

THE FACTORS RELATED TO COMPLIANCE WITH THE CONSUMPTION OF BLOOD SUPPLEMENT AT SENIOR HIGH SCHOOL IN LAHAT REGENCY

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ABSTRACT

Background: Consuming blood supplement tablets is an effort to prevent anemia in young women. The research aims to analyze the compliance of young women in consuming blood supplement tablets. **Methods:** This research was conducted at high schools in Lahat district in 2023. The calculated sample size was 192 respondents. Data was collected through interviews using questionnaires and analyzed using univariate, bivariate and multivariate methods. **Results:** The results of the chi - square test obtained variables that were related to compliance with the consumption of blood supplement tablets in young women, namely knowledge, attitudes, exposure to information and availability of iron tablets. Meanwhile, the most dominant factors influencing adolescent girls' compliance in consuming blood supplement tablets are knowledge ($p=0.0005$), attitudes ($p=0.005$), information exposure ($p=0.043$), and availability of iron tablets ($p=0.005$). **Conclusion:** Compliance with consuming blood supplement tablets in young women is related to knowledge, attitudes, exposure to information and availability of iron tablets.

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INTRODUCTION

Adolescence is a transition period from childhood to adulthood, usually occurring between the ages of 10 and 18 years. Every month young women experience menstruation (menstruation). Young women also tend to pay close attention to their body shape, so they will limit their food intake and have many food restrictions, such as following a vegetarian diet. The result will be malnutrition (Aiman et al. 2023). Therefore, handling and preventing this can be done by consuming blood supplement tablets (Kemenkes RI 2021).

The coverage of giving blood supplement tablets to young women in Indonesia in 2021 is 31.3%. The province with the highest percentage of coverage of giving blood supplement tablets to young women is Bali (85.9%), while the lowest percentage is North Maluku (2.1%). The coverage of giving blood supplement tablets to young women in South Sumatra in 2021 is 25.1% (Kemenkes RI 2021). Adolescents are increasingly considered important as potential agents of nutritional change in Indonesia because they play a role in breaking the chain of intergenerational poverty and malnutrition (Dewi and Noviyana 2022).

Anemia can attack anyone, but most often attacks women of childbearing age, especially teenage girls (Nurjannah and Putri 2021). Giving blood supplement tablets is an effective way to overcome the problem of anemia, if consumed regularly there will be an increase in hemoglobin levels. Adolescent girls themselves are very vulnerable to iron deficiency due to menstruation, rapid growth, and increased iron requirements (Amir and Djokosujono 2019).

Anemia in adolescents can inhibit psychomotor development, impair cognitive performance and scholastic performance. Therefore, the problem of anemia must be prevented and overcome when they are still teenagers because teenagers will become pregnant women later, while consuming TTD can increase concentration in women and teenagers and increase IQ in anemia sufferers (Amir and Djokosujono 2019).

Adolescent girls who suffer from anemia are also at risk of developing anemia

during pregnancy. This will have a negative impact on the growth and development of the fetus in the womb and has the potential to cause complications in pregnancy and childbirth, even causing death of the mother and child (Mahyuddin et al. 2022).

Data related to compliance with the consumption of blood supplement tablets in young women have not been identified in data and information centers at relevant institutions. However, compliance with the consumption of blood supplement tablets is a new indicator in the program of giving blood supplement tablets to young women. One effort to increase compliance with the consumption of blood supplement tablets for young women in its implementation requires assistance from external parties, such as teachers (Nuradhiani, Briawan, and Dwiriani 2017).

There are several factors related to compliance with the consumption of blood supplement tablets, namely knowledge, attitude, school support for compliance with the consumption of blood supplement tablets, support from health workers (Lindawati 2023). Apart from that, motivation, parental support and teacher support are also related to compliance with blood supplement tablet consumption (Runiari and Hartati 2020). Consumption of blood supplement tablets in young women is related to the level of knowledge about anemia and compliance with taking blood supplement tablets (Safitri and Yusuf 2020).

Based on the results of a preliminary study at Senior High School in Lahat, Fe tablets are given once a year. From the results of the interview with the teacher, Fe tablets during menstruation were given according to the dosage, namely taken once a day. The results of interviews with 10 female students, all of them already knew about the importance of consuming Fe tablets but were not obedient in consuming them because Fe tablets had an unpleasant taste, fishy smell, felt forgetful and nauseous. Based on the data above, the author is interested in conducting research with the title analysis of compliance with the consumption of blood supplement (FE) tablets among young women at Lahat Regency Senior High School in 2023.

The effort to control the incidence of anemia recommended by WHO is by providing Blood Supplement Tablets (TTD). Blood

supplement tablets are given with a composition consisting of 0.4 mg folic acid and 60 mg elemental iron (in the form of ferrous sulfate, ferrous gluconate or ferrous fumarate). Therefore, this study aimed to analyze factors related to compliance with the consumption of blood supplement (FE) tablets among young women at Lahat Regency Senior High School.

METHOD

This type of quantitative research with a cross sectional design. This research was carried out at the Lahat district public high school. This research was carried out from May to July 2023. The population in this study was 370 young women in grades X and XI at State High Schools 1, 2, 3 and 4 in Lahat Regency.

The sample size in this study was calculated using the Slovin formula as 192 people, using a simple random sampling technique. Data was collected by interview using a questionnaire that had been tested for validity and reliability. Data were analyzed univariately, bivariately using the Chi Square test and multivariately using the multiple logistic regression test..

RESULTS

The results of univariate, bivariate and multivariate analyzes are presented in the table below:

Table 1
Frequency Distribution of Knowledge and Attitudes in Lahat Regency High Schools in 2023 (n=192)

Variables	Frequency	Percentage (%)
1. Knowledge		
- Not Good (<5,00)	66	34,4
- Good (≥5,00)	126	65,5
2. Attitude		
- Negative (<5,00)	72	34.4
- Positive (≥5,00)	126	65.6

Based on Table 1, it is found that the majority of young women's knowledge is good and have a positive attitude towards consuming blood supplement tablets.

Table 2

Frequency Distribution of Information Exposure, Availability of Iron Tables, Family Support, Teacher Support and Consume Iron Tablets in Lahat Regency in 2023

Variables	Frequency	Percentage (%)
1. Information Exposure		
- No	108	56,3
- Yes	84	43,8
2. Availability of Iron Tables		
- No	76	57,8
- Yes	116	42,2
3. Family Support		
- Not Good (< 19)	94	49
- Good (≥19,00)	98	51
4. Teacher Support		
- Not Good (<19,00)	95	49,5
- Good (≥19,00)	97	50,5
5. Consume Iron Tablets		
- Not Compliant	69	35,9
- Compliant	123	64,1

Based on Table 2, it can be seen that the majority of young women have not been exposed to information about the importance of consuming blood supplement tablets.

Table 3

Relationship between Knowledge and Attitudes and Consume Iron Tablets among young women in Lahat Regency High Schools in 2023 (n = 192)

Variables	Konsumsi Tablet Fe						p value
	Tidak Patuh		Patuh		Total		
	n	%	n	%	n	%	
Knowledge							
- Not Good	59	89.4	7	10.6	66	100	0,0005
- Good	10	7.9	116	92.1	126	100	
Attitude							
- Negative	57	79.2	15	20.8	72	100	0,0005
- Positive	12	10	108	90	120	100	

Based on Table 3, the variables that are significantly related to compliance with the consumption of blood supplement tablets in young women are knowledge and attitude.

Tabel 4

Relationship between Information Exposure, Availability of Iron Tablets, Family Support and Teacher Support with Consume Iron Tablets among young women in Lahat Regency High Schools in 2023. (n = 192)

Variables	Konsumsi Tablet Fe						p value
	Tidak Patuh		Patuh		Total		
	n	%	n	%	n	%	
Information Exposure							
- No	46	42.6	62	57.4	108	100	0.043
- Yes	23	27.4	61	72.6	84	100	
Availability of Iron Tablets							0.0005
- No	47	61.8	29	38.2	76	100	
- Yes	22	19	92	81	116	100	
Family Support							0.605
- Not Good	36	38.8	58	61.7	94	100	
- Good	33	33.7	65	66.3	98	100	
Teacher Support							0.312
- Not Good	38	40	57	60	95	100	
- Good	31	32	66	68	97	100	

Based on Table 4, the results of the chi square test show that the variables that are significantly related to the consumption of iron tablets in adolescents are knowledge, attitudes and availability of iron tablets.

Table 5

Final Model of Multiple Logistic Regression Analysis

Variables	Beta	p value	Odd Ratio
Knowledge	4.708	0.0005	110.824
Attitude	2.960	0.0005	19.303
Availability of Iron Tablets	2.402	0.001	11.042
Constant	-15.366		

Based on Table 5, the final model from the results of the multiple logistic regression analysis shows that the most dominant variables in determining the adherence of young women to consuming blood supplement tablets are knowledge, attitude and availability of iron tablets. The rest is influenced by other variables.

DISCUSSION

The majority of young women at Lahat Regency State High School are obedient in taking

blood supplement tablets and have good knowledge. This may be influenced by other factors, namely factors that come from within a person to maintain health, eating habits, appearance, choice and meaning of food. (Wahyuningsih and Rohmawati 2020).

Providing iron tablets is a national program to prevent anemia. This is because giving iron tablets has a very big effect in increasing hemoglobin levels, especially in teenagers (Haryanti 2020), and also women of productive age who are still actively working (Maksuk et al. 2019; Maksuk and Suzanna 2017). In general, the level of compliance with the consumption of blood supplement tablets in adolescents greatly influences the consumption of iron tablets (Putri & Kurnia Astuti, 2023).

In general, the attitude of young women in District High Schools. The outlook for consuming iron tablets is very positive. Attitude is a reaction or response that is still closed from a person to a stimulus or object. It can be said that the manifestation of attitudes cannot be seen directly, but can only be interpreted first from closed behavior. Attitude clearly shows the connotation of appropriate reactions to certain stimuli, which in everyday life is an emotional reaction to social stimuli. Attitude is a reaction or response that is still closed from a person to a stimulus or object. Attitude is not yet an action or activity, but is a predisposition to the action of a behavior. This attitude is still a closed reaction, not an open reaction or overt behavior (Notoatmodjo 2011). Female students with negative and disobedient attitudes dominate more than female students who have positive and obedient attitudes (Putri and Astuti 2023).

Based on the research results and previous research, the researcher's assumption of attitude clearly shows the connotation of appropriate reactions to certain stimuli, which in everyday life is an emotional reaction to social stimuli. Attitude is a reaction or response that is still closed from a person to a stimulus or object.

Exposure to information on the consumption of iron tablets among young women in high schools in the district. Lahat is related to adolescent compliance with consuming iron tablets. Information or mass media, information obtained from formal or non-formal education can have a short-term influence (Immediate Impact) resulting in changes or increased knowledge. As technology advances, various types of mass media will be available that can influence public knowledge about new innovations. In conveying information as its main task, mass media also carries messages containing suggestions that can direct someone's opinion (Safitri & Ratnawati, 2022).

Information about the importance of blood supplement tablets for young women is also known to female students. This information is related to how to take blood enhancing tablets. Female students were also exposed to information about the benefits of taking blood supplement tablets for teenagers. The number of blood supplement tablets that teenagers should consume, namely one tablet every week, was also known to most respondents (Widiastuti and Rusmini 2019).

Based on research results and previous research, the assumptions of information researchers or mass media, information obtained from formal and non-formal education can have a short-term influence (Immediate Impact) resulting in changes or increased knowledge. As technology advances, various types of mass media will be available that can influence public knowledge about new innovations.

Availability of iron tablets is related to compliance with consuming iron tablets among young women at District High Schools. Lahat. Based on the respondents' answers, young women can get them from other places such as hospitals, available at home, buy them themselves, posyandu, even sub-districts so that even though blood supplement tablets are well available, if they don't have the awareness to consume them then the practice will not be carried out (Rahayuningtyas, Indraswari, and Musthofa 2021).

Based on the results of research and previous research, the researcher's assumption is that young female respondents can get it from other places such as hospitals, available at home, buying it yourself, posyandu, even sub-districts so that even though blood supplement tablets are well available, if they don't have the awareness to consume it then practice will not be carried out.

Family support is related to the consumption of iron tablets in young women at high schools in the district. Lahat. The high level of support provided by the family can form a normative belief and young women tend to form a positive perception towards consuming blood supplement tablets, so that a strong intention is formed to consume blood supplement tablets to avoid the risk of anemia. Family support has a very important role in consuming blood supplement tablets.

Family support can take the form of reminding you about the schedule for taking blood supplement tablets and providing food that contains blood supplement tablets. Adolescent girls' compliance with taking blood supplement tablets is influenced by other people such as parents, parents' good knowledge about nutrition and as a result will encourage young women to

take blood supplement tablets. Family support comes from father and mother, such as emotional support, namely the mother's sense of pride and also reminders, as well as physical support, namely assistance when consuming blood supplement tablets (Samputri and Herdiani 2022).

Respondents have family support that comes from father and mother, such as emotional support, namely the mother's sense of pride and also reminders, as well as physical support, namely assistance when consuming blood supplement tablets. Family support can influence a person's behavior (Rahayuningtyas et al. 2021). Based on the research results and previous research, the researcher's assumption is that family support has a very important role in consuming blood supplement tablets. Forms of family support can be in the form of reminding you of the schedule for taking blood supplement tablets and providing food containing blood supplement tablets. Adolescent girls' compliance with taking blood supplement tablets is influenced by other people such as parents, parents' good knowledge about nutrition and as a result will encourage young women to take blood supplement tablets.

Teacher support is related to adolescent compliance with consuming iron tablets. The role of teachers is very important in making adolescent girls comply with consuming iron tablets because adolescent girls spend more time at school each day than at home. The support of teachers at school who remind young women to consume iron tablets and provide information about iron tablets can provide a positive attitude in young women who will also manifest positive behavior, namely obediently taking blood supplement tablets as recommended (Nuradhiani et al. 2017).

Respondents have teacher support such as informative support, physical support, emotional support, and assessment support (giving praise) which are reinforcing factors in increasing adolescent compliance with consuming iron tablets. (Rahayuningtyas et al. 2021). Based on the results of the research and previous research, the researcher's assumption is that the role of teachers is very important in making young women adhere to consuming blood supplement tablets because young women spend more time at school every day than at home. There is support from teachers at school who remind young women to take blood supplement tablets and provide information about blood supplement tablets. The final model of the multiple logistic regression test, namely knowledge, attitude, availability of tablets, are the most dominant variables that influence the consumption of iron tablets in adolescents. Based on research results,

supporting theories and previous research, the first researcher's assumption states that the relationship between knowledge and consumption of blood supplement tablets is that if a person's knowledge (information) about blood supplement tablets is low then their behavior of consuming blood supplement tablets is also low, meaning this is strongly influenced by knowledge/ information received. The limitation of this research is that it was only conducted at one school and used a cross-sectional study design.

CONCLUSION

Adherence to consuming blood supplement tablets in young women is related to knowledge, attitudes, exposure to information and availability of iron tablets. Meanwhile, the most dominant factors influencing adolescent girls' compliance in consuming blood supplement tablets are knowledge, attitudes and availability of iron tablets.

The role of teachers and families in increasing knowledge and information regarding adolescent compliance with consuming iron tablets. Therefore, education regarding anemia in adolescents needs to be carried out regularly in schools.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interests

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