

# Analysis of Compliance With the Consumption of Fe Tablets Among Female Adolescents at Sman 1 Kalapanunggal, Sukabumi Regency, in 2025

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## Abstract

**Background:** Anemia in adolescent girls can reduce immunity, reduce activity, academic achievement, and fitness. FE supplementation is one way to address this issue. Teenagers lack motivation to consume FE supplements. Analyzing FE supplementation factors is one strategy to address this issue. **Purpose:** This study aims to analyze factors that can influence compliance with FE supplement consumption in female adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency, in 2025. **Methodology:** This study used a cross-sectional approach. The population in this study was 415 female students, the sample in this study was 100 female students. The sampling technique used was Cluster Random Sampling. The research instrument was a questionnaire. The questionnaire was tested for validity and reliability with a Cronbach's alpha coefficient value of 0.716. Bivariate analysis used the Chi-Square test.

**Results:** The bivariate analysis showed a significant relationship between knowledge, peer support, and parental support with adherence to FE supplement consumption. There was no significant relationship between school support and health worker support with adherence to FE supplement consumption. The variable with the strongest relationship with adherence to FE supplement consumption was knowledge, with an OR of 9.179. **Conclusion:** There is a relationship between knowledge, peer support, and parental support with adherence to FE supplement consumption. There is no significant relationship between school and health worker support and adherence to FE supplement consumption. The variable with the strongest relationship with adherence to FE supplement consumption is knowledge, with an OR of 9.179.

**Keywords:** Anemia; Adolescent girls; FE tablets; compliance; knowledge; Support.

## Introduction

Anemia remains a global health problem in developing countries. The global prevalence of anemia is approximately 51%. According to a report by the World Health Organization (WHO), more than 30%, or 2 billion people worldwide, are anemic. According to the Ministry of Health (2018), in Southeast Asia, 25-40% of adolescent girls experience mild to severe anemia (Indriani et al., 2023)

Anemia in adolescent girls can lead to decreased immunity, concentration, academic achievement, fitness, and productivity. This is especially true for adolescent girls who will eventually become mothers, as anemia can also trigger pregnancy complications, such as premature birth, low birth weight, and the risk of death due to hemorrhage during childbirth (Ministry of Health, 2018). Anemia can reduce endurance and physical performance, thereby reducing work capacity. It can also affect cognitive functions such as poor learning concentration and slowed comprehension in school-age children, adolescent girls, and other age groups. If left untreated for a long time, anemia can lead to several diseases such as congestive heart failure, bacterial infections, thalassemia, immune system disorders, and meningitis (Popang et al., 2023). Anemia is a condition characterized by a decrease in the number of red blood cells (RBCs), which is reflected in hemoglobin, hematocrit, and erythrocyte levels. Anemia has symptoms such as loss of appetite, difficulty focusing, a decreased immune system and behavioral disorders or known as 5 L (weak, tired, lethargic, fatigued and listless), pale face and seeing stars (Nasruddin et al., 2021).

The government must prioritize adolescent girls. This is related to the Sustainable Development Goals (SDGs), which still require significant efforts to achieve, namely maternal health. Puberty is crucial in a woman's developmental cycle, as this is the time when growth and development occur. Optimal growth and development will produce healthy, high-quality adolescent girls. This will also create healthy, high-quality mothers-to-be (Darmini, 2020).

As one of the developing countries in Indonesia, the incidence of anemia is still quite high. Based on Basic Health Research (2018), cases of anemia in adolescent girls in Indonesia were 48.9% while the prevalence of anemia in

Indonesia was 26.4% aged 5-14 years and 27% aged 15-24 years. Adolescence, between the ages of 10-19 years, is a transitional period experienced by someone with physical and psychological changes.

Changes during adolescence give rise to several health problems. One of the health problems that occurs in adolescents is anemia (Kurniawati, 2019). Data in West Java in 2018 showed that anemia was relatively high, at 41.93%. Based on data from the Sukabumi Regency Health Office, anemia in adolescent girls aged 12-18 years was 31%. The prevalence of anemia among adolescent girls in West Java remained high in 2024, with specific figures varying by source and region. Some data indicate that the incidence rate exceeds 25%, and in some areas even exceeds 50%. According to data from the Sukabumi Regency Office (2024) there are still many young women suffering from anemia, from a total of 43954 young women there are around 5113 who suffer from anemia (11.7%), in Kalapanunggal District anemia in young women is still widely found, especially in young women who have experienced menstruation, found around 80 cases of anemia in young women in 2024 based on the results of Anemia Screening in 10th grade young women through examination of Hemoglobin levels. The provision of FE tablets for young women in Sukabumi Regency in 2018 has reached 61.08%. Although it has been regulated by the Ministry of Health, this program still has many obstacles, especially the compliance of young women in consuming Fe.

According to Asriningrum (2019) in Green's theory, the health of a person or community is influenced by two main factors, namely behavioral factors (behavior causes) and non-behavioral factors (non-behavioral causes). Furthermore, the behavior itself is determined or formed from three factors, including predisposing factors (knowledge, attitudes, beliefs, beliefs, values, traditions, and existing skills), reinforcing factors (social support, peer influence, influence of others and strengthening of representation) and enabling factors (programs, services, resources that allow for behavioral change).

Kalapanunggal Health Center is one of the Sukabumi Regency Health Centers which has a target of 53,266 residents, and 14% are school-age children in the Kalapanunggal District area. The target of school-age female students at SMAN

1 Kalapanunggal is 415 female students. Based on the results (screening of school children, 2024) of the 415 female students who underwent Hemoglobine (Hb) examination, 153 female students were examined, 58 female students experienced anemia, amounting to 38%.

The implementation of the FE tablets provision program in Sukabumi Regency has been well distributed, almost all health centers always distribute to each school, as well as the Kalapanunggal Health Center which always distributes FE Tablets every 3 months, but the results show that compliance with FE Tablets consumption in adolescent girls at school is still low, including SMAN 1 Kalapanunggal where many adolescent girls are not compliant in consuming blood enhancing tablets , This is based on 5 out of 10 female students at the school are reluctant to consume FE Tablets for various reasons, one of which is the lack of knowledge of female students, parental support, monitoring from schools and peer support. Therefore, researchers are interested in conducting research with the title "Analysis of compliance with FE Tablets consumption in adolescent girls at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025"

## **Methods**

The study was conducted using an analytical survey, which attempts to explore how and why health phenomena occur and then analyze the dynamics of correlations between them. This study employed an analytical design with a cross-sectional approach. This study used a population of 415 female students at SMAN 1 Kalapanunggal, with a sample of 100 students using the Slovin formula. This study used a questionnaire (compliance, knowledge, peer support, parental support, school support, and health worker support) as a measurement tool distributed to adolescent girls. Data processing was performed using SPSS with the c-square test to determine the relationship between the variables studied and adherence to FE tablet consumption among adolescent girls at SMAN 1 Kalapanunggal.

## Results

### Univariate Results

**Table 1**  
**Frequency Distribution of FE Tablets Consumption Compliance Among Female Adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

FE Tablet Compliance	Frequency	%
<b>Compliant</b>	40	40
<b>Non-Compliant</b>	60	60
<b>Total</b>	<b>100</b>	<b>100</b>

Based on Table 1, it is known that the majority of female adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency, are not compliant in consuming FE Tablets, namely 60%.

**Table 2**  
**Frequency Distribution of Knowledge of Young Women about FE Tablets at SMAN 1 Kalapanunggal Sukabumi Regency in 2025**

Adolescent Girls' Knowledge	Frequency	%
<b>Good</b>	60	60
<b>Sufficient</b>	24	24
<b>Poor</b>	16	16
<b>Total</b>	<b>100</b>	<b>100</b>

Based on Table 2, it is known that the majority of female adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency, have good knowledge about FE Tablets, namely 60%.

**Table 3**  
**Frequency Distribution of Peer Support for FE Tablets Compliance in Female Adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

Peer Support	Frequency	%
<b>Supportive</b>	49	49
<b>Less Supportive</b>	51	51
<b>Total</b>	<b>100</b>	<b>100</b>

Based on Table 3, it is known that respondents received less peer support for consuming FE Tablets at SMAN 1 Kalapanunggal, Sukabumi Regency, as many as (51%).

**Table 4**  
**Frequency Distribution of Parental Support for FE Tablets Consumption Compliance in Female Adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

Parental Support	Frequency	%
Supportive	42	42
Less Supportive	58	58
<b>Total</b>	<b>100</b>	<b>100</b>

Based on Table 4, it is known that respondents received less support from their parents to consume FE Tablets at SMAN 1 Kalapanunggal, Sukabumi Regency, as many as (58%).

**Table 5**  
**Frequency Distribution of School Support for FE Tablets Consumption Compliance in Female Adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

School Support	Frequency	%
Supportive	44	44
Less Supportive	56	56
<b>Total</b>	<b>100</b>	<b>100</b>

Based on table 5, it is known that respondents who did not receive school support for consuming FE Tablets at SMAN 1 Kalapanunggal, Sukabumi Regency were (56%).

**Table 6**  
**Frequency Distribution of Health Worker Support FE Tablets Consumption Compliance in Female Adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

Health Worker Support	Frequency	%
Supportive	60	60
Less Supportive	40	40
<b>Total</b>	<b>100</b>	<b>100</b>

Based on Table 6, it is known that respondents received support from health workers to consume FE Tablets at SMAN 1 Kalapanunggal, Sukabumi Regency as many as (60%).

## Bivariate Analysis

**Table 7**

**The Relationship Between Knowledge of Female Adolescents About FE Tablets and Compliance with FE Tablet Consumption at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

Adolescent Girls' Knowledge	FE Tablets Consumption				Total		ρ	OR
	Compliant		Non- Compliant					
	f	%	f	%	f	%		
	Good	37	62	23	38	60		
Sufficient	2	8	22	92	24	100	0,000	9,179
Poor	1	6	15	94	16	100		
Total	40	25,4	60	74,6	100	100		

Based on Table 7, it shows that adolescents who do not comply with consuming FE Tablets are more in adolescents with less knowledge, namely 94% compared to sufficient and good knowledge. The test results obtained a p-value of 0.000 meaning less than the significance level of 0.05 ( $<0.05$ ) so it can be concluded that there is a relationship between adolescent girls' knowledge about FE Tablets and compliance with FE Tablets consumption in adolescent girls at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025, with an OR of 9.179 which means the relationship between the variable of adolescent girls' knowledge and compliance with FE Tablets consumption is very strong. Adolescent girls who have a low level of knowledge will be at risk of not consuming FE Tablets, 1 tablet/week, 9.179 times greater than adolescent girls who have sufficient or good knowledge.

**Table 8**

**Relationship between Peer Support and FE Tablets Compliance at SMAN 1 Kalapanunggal, Sukabumi Regency, 2025**

Peer Support	FE Tablets Consumption				Total		ρ	OR
	Compliant		Non-Compliant					
	f	%	f	%	f	%		
Supportive Less Supportive	29	59	20	41	49	100	0,000	5,273
	11	22	40	78	51	100		
Total	40	40,5	60	59,5	100	100		

Based on table 8, it shows that adolescents who do not comply with consuming FE Tablets are more in adolescents who lack peer support, namely 78% compared to adolescents who receive peer support. The test results obtained a p-value of 0.000 meaning it is less than the significance level of 0.05 ( $<0.05$ ) so it can be concluded that there is a relationship between peer support and compliance with FE Tablets consumption in adolescent girls at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025, with an OR of 5.273 which means the relationship between peer support variables and compliance with FE Tablets consumption in adolescent girls is very strong. Adolescent girls who lack peer support will be at risk of not consuming FE Tablets, 1 tablet/week, 5.273 times greater than adolescent girls who have peer support.

**Table 9**  
**The Relationship Between Parental Support and FE Tablet Consumption Compliance at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

Parental Support	FE Tablets Consumption				Total		ρ	OR
	Compliant		Non-Compliant		f	%		
	f	%	f	%				
Supportive Less Supportive	22	52	20	48	42	100	0,032	2,444
	18	31	40	69	58	100		
Total	40	41,5	60	58,5	100	100		

Based on Table 9, it shows that adolescents who do not comply with consuming FE Tablets are more in adolescents who lack parental support, namely 69% compared to adolescents who receive parental support, namely 48%. The test results obtained a p-value of 0.032, meaning it is less than the significance level of 0.05 ( $<0.05$ ) so it can be concluded that there is a relationship between parental support and compliance with FE Tablets consumption in adolescent girls at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025, with an OR of 2.444, which means the relationship between parental support variables and compliance with FE Tablets consumption in adolescent girls is very strong. Adolescent girls who lack parental support will be at risk of not consuming FE Tablets 1 tablet/week 2.444 times greater than adolescent girls who have parental support.



**Table 10**  
**The Relationship Between School Support and Compliance with FE Tablet Consumption at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

School Support	FE Tablets Consumption				Total		ρ
	Compliant		Non-Compliant				
	f	%	f	%	f	%	
Supportive	19	43	25	57	44	100	0,565
Less Supportive	21	37	35	63	56	100	
Total	40	40	60	60	100	100	

Based on table 10, it shows that adolescents who do not comply with consuming FE Tablets are more in adolescents who do not receive school support, namely 63% compared to adolescents who receive school support, namely 57%. The test results obtained a p-value of 0.565, meaning it is more than the 0.05 significance level ( $>0.05$ ) so it can be concluded that there is no relationship between school support and compliance with FE Tablets consumption in female adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025.

**Table 11**  
**The Relationship Between Health Worker Support and FE Tablets Consumption Compliance at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

Health Worker Support	FE Tablets Consumption				Total		ρ
	Compliant		Non-Compliant				
	F	%	f	%	f	%	
Supportive	20	33	40	67	60	100	0,096
Less Supportive	20	50	20	50	40	100	
Total	40	41,5	60	58,5	100	100	

Based on Table 11, it shows that adolescents who are not compliant in consuming FE Tablets are more in adolescents who receive support from health workers, namely 67% compared to adolescents who do not receive support from health workers, namely 50%. The test results obtained a p-value of 0.096, meaning it is more than the significance level of 0.05 ( $>0.05$ ) so it can be concluded that there is no relationship between support from health workers and compliance with TT consumption in female adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025.

## DISCUSSION

Based on the results of this study, conducted at SMAN 1 Kalpanunggal, Sukabumi Regency, in 2025, there were 415 female adolescents. From this population, the researcher selected 100 female students to complete the questionnaire.

### **The Relationship Between Knowledge of Female Adolescents about FE Tablets and Compliance with FE Tablet Consumption at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

The results of the study showed that adolescents who did not comply with consuming FE Tablets had a level of knowledge in the good category of 38%, adolescents who did not comply with consuming FE Tablets had a level of knowledge in the sufficient category of 92%, while adolescents who did not comply with consuming FE Tablets had a level of knowledge in the less category of 94%. adolescents who did not consume FE Tablets were more in adolescents whose level of knowledge was less, namely 94% compared to adolescents whose level of knowledge was good and sufficient. The results of data analysis with the person Chi-Square test obtained a p-value of 0.000 so that it can be concluded that there is a significant relationship between the knowledge of adolescent girls about FE Tablets and compliance with C consumption in adolescent girls at SMAN 1 Kalapanunggal FE Tablets Sukabumi Regency in 2025. This means that adolescent girls who have a less level of knowledge will be at risk of not consuming C1 tablet/week 9.179 times greater than adolescent girls who have sufficient or good knowledge.

This is in accordance with research conducted by Wahyuningsih and Rohmawati (2019) which stated that there was a significant relationship (p-value 0.001) between knowledge and FE Tablets consumption. Wahyuningsih and Qoyyimah (2019) showed a relationship between knowledge about anemia and compliance in consuming FE Tablets among female adolescents at SMA Negeri 1 Karanganom with a p-value of 0.000 ( $\alpha < 0.05$ ).

Knowledge influences FE tablet consumption behavior because knowledge, or cognitive skills, are crucial in shaping a person's actions. According to PRECEDE theory, knowledge is a predisposing factor, that is, a factor that

facilitates behavior. Knowledge is included in the informational factors that influence a person's beliefs, which then influence attitudes, leading to behavioral intentions. Knowledge is also the result of sensing a particular object. Sensing occurs through the five human senses: sight, hearing, smell, taste, and touch. Most knowledge is acquired through hearing and sight. The process of sensing and resulting in knowledge can be influenced by the intensity of attention and perception of the object. This indicates that the extent of a person's knowledge about adolescent anemia is also influenced by the number of times they have experienced it. Even if respondents have received information related to the topic, if the respondent's level of knowledge and perception are low, their level of knowledge about anemia will also decrease.

The large number of adolescents at SMAN 1 Kalapanunggal who have insufficient knowledge and do not consume FE tablet is likely due to low levels of knowledge and perception, which influence their behavior in consuming FE tablet. By having good knowledge, it is hoped that compliance with blood enhancing tablet consumption for the prevention of anemia in adolescent girls in the Kalapanunggal Community Health Center work area can be increased.

### **The Relationship Between Peer Support and FE Tablet Consumption Compliance at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

The results of the study showed that 78% of adolescents who did not comply with taking FE Tablets due to lack of peer support, while 41% of adolescents who did not comply with taking FE Tablets and received peer support. Adolescents who did not consume FE Tablets were more in adolescents who did not receive peer support, namely 78% compared to adolescents who received peer support. The results of data analysis using the person Chi-Square test obtained a p-value of 0.000 so that it can be concluded that there is a significant relationship between peer support and adherence to FE Tablets consumption in female adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025. This means that female adolescents who lack peer support will be at risk of not consuming FE Tablets 1 tablet/week 5.273 times greater than female adolescents who have peer support.

This is consistent with research by Latifa Hanum (2025), which states that there is a significant relationship between peer support and adherence to FE tablet consumption with a p-value of 0.005. Peers are individuals of similar age and maturity, with similar interests, experiences, goals, and rules (Yunalia and Etika, 2020). The impact of peer relationships has both positive and negative impacts. The function of peer groups is to provide a source of information and comparison about the world outside the family. Children or adolescents receive feedback on their abilities from peer groups. Groups fulfill adolescents' personal needs, value them, provide information, increase self-esteem, and give them an identity. Adolescents join groups because they perceive membership in a group to be enjoyable and collaborative. They join groups because they will have the opportunity to receive rewards, both material and psychological (Permanasari et al., 2021).

The supportive role of peers is to provide psychosocial support in the form of informational, emotional, instrumental, and value support. This support can include empathetic listening, providing needed information, offering advice when requested, and suggesting referrals when necessary. The results of the discussion above indicate that adolescent girls at SMAN 1 Kalapanunggal are more likely to be interested in taking FE tablets when their peers provide support and when they use them with their peers.

### **The Relationship Between Parental Support and FE Tablet Consumption Compliance at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

The results of the study showed that 69% of adolescents who did not comply with taking FE Tablets due to lack of parental support, while 48% of adolescents who did not comply with taking FE Tablets and received parental support. Adolescents who did not consume FE Tablets were more in adolescents who lacked parental support, namely 69% compared to adolescents who received parental support. The results of data analysis using the person Chi-Square test obtained a p-value of 0.032 so that it can be concluded that there is a significant relationship between parental support and adherence to FE Tablets consumption in adolescent girls at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025. This means that adolescent girls who lack parental support will be at risk of not consuming FE

Tablets 1 tablet/week 2.444 times greater than adolescent girls who have parental support.

In accordance with research by Putri et al (2019) which states that there is a significant relationship between parental support and compliance with FE supplement consumption with a p-value of 0.033, which is less than 0.05.

Parents play a crucial role in the development of their children. Their role in school health promotion includes participating in the planning and implementation of school health promotion programs, adapting to school health programs, and striving to learn what their children are learning at school, as well as encouraging them to practice healthy habits at home. Support from families, especially parents, includes reminding individuals to take FE Tablets as recommended (Fadillah, 2022). Parental involvement in their children's education can be seen in the form of financial participation (Hornby, 2011; Nurul Fatonah, 2022). In reality, parental involvement is more complex than what parents know and implement at school. The home environment, especially parenting patterns, is crucial for adolescents with general health problems. Parents who practice healthy lifestyles significantly influence their children's health status because they act as role models. This means parents play a role in improving adolescents' health status. Good knowledge will foster positive attitudes (Azwar, 2009; Fadillah, 2022).

### **The Relationship Between School Support and Compliance with FE Tablet Consumption at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

The results of the study showed that 63% of adolescents who did not comply with consuming FE Tablets due to lack of school support, while 57% of adolescents who did not comply with consuming FE Tablets and received school support. Adolescents who did not consume FE Tablets were more in adolescents who lacked school support, namely 63% compared to adolescents who received school support. The results of data analysis using the person Chi-Square test obtained a p-value of 0.0565 so it can be concluded that there is no significant relationship between school support and FE tablet consumption compliance in female adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025.

This is in line with research conducted by Dina Noviazahra (2017) which stated that there was no relationship between support and p-value 0.197. Although school support theoretically influences FE Tablets consumption, there are other factors that influence students' decisions to consume FE Tablets . Factors that play an important role in the formation or behavior of FE Tablets consumption are internal and external factors. Internal factors include intelligence, emotions, interests, and so on to process external influences. While external factors include objects, people, groups, environments, social support and so on. In the PRECEDE theory, it is stated that school social support is a reinforcing factor. This means that school social support is not the main factor that shapes a person's behavior. The three factors, namely predisposing factors, reinforcing factors, and enabling factors work together to shape a person's behavior.

From the results of this study, researchers argue that school support in the working area of the Kalapanunggal Health Center UPTD also does not have much influence on compliance with FE Tablets consumption in adolescent girls, due to many other factors such as environmental factors around adolescent girls, most of which are environments that are less concerned about the importance of FE Tablets benefits, the taste of FE Tablets tablets which according to adolescent girls is unpleasant and causes nausea as well as fake news (HOAXS) spread on social media about the dangers of FE Tablets consumption for adolescent girls.

### **The relationship between health worker support and compliance with FE tablet consumption at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

The results of the study showed that 50% of adolescents who did not comply with taking FE Tablets due to lack of support from health workers, while 67% of adolescents who did not comply with taking FE Tablets and received support from health workers. Adolescents who did not consume FE Tablets were more in adolescents who received support from health workers, namely 67% compared to adolescents who received less support from health workers. The results of data analysis using the person Chi-Square test obtained a p-value of 0.096 so it can be concluded that there is no significant relationship between the support of health workers and adherence to FE Tablets consumption in female adolescents at SMAN

1 Kalapanunggal, Sukabumi Regency in 2025. This is in line with research conducted by Damayanti et al (2025) which stated that there is no relationship between the support of health workers and adherence to FE Tablets consumption in female adolescents with a p-value of 0.059. This is different from the research conducted by Wulandari et.al (2022) which stated that there was a relationship between the support of health workers and compliance with FE Tablets consumption in adolescent girls with a p-value of 0.031 and the research by Elizar et al (2023) with a p-value of 0.000.

The role of health workers (midwives) or authorities in health management is very important, while the role of midwives in efforts to prevent and overcome anemia in adolescents can be through providing health education/counseling. Support from health workers (midwives) in the consumption of FE Tablets in adolescents is very important, it can be through counseling or providing assistance at least once a month when drinking FE Tablets together accompanied by physical activity and a healthy breakfast together (Nutrition Action program, 2023). Just like school support, support from health workers also theoretically influences FE tablet consumption, but there are other factors that influence the decision of female students to consume FE Tablets , Even though the support from health workers is good, many other factors can make the young women themselves neglect to consume FE Tablets .

The results of this study also show that young women consider the role of health workers in the working area of the Kalapanunggal Health Center UPTD to be supportive of compliance with FE Tablets consumption, health workers also always maximize coordination with schools in supporting the FE Tablets consumption program, but good support from health workers is not enough to make young women comply with FE Tablets consumption due to various factors in the young women's environment itself.

### **The Variables with the Strongest Relationship to FE Tablet Consumption Compliance at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025**

The results of the study showed that the knowledge of young women had a p-value of 0.000, which means it is less than the significance level ( $<0.05$ ) and an



OR of 9.173, so it can be concluded that there is a significant relationship between the knowledge variable of young women and compliance with FE supplement consumption in adolescents at SMAN 1 Kalapanunggal, as well as the peer support variable which has a p-value of 0.000, which means it is less than the significance level ( $<0.05$ ) and an OR of 5.273, so it can be concluded that there is a significant relationship between the peer support variable and compliance with FE supplement consumption in adolescents at SMAN 1 Kalapanunggal, the parental support variable has a p-value of 0.032, which means it is less than the significance level ( $<0.05$ ) and an OR of 2.444, so it can be concluded that there is a significant relationship between the parental support variable and compliance with FE supplement consumption in adolescents at SMAN 1 Kalapanunggal, the school support variable has a p-value of 0.565, which means it is more than significance level ( $>0.05$ ) so it can be concluded that there is no significant relationship between the school support variable and compliance with FE supplement consumption in adolescents at SMAN 1 Kalapanunggal, the health worker support variable has a p-value of 0.096 which means it is more than the significance level ( $>0.05$ ) so it can be concluded that there is no significant relationship between the health worker support variable and compliance with FE supplement consumption in adolescents at SMAN 1 Kalapanunggal.

The research findings above indicate that the strongest correlation between knowledge and adherence to FE supplement consumption among female adolescents at SMAN 1 Kalapanunggal is knowledge, with an OR of 9.173.

Adolescents' good knowledge can influence their positive attitudes toward FE supplementation, resulting in more students with good knowledge being more compliant with FE supplement consumption than those with adequate or inadequate knowledge. Therefore, it is understandable that knowledge is the dominant variable influencing adherence to FE supplement consumption among female adolescents at SMAN 1 Kalapanunggal.

### **Research limitations**

Limited time due to difficulty in arranging schedules with the school regarding the end-of-semester exams and end-of-semester holidays at SMAN 1



Kalapanunggal, Sukabumi Regency, thus hampering data collection, analysis, and writing of research reports.

## **Conclusions**

Based on the results of research and discussion in the study entitled "Analysis of compliance with FE supplement consumption in female adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025", the following conclusions can be drawn:

1. Distribusi frekuensi kepatuhan konsumsi FE Tablets pada remaja putri di SMAN 1 kalapanunggal di dapatkan remaja putri yang tidak patuh konsumsi FE Tablets sebesar 60%, pengetahuan baik 60%, cukup 24%, kurang 16% , yang tidak mendapat dukungan teman sebaya 51%, yang tidak mendapat dukungan orang tua 58%, yang tidak mendapat dukungan sekolah 56%, yang tidak mendapat dukungan tenaga kesehatan 40%.
2. There is a significant relationship between knowledge of adolescent girls, peer support and parental support with compliance with FE supplement consumption in adolescent girls at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025.
3. There is no significant relationship between school support and health worker support with adherence to FE supplement consumption in female adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025.
4. The variable with the strongest relationship to compliance with FE supplement consumption among female adolescents at SMAN 1 Kalapanunggal, Sukabumi Regency in 2025 is the female adolescent's knowledge variable based on the OR results.

## **Ethical Conciredations**

This research was conducted in accordance with the following ethical principles: This research has received ethical approval from the Health Research Ethics Committee of Muhammadiyah University of Purwokerto, with the ethical feasibility certificate number: Registration Number: KEPK/UMP/80/VII/2025, dated July 6, 2025. This approval was granted after reviewing the research protocol,

including aspects of protection for research subjects, intervention safety, and data collection procedures. This research was conducted in accordance with ethical principles of research with informed consent provided, as well as guarantees of confidentiality and the respondents' freedom to participate or withdraw.

### **Conflict of Interest**

The authors declare that they have no conflicts of interest that could affect the objectivity or integrity of these findings. All data, analysis, and interpretation of the results were conducted independently without any influence from any party

### **Author contribution**

All authors were actively involved in every stage of the findings, from study design and data collection to statistical analysis and manuscript writing. Each author also approved the final version of the manuscript for publication and is responsible for the accuracy of the findings

### **References**

- Adiputra, I.M.S., Trisnadewi, N.W., Oktaviani, N.P.W., (2021), Metodologi penelitian, Yayasan Kita Menulis, Denpasar, **43**, 115-116.
- Ayu, N. made., (2023), *Anemia Remaja Putri*, Nuansa Fajar Cemerlang, 50-53
- BD, F. *et al.* (2025) 'Tingkat Pengetahuan dan Perilaku Konsumsi Tablet Fe Pada Remaja Putri', *Jik Jurnal Ilmu Kesehatan*, **9**(1), p. 275.  
<https://doi.org/10.33757/jik.v9i1.1341>.
- Damayanti, F. *et al.*, (2025). Determinan Kepatuhan Mengonsumsi Tablet Tambah Darah Pada Remaja Putri di SMAN 02 Gunung Putri Kabupaten Bogor : a literatur review. *Jurnal Untuk Masyarakat Sehat (JUKMAS)*, **9**(1), pp. 15–31.  
<https://doi.org/10.52643/jukmas.v9i1.4891>.
- Darmini, J.V.N.B.A.A.A.Y. (2020). Faktor yang mempengaruhi konsumsi FE pada remaja : a literatur review. *Riset Kesehatan Nasional*, **59**(1), 36–40.  
<https://ejournal.itekes-bali.ac.id/index.php/jrkn/article/view/531>.
- Dartiwen., Aryanti, M., (2022), *Buku Ajar Asuhan Kebidanan pada Remaja dan Perimenopause*, PENERBIT DEEP PUBLISHER, Yogyakarta, 136-140.

- Elizar *et al.*, (2022). Hubungan Peran Petugas Kesehatan dan Sikap Remaja dengan Konsumsi Tablet Fe di Dayah Terpadu I : a literatur review. *indonesia Trust Health Journal*, **5**(2), pp. 72–77.  
<https://www.researchgate.net/publication/366478757>
- Indriani, F. *et al.* (2023). *Factors Related to Incidence of Anemia in Adolescent Girl*, *INCH: Journal of Infant And Child Healthcare*, **2**(1),33–39.  
<https://jurnal.pkr.ac.id/index.php/INCH/article/view/693>.
- Kabupaten, S.D, (2024) *Laporan Penjaringan dan Berkala Kesehatan Pada Anak Sekolah*. Sukabumi.
- Kemenkes R.I., (2020), Pedoman pemberian Tablet Tambah Darah bagi remaja putri pada masa pandemi COVID-19', *Kementrian Kesehatan RI*, p. 22.  
[http://appx.alus.co/direktoratgiziweb/katalog/FE Tablets -rematri-ok2.pdf](http://appx.alus.co/direktoratgiziweb/katalog/FE%20Tablets%20-rematri-ok2.pdf)
- Kemenkes R.I., (2023),Petunjuk Teknis Penggerakan Aksi Bergizi,, Direktorat Promosi Kesehatan dan Pemberdayaan Masyarakat, Jakarta, 15-16.
- Hanum Latifa., (2025), Hubungan Pengetahuan Anemia Dan Dukungan Teman Sebaya Dengan Kepatuhan Konsumsi Tablet Tambah Darah Pada Remaja Di Smk Negeri Pertanian Terpadu Provinsi Riau, *Skripsi*, Program Studi Gizi, UIN Suska, Pekanbaru .
- Marzuki, D., Tahrim, N., Athaya, F., *et al.* (2024),*Tablet Tambah Darah, Buku Derajat Kesehatan Masyarakat*, Uwais Inspirasi Indonesia, Ponorogo, 53-54.
- Masfufah, M., Kandarina, I. and Padmawati, R.S. (2022) 'Penerimaan remaja putri terhadap tablet tambah darah di Kota Yogyakarta', *Jurnal Gizi Klinik Indonesia*, **18**(3), p. 145.  
<https://doi.org/10.22146/ijcn.37031>.
- Nurjanah, A. and Azinar, M. (2023) 'Kepatuhan Konsumsi Tablet Tambah Darah Remaja Putri pada Sekolah Percontohan Kesehatan Reproduksi dan Seksualitas', *HIGEIA (Journal of Public Health Research and Development)*,**7**(2),pp.244–254.  
<https://doi.org/10.15294/higeia.v7i2.64227>.
- Octavia, S.A.,(2020), *Motivasi Belajar Dalam Perkembangan Remaja* DEEPUBLISH, Sleman, 59.
- Permini, Devi, R. and Badariati (2024) 'Sosialisasi Pentingnya Tablet Tambah Darah pada Remaja Putri di SMAN 5', *Jurnal Kolaboratif Sains*, **7**(10), pp. 3653–3658.  
<https://doi.org/10.56338/jks.v7i10.6096>.
- Pertiwi, M.R. *et al.* (2022),*Komunikasi terapeutik dalam kesehatan*, Rizmedia

Pustaka Indonesia, Makassar, 84.

- Popang, C.T., Sulistyowati, U., Hayati., *et al.* (2023). Peningkatan Pengetahuan Tentang Anemia Pada Remaja Putri Di Sma Negeri 3 Nabire Di Kabupaten Nabire : a literatur riview. *Communnity Development Journal*, **4**(6),11505–11509.  
<https://j-innovative.org/index.php/Innovative/article/view/8497>.
- Putri, N.W., Rahmawati, A., Aru, D., (2019), Hubungan dukungan orangtua dan dukungan sekolah dengan kepatuhan konsumsi FE Tablets pada siswi SMAN 1 kokap,1–23.  
<https://eprints.poltekkesjogja.ac.id/2298/>.
- Rasmaniar., Rofiqoh., Kristanto, Y., (2019), *Kesehatan Gizi Remaja*, Yayasan Kita Menulis, Surakarta, 8-12.