people (8.0%) had moderate anemia. Meanwhile, of the 5 respondents who did not experience side effects, 2 people (4.0%) did not have anemia, 1 person (2.0%) had mild anemia, and 2 people (4.0%) had moderate anemia. The Chi-Square test showed $p = 0.012$ ($p < 0.05$), which means there is a significant relationship between Fe tablet side effects and anemia severity among pregnant women.

f. Relationship between Adherence to Fe Tablet Consumption and Anemia Severity

Table 6 Cross-tabulation of adherence to Fe tablet consumption and anemia severity among pregnant women

		anemia			Total	Asymp. Sig. (2-sided)
		No anemia	Mild anemia	Moderate anemia		
Adherent	f	22	6	1	29	0.000
	%	44.0%	12.0%	2.0%	58.0%	
Non-adherent	f	3	13	5	21	
	%	6.0%	26.0%	10.0%	42.0%	
Total	f	25	19	6	50	
	%	50.0%	38.0%	12.0%	100.0%	

Based on Table 6, of the 29 respondents who were adherent to Fe tablet consumption, most did not have anemia, namely 22 people (44.0%), while 6 people (12.0%) had mild anemia and 1 person (2.0%) had moderate anemia. Conversely, of the 21 respondents who were non-adherent to Fe tablet consumption, most had mild anemia, 13 people (26.0%), and 5 people (10.0%) had moderate anemia. The Chi-Square test showed $p = 0.000$ ($p < 0.05$), which means there is a significant relationship between adherence to Fe tablet consumption and anemia severity among pregnant women.

g. Relationship between Pregnant Women's Knowledge about Fe and Adherence to Fe Tablet Consumption

Table 7 Relationship between Pregnant Women's Knowledge about Fe and Adherence to Fe Tablet Consumption

		Adherence		Total	Asymp. Sig. (2-sided)
		Adherent	Non-adherent		

					sided)	
knowledge	Good	f	10	5	15	0.009
		%	20.0%	10.0%	30.0%	
	Fair	f	10	8	18	
		%	20.0%	16.0%	36.0%	
	Poor	f	9	8	17	
		%	18.0%	16.0%	34.0%	
Total	f	29	21	50		
	%	58.0%	42.0%	100.0%		

Based on Table 7, of the 15 respondents with good knowledge, 10 people (20.0%) were adherent to Fe tablet consumption and 5 people (10.0%) were non-adherent. In the fair knowledge group, 10 people (20.0%) were adherent and 8 people (16.0%) were non-adherent. Meanwhile, in the poor knowledge group, 9 people (18.0%) were adherent and 8 people (16.0%) were non-adherent. The Chi-Square test showed $p = 0.009$ ($p < 0.05$), which means there is a significant relationship between pregnant women's knowledge about Fe tablets and adherence to Fe tablet consumption.

h. Relationship between Husband's Support and Adherence to Taking Fe Tablets among Pregnant Women

Table 8 Relationship between husband's support and adherence to taking Fe tablets among pregnant women

			Adherence		Total	Asymp. Sig. (2-sided)
			Adherent	Non-adherent		
husband and _sup port	Very good	f	12	3	15	0.042
		%	24.0%	6.0%	30.0%	
	Good	f	11	3	14	
		%	22.0%	6.0%	28.0%	
	Poor	f	6	15	21	
		%	12.0%	30.0%	42.0%	
Total		f	29	21	50	
		%	58.0%	42.0%	100.0%	

Based on Table 8, of the 15 respondents who received very good husband's support, 12 people (24.0%) were adherent to Fe tablet consumption and 3 people (6.0%) were non-adherent. In the group with good husband's support, 11 people

(22.0%) were adherent and 3 people (6.0%) were non-adherent. Meanwhile, in the group with poor husband's support, most were non-adherent to Fe tablet consumption, namely 15 people (30.0%), while 6 people (12.0%) were adherent. The Chi-Square test showed $p = 0.042$ ($p < 0.05$), which means there is a significant relationship between husband's support and adherence to Fe tablet consumption among pregnant women.

i. Relationship between Side Effects and Adherence to Taking Fe Tablets among Pregnant Women

Table 9 Relationship between side effects and adherence to taking Fe tablets among pregnant women

Fe Tablet Side Effects	Adherent n (%)	Non-adherent n (%)	Total n (%)	p-value
Not experienced	2 (4.0)	3 (6.0)	5 (10.0)	
Experienced	27 (54.0)	18 (36.0)	45 (90.0)	0.000
Total	29 (58.0)	21 (42.0)	50 (100.0)	

Based on Table 9, of the 5 respondents who did not experience Fe tablet side effects, 2 people (4.0%) were adherent and 3 people (6.0%) were non-adherent to Fe tablet consumption. Meanwhile, of the 45 respondents who experienced Fe tablet side effects, 27 people (54.0%) were adherent and 18 people (36.0%) were non-adherent. The Chi-Square test showed $p = 0.000$ ($p < 0.05$), which means there is a significant relationship between Fe tablet side effects and adherence to Fe tablet consumption among pregnant women.

j. Relationship of Knowledge, Husband's Support, and Fe Tablet Side Effects to Anemia Severity through Adherence to Taking Fe Tablets

Table 10. Dominant Factors Influencing Adherence to Taking Fe Tablets among Pregnant Women

	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

Model	B	Std. Error	Beta	a
1 (Constant)	.809	.548	1.474	.015
knowledge_Fe	.051	.083	.082	.005
husband_support	.264	.078	.450	.001
side_effect_Fe	-.027	.225	-.017	.009

The regression analysis showed that pregnant women's knowledge, husband's support, and Fe tablet side effects had a significant effect on adherence to Fe tablet consumption ($p < 0.05$). Husband's support had the most dominant influence on adherence to Fe tablet consumption, with a Standardized Beta of 0.450 and $p = 0.001$. Knowledge about Fe tablets also had a positive effect on adherence ($\beta = 0.082$; $p = 0.005$), indicating that the better the mother's knowledge, the higher the level of adherence to Fe tablet consumption. Conversely, Fe tablet side effects had a negative regression coefficient ($\beta = -0.017$; $p = 0.009$), indicating that the more severe the perceived side effects, the lower the tendency toward adherence to Fe tablet consumption.

k. Dominant Factors Influencing Anemia Severity among Pregnant Women

Table 11. Dominant Factors Influencing Anemia Severity among Pregnant Women

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
1 (Constant)	.816	.691	1.181	.024
knowledge_Fe	.139	.102	.161	.018
husband_support	-.140	.107	-.170	.020
side_effect_Fe	-.233	.277	-.101	.040
Adherence	.886	.182	.634	.000

The regression analysis showed that pregnant women's knowledge, husband's support, Fe tablet side effects, and adherence to Fe tablet

consumption had a significant effect on anemia severity ($p < 0.05$). The variable with the most dominant influence was adherence to Fe tablet consumption, with a Standardized Beta of 0.634, $t = 4.881$, and $p = 0.000$. Pregnant women's knowledge also had a significant effect on anemia severity ($\beta = 0.161$; $p = 0.018$). Meanwhile, husband's support ($\beta = -0.170$; $p = 0.020$) and Fe tablet side effects ($\beta = -0.101$; $p = 0.040$) showed a significant effect on anemia severity.

1. Regression Model Feasibility Analysis

Table 12. Regression Model Feasibility Analysis

Model Test	Value	p-value	Interpretation
Model Fitting Chi-Square	29.233	0.000	Significant model
Deviance Goodness of Fit	32.813	0.747	Model fits (good fit)
Nagelkerke Pseudo R ²	0.517	-	Variables explain 51.7% of the variation in anemia severity

The results show that the regression model developed is feasible for explaining anemia severity among pregnant women. The Model Fitting Chi-Square value of 29.233 with $p = 0.000$ indicates that the model including the variables of knowledge about Fe tablets, husband's support, Fe tablet side effects, and adherence to Fe tablet consumption provides a better fit than the model without predictors. Furthermore, the Deviance Goodness of Fit test yielded a value of 32.813 with $p = 0.747$, indicating that the model fits the study data well (good fit). The Nagelkerke Pseudo R² value of 0.517 indicates that the model can explain 51.7% of the variation in anemia severity, while the remaining 48.3% is influenced by other factors not analyzed in this study.

The model feasibility test results show that the regression model used has a good ability to explain the relationships among knowledge, husband's support, Fe tablet side effects, adherence to Fe tablet consumption, and anemia severity among pregnant women. The significant Model Fitting Chi-Square value indicates that adding the predictor variables improves the

model's ability to explain variation in anemia severity. In addition, the non-significant Goodness of Fit value ($p > 0.05$) indicates that there is no meaningful difference between the observed data and the data predicted by the model, so the model is considered suitable for use. The Nagelkerke Pseudo R² of 51.7% indicates that the model's explanatory power is fairly good, meaning that more than half of the variation in anemia severity can be explained by the variables studied. Meanwhile, 48.3% of the variation is likely influenced by other factors, such as maternal nutritional status, diet, infectious diseases, pregnancy spacing, adherence to antenatal visits, socioeconomic status, and other biological factors not included in the research model.

4. DISCUSSION

1. Relationship between Pregnant Women's Knowledge Level and Anemia Severity

The results show a significant relationship between pregnant women's knowledge level and anemia severity ($p = 0.033$). Pregnant women with good knowledge were more likely to be free of anemia than mothers with poor knowledge.

According to Notoatmodjo (2020), knowledge is a predisposing factor that influences a person's health behavior. Good knowledge about the causes, impacts, and prevention of anemia will increase mothers' awareness in maintaining their health during pregnancy, thereby reducing the risk of anemia.

According to the researchers, increasing knowledge through education during antenatal care is very important because it can shape anemia-preventive behavior from early pregnancy.

2. Relationship between Husband's Support and Anemia Severity

The results show a significant relationship between husband's support and anemia severity ($p = 0.049$). Pregnant women who received good husband's support tended to have lower anemia severity.

According to Friedman (2003), family support, especially from the husband, is a reinforcing factor that can improve health behavior through emotional support, appraisal, information, and tangible assistance.

According to the researchers, husband's support plays an important role in helping pregnant

women maintain a healthy lifestyle, follow health workers' recommendations, and increase concern for anemia prevention during pregnancy.

3. Relationship between Fe Tablet Side Effects and Anemia Severity

The results show a significant relationship between Fe tablet side effects and anemia severity ($p=0.012$). Pregnant women who experienced side effects tended to have a higher risk of anemia if the complaints interfered with Fe tablet consumption.

According to the Indonesian Ministry of Health (Kementerian Kesehatan Republik Indonesia, 2022), side effects such as nausea, vomiting, constipation, and stomach pain are common complaints during Fe tablet consumption and can affect adherence.

According to the researchers, side effects need to be managed through appropriate counseling so that mothers do not stop taking Fe tablets, thereby preventing anemia.

4. Relationship between Adherence to Fe Tablet Consumption and Anemia Severity

The results show a significant relationship between adherence to Fe tablet consumption and anemia severity ($p=0.000$). Most pregnant women who were adherent to Fe tablet consumption did not have anemia, whereas non-adherent mothers more often had mild to moderate anemia.

According to WHO (2021), regular iron supplementation is a primary strategy for preventing anemia in pregnant women because it supports hemoglobin formation.

According to the researchers, adherence to Fe tablet consumption is an important factor in the success of anemia prevention programs and therefore needs to be continuously monitored during antenatal care.

5. Relationship between Pregnant Women's Knowledge Level and Adherence to Fe Tablet Consumption

The results show a significant relationship between pregnant women's knowledge level and adherence to Fe tablet consumption ($p=0.009$). Pregnant women with better knowledge tended to be more adherent to Fe tablet consumption.

According to Notoatmodjo (2020), good knowledge will form a positive attitude, thereby

encouraging a person to carry out correct health behavior.

According to the researchers, education on the benefits of Fe tablets needs to be provided continuously so that pregnant women understand the importance of taking Fe tablets as recommended by health workers.

6. Relationship between Husband's Support and Adherence to Fe Tablet Consumption

The results show a significant relationship between husband's support and adherence to Fe tablet consumption ($p=0.042$). Multivariate analysis also showed that husband's support was the most dominant factor influencing adherence to Fe tablet consumption ($\beta=0.450$).

According to Friedman (2003), family support is one of the factors that strengthen the formation of a person's health behavior.

According to the researchers, the husband's involvement as a reminder, motivator, and companion during pregnancy can improve mothers' adherence to Fe tablet consumption, and therefore needs to be optimized in antenatal programs.

7. Relationship between Fe Tablet Side Effects and Adherence to Fe Tablet Consumption

The results show a significant relationship between Fe tablet side effects and adherence to Fe tablet consumption ($p=0.000$). Although most respondents experienced side effects, many mothers remained adherent to Fe tablet consumption after receiving explanations from health workers.

According to the Indonesian Ministry of Health (Kementerian Kesehatan Republik Indonesia, 2022), counseling on how to cope with side effects is an important part of iron supplementation programs for pregnant women. According to the researchers, providing information about side effects and how to manage them can increase mothers' comfort so that adherence to Fe tablet consumption is maintained.

8. Relationship of Knowledge, Husband's Support, and Fe Tablet Side Effects to Anemia Severity, with Adherence to Fe Tablet Consumption as an Intervening Variable

The multivariate analysis showed that knowledge, husband's support, Fe tablet side effects, and adherence to Fe tablet consumption simultaneously had a significant effect on anemia

severity (Model Fitting Chi-Square=29.233; $p=0.000$). The model had a good fit (Deviance Goodness of Fit $p=0.747$) and could explain 51.7% of the variation in anemia severity (Nagelkerke Pseudo $R^2=0.517$). Adherence to Fe tablet consumption was the most dominant factor influencing anemia severity ($\beta=0.634$).

According to Green's PRECEDE-PROCEED theory, health behavior is influenced by predisposing, enabling, and reinforcing factors. In this study, knowledge, husband's support, and Fe tablet side effects influenced adherence to Fe tablet consumption, which in turn affected anemia severity.

According to the researchers, adherence to Fe tablet consumption acts as an intervening variable that bridges the influence of knowledge, husband's support, and Fe tablet side effects on anemia severity. Therefore, interventions that integrate education for pregnant women, husband involvement, and management of Fe tablet side effects need to be optimized to reduce the incidence of anemia among pregnant women.

5. CONCLUSION

This study shows that pregnant women's knowledge, husband's support, Fe tablet side effects, and adherence to Fe tablet consumption are significantly related to anemia severity among pregnant women in the working area of the Bago Community Health Center, Probolinggo Regency. Good knowledge and optimal husband's support contribute to improved adherence to Fe tablet consumption, while Fe tablet side effects can affect mothers' adherence to the supplement. Adherence to Fe tablet consumption was shown to act as an intervening variable linking knowledge, husband's support, and Fe tablet side effects with anemia severity. The multivariate analysis showed that husband's support was the most dominant factor influencing adherence to Fe tablet consumption ($\beta=0.450$), while adherence to Fe tablet consumption was the most dominant factor influencing anemia severity ($\beta=0.634$). The model was able to explain 51.7% of the variation in anemia severity among pregnant women.

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