Journal of Health and Nutrition Research
Published by
Media Publikasi Cendekia Indonesia
https://www.journalmpci.com/index.php/jhnr/index
ISSN : 2829-9760 (Online - Elektronik)
ISSN 2829-9760

Original Research
Journal of Health and Nutrition Research, Vol. 2 No. 3 (2023): 181-189

Correlation between Knowledge and Attitudes of Female Adolescents Towards Compliance with Iron Supplements

Nurhaera[1]*, Riana Pangestu Utami[1], Riska Mayang Saputri[1]
[1] Department of Nutrition, Health Polytechnic, Ministry of Health, East Kalimantan, Indonesia
*Corresponding author, contact: heraara24@gmail.com

Abstract

The research aims to determine the correlation between the knowledge and attitudes of female adolescents toward compliance with consuming iron supplements at the Junior High School of SMPN 01 Long Bagun. This research was quantitative design research with a cross-sectional approach with a sampling technique using proportionate stratified random sampling. In selecting samples for each class, simple random sampling was used. The number of samples in this study was 79 female students at SMPN 01 Long Bagun, using questionnaires and interviews. Bivariate results show no significant relationship was found between knowledge and compliance with consuming iron supplements with a p-value of 0.2560 with r 0.129; also, no significant relationship between attitude and compliance with consuming iron supplements with a value of 0.0280.05 with r = 0.248. It is suggested that schools be able to carry out activities for drinking iron supplements together at school so that female adolescents can be controlled at predetermined and scheduled times and that the Community Health Center can provide counseling to young women on an ongoing basis and supervise schools regarding the implementation of drinking iron supplements together, as well as making efforts to carry out hemoglobin checks for them at school.

Keywords: Knowledge, Attitude, Female Adolescent, Iron Supplements, Compliance

Key Messages:

- The proposed interventions focus on addressing practical and social barriers to compliance, rather than just providing information

Access this article online
Quick Response Code

Copyright (c) 2023 Authors.

Received: 24 September 2023
Accepted: 8 October 2023

DOI: https://doi.org/10.56303/jhnresearch.v2i3.182

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

1. Introduction

Anemia is a public health problem in Indonesia that is still of concern to the government and has not yet been thoroughly addressed. Anemia can be experienced by all age groups, from toddlers, teenagers, and pregnant women to the elderly. Adolescent girls are vulnerable to anemia because during adolescence, they experience menstruation every month, and their physical growth is very rapid, so nutritional needs during this period also increase (1).

The 65th World Health Assembly (WHA) agreed on a global action plan and targets for maternal, infant and child nutrition, with a commitment to halve (50%) the prevalence of anemia in Women of childbearing age by

2025(2). Following up on these recommendations, the Indonesian government intensified the prevention and control of anemia in young women and Women of childbearing age by prioritizing the provision of Iron Supplements through school institutions (3). The Indonesian Government's program that focuses on preventing anemia in adolescent girls is the Iron Nutrition Anemia Prevention and Management Program (In Indonesia: Program Pencegahan dan Penanggulangan Anemia Gizi Besi, abbreviated as PPAGB) targeting junior high school and senior high school students by providing iron capsule supplementation (4). Teenage girls who are anemic will impact their health and achievement at school. Teenagers who are anemic in the future can cause suboptimal growth and development of the fetus, complications in pregnancy and childbirth, and death of mother and child if not handled properly (1). The Indonesian government has a comprehensive program to prevent anemia in adolescent girls. This program includes the distribution of iron tablets, empowerment of adolescent girls, and increased access to nutritious food. The government has set a target to reduce the prevalence of anemia in adolescent girls from 27.7% to 22.5% by 2024

Anemia needs to be treated because anemia can reduce the body's immune system so that anemia sufferers are susceptible to infectious diseases, reduce fitness and mental agility due to lack of oxygen to muscle cells, and reduce learning achievement and work productivity (5). Knowledge and attitudes are factors that facilitate the formation of behavior. Changes in behavior will occur gradually, starting with changes in knowledge, then attitudes. After all these stimuli are realized, changes in action/practice emerge. Young women's attitude toward preventing anemia is the response of young women to statements about anemia consisting of symptoms, signs, causes, impacts, and efforts to prevent it (6). There are several reasons why young women in East Kalimantan Province may not be consuming iron supplements. One reason is lack of awareness of the importance of iron intake. Many young women are not aware that they are at risk of anemia, and they may not know the benefits of taking iron supplements. Another reason is lack of access to iron supplements. Iron supplements may not be available in all areas of East Kalimantan Province, and they may be too expensive for some young women

The Basic Health Research of the Republic of Indonesia (RISNAKES) 2018 report for East Kalimantan Province shows that the percentage of adolescent girls aged 10-19 years received iron supplements was 35.97%. Meanwhile, the percentage of iron supplements obtained from health facilities and taken by young women aged 10-19 < 52 items was 98.59%. The proportion of main reasons for not drinking/finishing iron supplements obtained from health facilities among young women aged 10-19 years was 8.86% answered that the taste and smell were unpleasant, 21.99% answered that there were side effects, and 78.15% said they felt no influence (5).

SMPN 01 Long Bagun is one of the schools in Mahakam Ulu district, a model school at junior high level in Mahakam Ulu district. The number of female students at SMPN 01 Long Bagun is 161 female students. Based on data at the Ujoh Bilang Community Health Center in 2021 at SMPN 01 Long Bagun, the distribution percentage of iron supplements was 100 percent, and consumption of iron supplements was less than 52 tablets. Preliminary studies that were carried out at SMPN 01 Long Bagun, interviewing several female students in each class to obtain data on compliance with the consumption of blood supplement tablets, showed that female students did not consume iron supplements simultaneously at school, which should have been consumed at school simultaneously every week.

Based on these data, it is necessary to carry out further research on the relationship between knowledge, attitudes, and compliance of young women consuming blood supplement tablets at SMPN 01 Long Bagun.

2. Methods

This type of research was quantitative design research with a cross-sectional approach. The population in this study were all female students of SMPN 01 Long Bagun who had received iron supplements aged 12-16 years in classes VII and VIII at SMPN 01 Long Bagun. The minimum sample size calculation used the Slovin formula with a sample size of 79 people. Inclusion criteria were: (1) female students in class VII, VIII; (2) age 12 years – 16

years; (3) have received iron supplements; (4) Have the status of an active female student; (5) willing to be a respondent. The exclusion criteria were: (1) Children who were not present at the time of the research, forgot permission, or were sick; (2) not willing to be a respondent. Sampling used the proportionate stratified random sampling technique. The independent (free) variables in this study were the knowledge and attitudes of young women, while the dependent variable in this study was the adherence of female adolescents to consuming iron supplement tablets.

Table 1 Research Variables

No	Variable	Operational definition	Instrument	Procedure	Result	Scale
1	Knowledge	Knowledge is information about iron supplements that is owned and obtained by asking questions through a questionnaire.	Questionnaire	Fill Questionnaires	a. Good if > 76% b. Enough if 60-75% c. Less if <60 % (7)	Ordinal
2	Attitude	The attitudes of female adolescents regarding iron supplement tablets were obtained by providing statements through a questionnaire.	Questionnaire	Fill Questionnaires	a. Good if > 76% b. Enough if 60-75% c. Less if <60 % (8)	Ordinal
3.	Obedience	Female adolescents' compliance with consuming 13 tablets for 3 months	Questionnaire	Checking by Observation Sheet	a. Consumed regularly (consume iron supplements tablet/week) b. Consumed not regularly (consuming iron supplements not regularly every week) c. Do not consume (Do not consume at all iron supplements 1 tablet/week) (9)	Ordinal

Primary data in this study was obtained from filling out knowledge and attitude questionnaires by respondents and interviews regarding compliance with taking iron supplement tablets. Meanwhile, secondary data is obtained from SMPN 01 Ujoh Long Bagun School regarding the number of female students at SMPN 01 Long Bagun.

This analysis was used to determine the relationship between the knowledge and attitudes of female adolescents toward compliance with the consumption of iron supplement tablets using the Sperm test. This analysis is carried out to see the relationship or correlation between independent and dependent variables. The Spearman test results showed a p-value < α (0.05), H_0 was rejected, and H_a was accepted, meaning a relationship

exists between the independent and dependent variables. On the other hand, if a p-value> α (0.05), H_0 is accepted, and H_a is rejected, which means no relationship between the independent and dependent variables.

The researcher took female students aged 12-18 years at SMPN 01 Long Bagun as research samples, so before conducting the research, the researcher submitted it to the KEPK (Komisi Etik Penelitian Kesehatan) of the East Kalimantan Health Polytechnic. This research met ethical requirements and was approved to be carried out (DP.04.03/7.1/7865/2023).

3. Results

Table 2 Characteristics of Respondents

Variable	Categories	n (79)	%
Age	12 y.o	21	26,6
	13 y.o	32	40,5
	14 y.o	24	30,4
	15 y.o	2	2,5
Education of Father	Not completed in primary school	4	5,1
	Finished elementary school	11	13,9
	Not completed junior high school	13	16,5
	Finished junior high school school	12	15,2
	Not completed senior high school	5	6,3
	Finished senior high school	21	26,6
	College	13	16,5
Education of Mother	Not completed in primary school	3	3,8
	Finished elementary school	7	8,9
	Not completed junior high school	14	17.7
	Finished junior high school school	14	17.7
	Not completed senior high school	4	5.1
	Finished senior high school	23	29.1
	College	14	17.7
Occupation of Father	Civil servants	6	7.6
	Private employees	8	10.2
	Self-employed	13	16.4
	Farmers/Farm Laborers	19	24.0
	Fisherman	1	1.3
	Laborer/Driver/Ojek Driver/Household Assistant	30	37.9
	Doesn't work	2	2.6
Occupation of Mother	Civil servants	7	8.9
	Private employees	4	5.1
	Self-employed	1	1.3
	Farmers/Farm Laborers	5	6.3
	Laborer/Driver/Ojek driver/household assistant	18	22.8
	Housewife	44	55.6
Religion	Islam	18	22.8
	Christian	61	77.2

Table 2 shows the distribution of respondents based on age. The largest respondents were 13 years old, 40.5% (32 people), and the fewest were 15 years old, 2.5% (2 people). Based on the father's last education, the majority were high school graduates, namely 26.6% (21 people), and the fewest respondents were not high school graduates, 6.3% (5 people). By the mother's education level, most respondents were high school graduates at 29.1% (23 people), and the fewest were not high school graduates at 5.1% (4 people). Based on the father's occupation, most respondents were workers/heads/household assistants at 37.9% (30 people), and the fewest

were fishermen at 1.3% (1 person). According to the mother's occupation, most respondents were housewives at 55.7% (44 people), and the fewest respondents were entrepreneurs at 1.3% (1 person). Based on religion, the number of respondents were Christians at 77.2% (61 people), and the rest were Muslims.

Table 3 Classification of Adolescent Awareness

Question	n	%
Taking iron supplement tablets at school		
Yes	14	17.7
No	65	82.3
Reasons for taking iron supplements		
The teacher's orders/advice	31	39.2
It is free	18	22.8
Friends consumed it	0	0.0
To prevent anemia	30	38.0
Number of iron supplements taken in the last 7 weeks		
≤5 tablets	60	75.9
>5 tablets	19	24.1
Always take iron supplement under supervision		
Yes	0	0.0
No	79	100.0
Have you ever missed taking iron supplement tablets?		
Yes	79	100.0
No	0	0.0
Reasons for skipping taking iron supplement tablets		
Forget	67	84.8
Not present in school	0	0.0
There are side effects	12	15.2
Did not receive any iron supplement tablets	0	0.0

Table 3 shows the classification of adolescent alertness. Adolescent girls do not consume iron supplement tablets at school, 82.3%, the number of iron supplement tablets taken in the last 7 weeks is mostly <5 tablets was 75.9%, always take an iron supplement without supervision was 100%, and all respondents have missed taking iron supplement was 100%, and the reason for skipping taking iron supplement was because forgetting was 84.8%.

Table 4 Correlation between Knowledge and Attitudes among Female Adolescents towards Compliance with Iron Supplements Consumption

Independent Variable	Obedience				p-value	r
	Yes		No			
	n	%	n	%		
Knowledge						
Low	1	1.3	16	20.2		
Sufficient	1	1.3	39	49.4	0.256	0.129
Good	3	3.8	19	24.0		
Attitude						
Low	0	0.0	4	5.1		
Sufficient	2	2.5	57	72.1	0.028	0.248
Good	3	3.8	13	16.5		

Table 4 shows no significant correlation between the level of adolescent knowledge and compliance with iron supplement consumption at SMPN 01 Long Bagun, p (0.256>0.05). The r value = 0.129 shows that the two variables are positive and directly proportional to the strength of the correlation, which is very weak (0 - 0.25).

Then, the Spearman test results showed a significant relationship between teenagers' attitudes towards compliance with iron supplement consumption at SMPN 01 Long Bagun, p 0.0028 (0.0028<0.05). The r value = 0.248 shows that the two variables are positive and directly proportional, with the strength of the correlation being very weak (0-0.25).

4. Discussion

The Correlation Between Knowledge of Young Women and Compliance with Iron Supplement Tablet Consumption

The results of the Spearman test show no significant relationship between the level of adolescent knowledge and compliance with iron supplements at SMPN 01 Long Bagun, p (0.256 > 0.05). This is in line with research conducted by Ningtyas et al. (2021) (10); the measured experimental results obtained were p = 0.414 > 0.05. This is similar to research conducted by Lismiana & Indarjo (2021) (11) with the results that there was no relationship between knowledge about anemia and iron supplement tablets and adolescent girls' compliance in consuming iron supplement tablets where p = 0.93 (p> 0.05). The results of this study are also in accordance with Lestari et al. (2016) (12), which stated that there was no relationship between information and the use of iron supplement tablets during menstruation among young women at SMAN 2 Banguntapan Bantul, p>0.05. Behavior (use of iron supplement tablets) is not only influenced by internal factors such as age and environment. However, it is influenced by external factors such as region and other internal factors, namely knowledge, insight, feelings, inspiration, and ability to handle external pressure. In the category of good or sufficient knowledge, female students did not consume iron supplement tablets during their monthly cycle due to low awareness of consuming iron supplement tablets.

Ramlah et al. (2022) (13) stated that Although these young women have fairly good knowledge, they are influenced by internal factors such as age and gender, young women will not comply with taking iron supplement tablets. Consumption is a type of genuine behavior closely related to information, but before an individual acts, there is a cycle of acceptance that underlies the development of individual behavior. One process of accepting behavior is experimentation. On the other hand, even though young women have poor knowledge, they are aware that consuming iron supplement tablets has health benefits, so young women will be obedient in consuming iron supplements (14).

The level of knowledge of the sample that is not related to compliance with iron supplement tablet consumption is influenced by several confounding factors that can cause teenagers to experience anemia. Another influencing factor is when the knowledge that teenagers have has not been applied in everyday life. For example, teenagers already know about breakfast as one of the causes of anemia but still do not eat breakfast before school. This is an example that knowledge cannot increase awareness and change a person's behavior (15).

According to researchers, one of the factors that influence the absence of a relationship between knowledge and compliance with consuming iron supplement tablets in young women is that female students still do not consider it important to consume iron supplement tablets, supported by data on the distribution of knowledge questions where the lowest score is for the question anemia can cause various impacts bad for young women among others about 64.1%. Awareness data shows that 100% of young women have missed taking iron supplement tablets, and as many as 84.8% have missed taking blood supplement tablets because they forgot, as well as school officials who have not been strict about encouraging students to take iron supplement tablets regularly and because there has been no anemia check by the health center to female students. Then, no data can show any impact if they do not take iron supplement tablets regularly. Apart from being influenced by behavioral and knowledge factors, the consumption of blood-enhancing tablets in teenagers is also influenced by a lack of interest in consuming Fe-enhancing tablets as an iron-boosting supplement. This is because young women feel that there are side effects usually caused by iron supplement tablets 15.2% (10 people).

The relationship between knowledge and compliance with iron supplement tablet consumption is not always significant. This may be due to the measurement of knowledge, honesty of respondents, or other factors such as side effects, cost, and access. In addition to these reasons, it is important to note that correlation does not equal causation. Just because there is no significant correlation between knowledge and compliance does not mean that knowledge is not important. It is possible that knowledge has a significant indirect effect on compliance, or that it is more important for certain subgroups of people.

More research is needed to better understand the complex relationship between knowledge and compliance with iron supplement tablet consumption. However, the studies that have been conducted so far suggest that it is important to develop educational interventions that are tailored to the specific needs of the target population. These interventions should focus on practical knowledge, and they should be combined with other strategies to improve compliance, such as reducing side effects, making supplements more affordable and accessible, and providing social support

The Relationship between Young Women's Attitudes towards Compliance with Iron Supplement Tablet Consumption

The results of the Spearman test show a significant relationship between adolescent attitudes and compliance with iron supplement consumption at SMPN 01 Long Bagun with a p-value (0.028<0.05). In this study, although the results were significant, as seen from the level of correlation, it was still in the very weak category marked r = 0.248. One influencing factor is age; the average age of respondents is 13 years old, and they come from class VII, which still requires a lot of experience, knowledge, and adaptation from elementary to middle school, from children to teenagers, which influences attitudes and compliance.

This research was supported by Risva & Rahfiludin (2016) (16), which shows a relationship between attitude and the tendency to consume iron supplement tablets with a value of p = 0.031 (p < 0.05) and OR = 2.192. Respondents with an adequate attitude consumed 2.2 times more iron supplement tablets than respondents with a poor attitude. The correlation coefficient value in this study is r = 0.248, which shows that the two variables are positive and directly proportional, with the strength of the correlation being very weak (> 0-0.25).

Attitude is a predisposing factor for someone to behave healthily, according to L. Green's theory (17). The formation of attitudes that influence young women to consume iron supplements can occur due to the cognitive component of individual knowledge or beliefs regarding iron supplements opinions, which can benefit health (18). People with a positive attitude tend to behave positively (17). This is what makes attitude have a significant relationship with iron supplement compliance at SMPN 22 Semarang. In line with research on young women at SMAN 10 Kendari, attitudes influence compliance with iron supplement consumption.

Teenage girls with a positive attitude are 6 times more obedient in consuming iron supplement than teenagers with a negative attitude (19). Then, research on female students at SMPN 1 Kepahiang also showed a relationship between attitude and compliance with iron supplement consumption. Young women with negative attitudes tend to refuse iron supplements (20). This research is also supported by research by Setiawan et al. (2022) (21), namely, the results of other counseling for junior high school girls showed a significant increase in attitudes (p ≤0.05). Attitudes cannot be seen directly but can be seen as close behavior. The stimulus is framed by changing the response to improvement. Attitudes turn into behavioral tendencies and information signals (20). The good attitude of teenagers comes from increasing the amount of information obtained to know how to overcome and control the shortage of added tablets by consuming iron supplements. A good attitude is expected to align with increasing compliance with iron consumption in preventing and treating iron deficiency in young women. Based on awareness data, 40% consume iron supplements to prevent anemia.

Attitude distribution data was obtained from the statement with the lowest value: "In my opinion, consuming iron supplements is not important because it can only be adjusted to my health condition", as much as 66.4%. Young women are still indifferent because they feel there is no impact if they do not take iron supplements, and it will certainly have a negative impact on young women in terms of compliance with taking iron supplements. One of the factors that influences this is that there has been no anemia check by the health center for female students, so no data can show the impact of not taking iron supplements regularly.

Attitudes are a person's beliefs and feelings about something. They can be positive, negative, or neutral. Attitudes can influence behavior in a number of ways. For example, a person with a positive attitude towards iron supplementation is more likely to believe that iron supplements are beneficial and to be willing to take them. Knowledge is important, but it is not the only factor that influences behavior. Attitudes can also play a role, especially when people are faced with a decision that is difficult or requires some effort. In the context of iron supplement tablet consumption, taking iron supplements is a decision that can be difficult or require some effort. This is because iron supplements can cause side effects, such as constipation, nausea, and vomiting. They can also be expensive. In this context, attitudes can be a more important predictor of compliance than knowledge. This is because people with positive attitudes towards iron supplementation are more likely to be willing to put up with

the side effects and cost of taking them. The relationship between attitudes and compliance with iron supplement tablet consumption is complex. It is likely that a combination of factors, including knowledge, attitudes, and other factors such as side effects, cost, and access, influence compliance. The relationship between attitudes and compliance with iron supplement tablet consumption was significant, even though it was weak. This may be because attitudes are a better predictor of compliance than knowledge. Attitudes can influence behavior, especially when people are faced with a decision that is difficult or requires some effort. Our study was limited by a relatively small sample size and the use of self-reported data. Future research should use larger sample sizes and more objective measures to assess knowledge, attitudes, and compliance.

5. Conclusion

Knowledge and attitudes may not be the only factors that influence compliance with iron supplement consumption in adolescent girls. Other factors, such as forgetfulness, inconvenience, and side effects, may also play a role. The school environment may not be supportive of iron supplementation, as most of the respondents in our study did not take iron supplements at school. This suggests that it is important to develop school-based interventions to promote iron supplementation among adolescent girls.

Health educators should focus on developing interventions that: 1) Promote positive attitudes towards iron supplementation, 2) Make iron supplements more accessible and convenient for adolescent girls to take, 3) Address factors that may hinder compliance, such as forgetfulness and side effects. Our study provides valuable insights into the relationship between knowledge, attitudes, and compliance with iron supplement consumption in adolescent girls. Future research should focus on the following areas: 1) Identifying other factors that may influence compliance with iron supplement consumption in adolescent girls, 2) Developing and evaluating interventions to improve compliance with iron supplement consumption in adolescent girls.

Funding: This research received no external funding

Acknowledgments: We would like to thank the Junior High School of SMPN 01 Long Bagun for granting permission to carry out this research

Conflicts of Interest: The authors declare no conflict of interest

References

1. Sulistyorini E, Maesaroh S. Hubungan Pengetahuan dan Sikap Remaja Putri Tentang Anemia dengan Perilaku Mengkonsumsi Zat Besi Di RW 12 Genengan Mojosongo Jebres Surakarta. Jurnal Kebidanan Indonesia. 2019;10(2):12–26.
2. Hasan MM, Soares Magalhaes RJ, Garnett SP, Fatima Y, Tariqujjaman M, Pervin S, et al. Anaemia in women of reproductive age in low- and middle-income countries: progress towards the 2025 global nutrition target. Bull World Health Organ. 2022 Mar 1;100(3):196–204.
3. Kemenkes RI. Pedoman pencegahan dan penanggulanngan anemia pada remaja putri dan WUS. Direktorat Gizi Masyarakat. 2016. 97 p.
4. Tim Riskesdas 2018. Laporan Provinsi Kalimantan Timur Riskesdas 2018. Lembaga Penerbit Badan Litbang Kesehatan. 2019;472.
5. Kemenkes RI. Hasil Riset Kesehatan Dasar Tahun 2018. Kementrian Kesehatan RI. 2018;53(9):1689–99.
6. Listiana A. Analisis Faktor-Faktor yang Berhubungan Dengan Kejadian Anemia Gizi Besi pada Remaja Putri di SMKN 1 Terbanggi Besar Lampung Tengah. Jurnal Kesehatan. 2016;7(3):455.
7. Darsini D, Fahrurrozi F, Cahyono EA. Pengetahuan; Artikel Review. Jurnal Keperawatan. 2019;12(1):13.
8. Budiman A. Kapita Selekta Kuesioner : pengetahuan dan Sikap dalam Penelitian Kesehatan. Jakrta: Salemba Medika; 2013.
9. Kaur GD, Chauhan N, Varshney DS, Kumar A. ORIGINAL ARTICLE A Study on Weekly Iron Folic Acid Supplementation and Regular Deworming Programme in Rural Schools of Mathura District. 2020;46–50.
10. Ningtyas O, Ulfiana E, Yono N. Hubungan Pengetahuan tentang Anemia dan Dukungan Keluarga terhadap

Kepatuhan Konsumsi Tablet Tambah Darah pada Remaja Putri di SMPN 01 Brondong Lamongan. Indonesian Journal of Midwifery (IJM). 2021;4(2):128.
11. Lismiana H, Indarjo S. Pengetahuan dan persepsi remaja putri terhadap kepatuhan konsumsi tablet tambah darah. Indonesian Journal of Public Health and Nutrition. 2021;1(1):22–30.
12. Lestari P, Widardo W, Mulyani S. Pengetahuan Berhubungan dengan Konsumsi Tablet Fe Saat Menstruasi pada Remaja Putri di SMAN 2 Banguntapan Bantul. Jurnal Ners dan Kebidanan Indonesia. 2016;3(3):145.
13. Ramlah, Ida AS, Saadong D, Sabur F. Hubungan Pengetahuan dan Sikap dengan Kepatuhan Mengkonsumsi Tablet Fe pada Remaja Putri di Wilayah Kerja Puskesmas Minasa Upa Makassar. Jurnal Inovasi Penelitian. 2022;91(5):328–41.
14. Izzani R. Hubungan Tingkat Pengetahuan dengan Perilaku Konsumsi Tablet Fe Saat Menstruasi pada Mahasiswi FKM Unair Surabaya. Jurnal Biometrika dan Kependudukan. 2018;
15. Suryani D, Hafiani R, Junita R. Analisis Pola Makan Dan Anemia Gizi Besi Pada Remaja Putri Kota Bengkulu. Jurnal Kesehatan Masyarakat Andalas. 2017;10(1):11–8.
16. Risva TC, Rahfiludin MZ. Faktor-Faktor Yang Berhubungan Dengan Kebiasaan Konsumsi Tablet Tambah Darah Sebagai Upaya Pencegahan Anemia Pada Remaja Puteri (Studi Pada Mahasiswa Tahun Pertama Di Fakultas Kesehatan Masyaratak Universitas Diponegoro). Jurnal Kesehatan Masyarakat. 2016;4(3):2356–3346.
17. Purnamasari G, Margawati A, Widjanarko B. Pengaruh Faktor Pengetahuan dan Sikap Terhadap Kepatuhan Ibu Hamil dalam Mengkonsumsi Tablet Fe di Puskesmas Bogor Tengah. Jurnal Promosi Kesehatan Indonesia. 2016;11(2):100.
18. Nurjanah A, Azinar M. Kepatuhan Konsumsi Tablet Tambah Darah pada Sekolah Percontohan Kesehatan. Higeia Journal Of Public Health. 2023;7(2):244–54.
19. Sety LOM, Syarifuddin Y, Tina L, Majid R. Female Adolescents in attitudes and side effects of consuming iron supplements. Al-sihah: The Public Health Science Journal. 2020;12(2):181.
20. Andani Y, Esmianti F, Haryani S. Hubungan Pengetahuan dan Sikap Remaja Putri Terhadap Konsumsi Tablet Darah (TTD) Di SMP Negeri 1 Kepahiang. Jurnal Kenidanan Besurek. 2020;5(2):55–62.
21. Setiawan, Cahyani, Mulya, Safitri. Pengaruh Pendidikan Kesehatan terhadap Pengetahuan Dan Sikap Terhadap Konsumsi Tablet Tambah Darah. Jurnal JPKES. 2022;3(1):1–9.