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### THE INFLUENCE OF KNOWLEDGE ON FE TABLET CONSUMPTION IN ADOLESCENT WOMEN

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#### ABSTRACT

*Anemia is a nutritional problem in the world, especially in developing countries, including Indonesia. According to WHO, the prevalence of anemia in women in Indonesia is 23.9%, which is divided by the prevalence of anemia in women aged 5-14 years which is 26.4% and aged 15-25 years which is divided by the prevalence of anemia in women aged 5-14 years which is 26.4%. 26.4% and 15-25 year olds 18.4%. The aim of the research was to determine the effect of knowledge on the consumption of Fe tablets in adolescents. This type of quantitative research uses a descriptive analytical design, the research design uses cross sectional. The research location was carried out at SMAN 3 Rumbai, Pekanbaru City. The population of this study was 168 young women and the sample size was 119 young women using stratified random sampling techniques. The results of the univariate analysis showed that the distribution of young women with high knowledge was 58.0%, while the number of young women with low knowledge was 42.0%, 55.5% of young women had ever consumed Fe tablets, while 44 young women had never consumed Fe tablets. 5%. The statistical test obtained a value of  $p=0.002$ , so it can be concluded that there is an influence of knowledge on consuming Fe tablets. The conclusion is that there is an influence of knowledge on consuming Fe tablets, so it is hoped that with good knowledge, young women will think and try to avoid anemia. Apart from that, complying with taking blood supplement tablets will also affect hemoglobin levels in teenagers.*

*Keywords: Knowledge, Teenage girl, Fe Tablets*

#### INTRODUCTION

Adolescence is a transition period from childhood to adulthood which requires higher levels of nutrients, including iron. Where teenage girls are more susceptible to anemia because they are already menstruating [1].

Adolescence is a transition period for adults. During this period, many changes occur in a person, both physically and mentally, so it must be balanced with adequate nutrition, otherwise it can cause several nutritional problems in teenagers, such as obesity, deficiency [2].

Anemia is a decrease in the amount of erythrocyte mass (red cell mass) so that

the amount of oxygen to peripheral tissues is not fulfilled [3].

Anemia is a nutritional problem that exists in Indonesia, namely iron deficiency anemia. Anemia has an impact on teenagers. It is very important to overcome anemia in young women so that the problem does not continue during pregnancy, one of which is by consuming Blood Supplement Tablets which contain 60 mg of elemental iron and 400 mcg of folic acid [4].

Anemia is a nutritional problem in developing countries, including Indonesia. World Health Organization (WHO) where anemia in Indonesian women is 23.9%, which is divided into anemia in women

aged 5-14 years by 26.4% and 18.4% aged 15-25 years. Young women have ten times the risk suffer from anemia than young men [5].

In 2020 World Health Organization where anemia was 40-80%, in India the prevalence of anemia in female adolescents was 45%, while in Indonesia itself it was 39.1%, and it was found that the proportion of anemia was higher than men, namely 27.2%. in women, and 20.3% in men [6].

Low intake or entry of iron and other nutrients into the body, for example vitamin A, vitamin C, folate, riboflavin, B12 and errors in consuming iron, for example when consuming iron together with other substances, can interfere with the process of iron absorption [7].

Adolescent girls experience anemia at a higher rate than boys, the effects of anemia include decreased immunity, concentration in learning, fitness and productivity. Adolescent girls who experience anemia will have a more serious impact, where adolescent girls will become pregnant and give birth to a baby, thereby increasing the risk of maternal death giving birth to premature babies and low birth weight babies.

Malnutrition is the cause of anemia which reaches a percentage of around 85.5% which is characterized by impaired hemoglobin synthesis. In Indonesia, many teenagers do not get used to breakfast and consume less than 50% of foods containing nutrients, therefore teenagers in Indonesia easily suffer from anemia [8].

Anemia has an impact on young women, such as stunted growth, the body is easily infected, resulting in reduced fitness or body freshness, decreased enthusiasm for learning or achievement, apart from that it can cause symptoms of paleness, lethargy or fatigue, shortness of breath and lack of appetite and growth disorders. Some of the direct impacts that occur in young women who suffer from anemia are often complaining of dizziness and dizziness in their eyes, their eyelids,

lips, tongue, skin and palms become pale, lethargic, weak, tired, fatigued and limp, as well as long-term impacts. because women will later become pregnant and have children, during pregnancy teenagers who already suffer from anemia will have more severe anemia during pregnancy because pregnancy requires more nutrition, if this is not treated it will have a bad impact on the mother and baby [9].

The level of knowledge in adolescents is very important and influences attitudes and behavior in efforts to form positive actions to prevent anemia in adolescent girls. A person's knowledge and behavior regarding anemia prevention will make it easier to shape a person's behavior in consuming TTD. The level of knowledge in adolescents influences attitudes and behavior in choosing food at school and at home, which determines whether it is easy for someone to understand the benefits of TTD [10].

In the description above, researchers are interested in conducting research on the influence of knowledge on the consumption of Fe tablets among teenagers at SMAN 3 Rumbai, Pekanbaru City. The aim of this study was to determine the effect of knowledge on the consumption of Fe tablets in adolescents.

## **RESEARCH METHODS**

This type of quantitative research uses a descriptive analytical design, the research design uses cross sectional. The research location was carried out at SMAN 3 Rumbai, Pekanbaru City. The population of this study was 168 young women and the total sample was 119 young women using stratified random sampling techniques, using univariate and bivariate data analysis where univariate analysis looked at the frequency distribution of knowledge regarding consuming Fe tablets. The research instrument used a questionnaire and data collection was carried out directly by the researcher. Next, a bivariate analysis was carried out using

the Chi Square test to see the effect of knowledge on consuming Fe tablets.

## RESULTS AND DISCUSSIONS

### Result

Table 1. Frequency Distribution of Knowledge of Tablet (Fe) Consumption among Young Women at SMAN 3 Rumbai, Pekanbaru City

Characteristics	Amount	Percentage (%)
<b>Knowledge</b>		
Not enough	50	42,0
Tall	69	58,0
<b>Taking Fe Tablets</b>		
Never	53	44.5
Once	66	55.5

Table 1 shows that the results of the univariate analysis showed that the distribution of high knowledge among young women was 58.0%, while 42.0% of young women had low knowledge, 55.5% of young women had ever consumed fe tablets, while young women who had never consumed tablets fe as much as 44.5%.

Table 2. Effect of income on consuming Fe tablets among young women at SMAN 3 Rumbai, Pekanbaru City

No	Knowledge	Taking Fe Tablets				Amount	P Value
		Never		Once			
		f	%	f	%		
1	Not enough	31	62,0	19	38,0	50	0,00 2
2	Tall	22	31,9	47	68,1	69	
<b>Amount</b>		<b>53</b>	<b>44,5</b>	<b>66</b>	<b>55,5</b>	<b>119</b>	

Table 2 shows the interpretation of the table above that the results of the analysis of the relationship between knowledge and consuming Fe tablets where it is known that of the 50 young women who have less knowledge, 62.0% of young women have never consumed Fe tablets and 38.0% have ever consumed Fe tablets. Meanwhile, of 69 young women with high knowledge, 68.1% consumed Fe tablets and 31.9% never consumed Fe tablets. The statistical test obtained a value of  $p = 0.002$ , so it can be concluded that the influence of knowledge on consuming Fe tablets.

## Discussions

Adolescence is a critical period in a person's development cycle. During this period, many changes occur within a person in preparation for entering adulthood. Adolescents are no longer said to be children, but they also cannot be said to be adults. This happens because this period is full of turbulent changes, both biological, psychological and social growth. In this state of responsibility, it often triggers conflict in the surrounding environment (external conflict). If this conflict is not resolved well, it will have a negative impact on the development of the teenager in the future, especially on the maturation of their character and often triggers mental disorders [11].

One of the causes of anemia is a lack of consuming foods that contain iron. Malnutrition in the early stages may not cause symptoms, but it can already affect organ function. The number of people suffering from iron deficiency anemia is 2.5 times greater than the number of people suffering from iron deficiency anemia [11].

The factors that influence the acceptability of Fe tablets are not only knowledge, but there are other factors that can influence the response to giving Fe tablets. The factors that can influence the acceptability of Fe tablets are individual experience, factors that come from within oneself such as emotions, habits and body image. Another factor that can influence the acceptance of Fe tablets in adolescents is motivation [12].

Knowledge and compliance with consuming blood supplement tablets is related to anemia status in adolescents. Good knowledge about anemia and nutrition will influence teenagers' eating patterns so that they can prevent anemia. Apart from that, complying with taking blood supplement tablets will also affect hemoglobin levels in teenagers [13]

Studies conducted [14] There is a relationship between knowledge in

consuming iron tablets at SiniSukai Bingai Private Middle School with a P value of  $0.000 < 0.05$ . The results of this research conducted [4] showed a relationship between knowledge and compliance with the consumption of blood supplement tablets at SMP N 1 Karangnongko. The statistical test with chi square was obtained with a p value = 0.001 ( $p < 0.05$ ). Study [15] It is known that there is a relationship between the level of knowledge about anemia and compliance with consuming Fe tablets among young women at SMA Negeri 1 Sewon, Bantul, Yogyakarta with a P value of  $0.027 < 0.05$ .

Study [16] relationship between respondents' knowledge and compliance with taking class X Fe tablets at SMK N 1 Klaten. The p value obtained was  $0.02 < \alpha: 0.05$ , where the knowledge of young women is dominant, which is very important to increase the adherence of young women to taking Fe tablets to prevent anemia in young women. These results show that the better the knowledge, the more compliant young women are in drinking.

Anemia in teenagers has a negative impact on reducing immunity, concentration, learning achievement, and fitness of teenagers and makes teenagers often sleepy when studying at school. The health of a teenager greatly determines the success of health development, especially in efforts to produce the quality of the nation's future generation in the future. considering that they are prospective mothers who will become pregnant and give birth to a baby, teenagers' knowledge about consuming Blood Supplement Tablets must be emphasized again. Because, if teenagers' knowledge about the benefits of blood supplement tablets is good then this will minimize the risk of maternal death, premature babies and low birth weight babies [17].

Teenage girls are required to take blood supplement tablets because every month they menstruate. Blood supplement tablets are also useful for replacing iron

lost due to menstruation and for meeting iron needs that have not been met from food. Iron in young women is also useful for increasing study concentration, maintaining fitness and preventing anemia in future mothers [18].

According to research assumptions, a person's knowledge is obtained based on understanding what is around them through the senses. In the lives of teenagers, what researchers do is that their subjects spend time outside the home (environment) and the information they get is only from their environment. The gadgets they use are not for looking for information about the benefits of tablets but are used to watch or play online games that make them staying up late and not getting enough sleep, the other thing is just looking for school material, even though the benefits of Fe tablets in preventing anemia are very important, their curiosity about this is still very minimal. Therefore, the role of female companions (parents or teachers) is very necessary to increase health education, especially the benefits of Fe tablets in preventing anemia.

## CONCLUSION

This research concludes that there is an influence of knowledge on consuming Fe tablets, so it is hoped that with good knowledge, young women will think and try to avoid anemia. Apart from that, complying with taking blood supplement tablets will also affect hemoglobin levels in teenagers.

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