

## THE CORRELATION BETWEEN KNOWLEDGE WITH ATTITUDES OF ADOLESCENTS IN CONSUMING IRON TABLETS AT SMP NEGERI 2 KABANJAHE, KABANJAHE DISTRICT, KARO REGENCY IN 2023

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### ABSTRACT

*Lack of iron in adolescents without balanced adequate iron intake will continue during pregnancy when pregnancy will cause fetal growth is not optimal, low birth weight, the risk of bleeding during labor and increase the risk of maternal and infant death. Therefore most Obstetrics and Nutrition experts recommend iron supplements from preconception (adolescence). This was an analytical research with a Cross Sectional design, where researchers take samples from a population using a questionnaire as a data collection tool to determine the relationship between knowledge and attitudes of adolescents in consuming iron tablets at SMP Negeri 2 Kabanjahe, Karo Regency, North Sumatra Province in 2023. Results of a study conducted by the author entitled "The Relationship of Knowledge and Attitudes of Adolescents in Consuming Iron Tablets at SMP Negeri 2 Kabanjahe, Karo Regency, North Sumatra Province in 2023". By measuring the knowledge and attitudes of adolescents in consuming Iron Tablets. This research by looking at secondary data, data obtained from SMP Assisi is like looking at the number of adolescent girls. The conclusion of the statistical test results is obtained p value = 0.000 ( $p < 0.05$ ). This means that there is a significant relationship between knowledge and attitudes of adolescents in taking iron tablets.*

**Keywords:** Adolescents, anemia, iron, knowledge, attitude



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### INTRODUCTION

Adolescence is a transition period from childhood to adulthood that requires higher nutrients including iron. Where adolescent girls are more susceptible to anemia because they have experienced menstruation. (Sediaoetama, 2018). Lack of iron in

adolescents without balanced adequate iron intake will continue during pregnancy when pregnancy will cause fetal growth is not optimal, low birth weight, the risk of bleeding during labor and increase the risk of maternal and infant death. Therefore most Obstetrics and Nutrition experts

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recommend iron supplements from preconception (adolescence).

Based on the 2015 Minister of Health Regulation concerning Nutritional Supplementation Product Standards, nutritional supplementation in the form of blood-added tablets is a nutritional supplement with the least iron content in women of childbearing age, including adolescents, this is intended to increase concentration and prevent bleeding during pregnancy, childbirth and puerperium. (Permenkes RI, 2015).

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Risk data for adolescent girls aged 13-18 years amounted to 22.7% had anemia (Riskesdas, 2013). According to research, vegetarian diets that are trending among some teenagers can also affect sex hormones, in this diet limit meat consumption or not eat meat at all. Women who are on a vegetarian diet have an increased frequency of menstrual cycle disorders. The prevalence of menstrual irregularities was 26.5% in vegetarians, and 4.9% in non-vegetarians (Francin & Erna, 2015). Young women in addition to limiting food consumption also have taboos on food because they

want to pay attention to body shape (Sediaoetama, 2018).

Iron supplementation programs or TTD for adolescent girls are expected to contribute to breaking the cycle of malnutrition between generations. The Indonesian government since 1997 has carried out a program to prevent and control nutritional anemia in women of childbearing age (WUS) by intervening WUS early, namely since adolescence. Giving TTD to adolescent girls is 1 tablet / week and 1 tablet / day during menstruation.

Indirect factors causing anemia are factors of knowledge, educational status, environmental conditions and lack of iron intake (Price, 2016). Anemia can be caused by knowledge. According to Mamta's (2014) research, women's age, education, and work status have a statistically significant relationship with knowledge related to anemia.

Adolescent age needs to be made efforts to improve health, nutritional status, especially in adolescent girls as the next generation and potential development resources. Adolescent girls who are maintained in good health will become healthy

mothers when entering marriage and pregnancy, so to prevent the incidence of iron deficiency anemia, young women need to be equipped with knowledge about iron deficiency anemia itself (Dharmadi, 2011).

## MATERIAL AND METHOD

This type of research is an analytical study with a Cross Sectional design, where researchers take samples from a population using questionnaires as a data collection tool to determine the relationship between knowledge and attitudes of adolescents in consuming iron tablets at SMP Negeri 2 Kabanjahe, Karo Regency, North Sumatra Province in 2023 (Hermanto, 2015).

## RESULT

**Table 1. Frequency Distribution Based on the Knowledge of Young Women in SMP Negeri 2 Kabanjahe, Karo Regency, North Sumatra Province in 2023**

Knowledge Level	f	%
1. Good	10	25,6
2. Enough	11	28,2
3. Less	18	46,2
Total	39	100,0

Based on table 1 above, it can be seen that from a total of 39 adolescent female respondents, the majority of

respondents were less knowledgeable as many as 18 respondents (46.2%) and the minority of respondents with good knowledge of 10 people with (25.6%).

**Table 2. Frequency Distribution of Respondents Based on Young Women's Attitudes at SMP Negeri 2 Kabanjahe, Karo Regency, North Sumatra Province in 2023**

Attitude	f	%
1. Consume	10	25,6
2. Not Consuming	29	74,4
<b>Total</b>	<b>9</b>	<b>100,0</b>

Based on table 4.2 above, it can be seen that of the 39 respondents, the majority of respondents did not consume iron tablets, 29 people (74.4%)

**Table 3. Distribution of Knowledge Frequency and Attitudes of Adolescents in Consuming Iron Tablets at SMP Negeri 2 Kabanjahe, Karo Regency, North Sumatra Province in 2023**

	Value	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.000 <sup>a</sup>	.000
Likelihood Ratio	44.403	.000
Linear-by-Linear Association	28.157	.000
N of Valid Cases	39	

Based on table 4.3 above, it was found that from 39 respondents, results can be obtained that there is a relationship between Knowledge and Attitudes of Adolescents in Consuming Iron Tablets at

SMP Negeri 2 Kabanjahe, Karo Regency, North Sumatra Province in 2023 with a P value of  $0.000 < 0.05$

## DISCUSSION

Nutritional anemia is caused by a lack of nutrients that play a role in the formation of hemoglobin, either due to lack of consumption or due to impaired absorption. The nutrients concerned are iron, protein, pyridoxine (vitamin B6) (Almatsier, 2010). Anemia can occur in adolescents due to lack of iron intake in food consumed. In addition, in adolescent women who experience menstruation there is a lack of blood which causes adolescent women to be susceptible to anemia. This is certainly not good in the development of adolescents because it can interfere with the level of productivity in learning (Istiany and Rusilanti, 2013).

Iron supplementation programs or Blood Added Tablets (TTD) for adolescent girls are expected to contribute to breaking the intergenerational cycle of malnutrition. The Indonesian government since 1997 has carried out a program to prevent and control nutritional anemia in women of childbearing age (WUS) by intervening WUS early, namely since adolescence. This program aims to support efforts to reduce maternal mortality by

reducing the risk of bleeding due to anemia in pregnant women. Giving TTD to adolescent girls is 1 tablet / week and 1 tablet / day during menstruation (Nuradhiani, 2017).

Based on the theory of individual development stages according to Erickson from infancy to old age, adolescence is divided into three stages, namely early adolescence, middle adolescence, and late adolescence. The age range of early adolescence in women is 13-15 years and in men is 15-17 years. The age range of middle adolescence in women is 15-18 years and in men is 17-19 years. While the age range of late adolescence in women is 18-21 years and in men 19-21 years (Hurlock, 2005). Based on a 2002 survey on risky behaviors that have an impact on adolescent reproductive health, it is found that adolescents covered are those aged 10-24 years (Maryatun, 2013). So it can be concluded that adolescence is a transition period or transition period from childhood to adulthood which lasts at the age of 12 years to 21 years with physical, social, and psychological changes, where psychologically adolescents begin to integrate with adult society and are at the same level.

## CONCLUSION

The results of research on the Knowledge and Attitudes of Adolescents in Consuming Iron Tablets at SMP Negeri 2 Kabanjahe, Karo Regency, North Sumatra Province in 2023 with a total of 39 respondents, the following conclusions that results of statistical tests,  $p$  value = 0.000 ( $p < 0.05$ ). This means that there is a significant relationship between knowledge and attitudes of adolescents in taking iron tablets

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