

## THE EFFECT OF EDUCATION ON ANEMIA PREVENTION IN ADOLESCENT WOMEN

Rossi Septina<sup>1</sup>

STIKES Bhakti Pertiwi Indonesia. Prodi S1 kebidanan

Corresponding Email : [rossiseptina19@gmail.com](mailto:rossiseptina19@gmail.com), [rossi.septina@stikesbpi.ac.id](mailto:rossi.septina@stikesbpi.ac.id)

### ABSTRAK : PENGARUH PENDIDIKAN TERHADAP PENCEGAHAN ANEMIA PADA REMAJA WANITA

Pendahuluan: Anemia merupakan salah satu masalah kesehatan yang dapat terjadi pada semua kelompok umur mulai dari balita sampai usia lanjut. Pada remaja putri (rematri) rentan menderita anemia, hal ini dapat disebabkan karena siklus menstruasi setiap bulan yang rentan terjadinya anemia. Anemia dapat menyebabkan penurunan daya tahan tubuh dan produktivitas. Anemia yang terjadi pada rematri dapat bersiko pada saat hamil dan akan berdampak negative terhadap pertumbuhan dan perkembangan janin dalam kandungan serta berpotensi menimbulkan komplikasi kehamilan dan persalinan, bahkan menyebabkan kematian ibu dan anak.

Tujuan: Tujuan dalam penelitian untuk mengetahui perbedaan sebelum dan sesudah diberikan edukasi tentang pencegahan anemia.

Metode: penelitian ini menggunakan metode analisis kuantitatif yang menggunakan kuesioner berbasis pilihan ganda yang terdiri dari 25 pertanyaan, dilakukan pada 38 orang, dilakukan tes sebelum dan sesudah dilakukan edukasi (One-Group Pra-Test dan Pasca-Test). Penelitian ini dilakukan pada bulan September 2024.

Hasil Penelitian: Penelitian ini menunjukkan nilai sig (2-tailed) adalah sebesar  $0,000 < 0,05$ , maka  $H_0$  ditolak dan  $H_a$  diterima. Sehingga dapat disimpulkan bahwa ada perbedaan rata-rata antara sebelum dengan sesudah yang artinya ada pengaruh edukasi. Adanya peningkatan pengetahuan sebelum dan sesudah dengan nilai

Conclusion: Hasil penelitian ini menunjukkan bahwa pengetahuan remaja putri mengalami perubahan sesudah diberikan edukasi. Diharapkan kepada Petugas Kesehatan untuk sering memberikan edukasi kepada remaja putri tentang pencegahan anemia dan diharapkan dengan pengetahuan yang baik maka akan merubah perilaku remaja putri dalam kepatuhan dalam mengkonsumsi tablet tambah darah.

Kata Kunci: anemia, edukasi, remaja putri

### ABSTRACT

Introduction : Anemia is a health problem that can occur in all age groups, from toddlers to old age. Adolescent girls ( rheumats ) are susceptible to suffering from anemia, this can be caused by the monthly menstrual cycle which is prone to anemia. Anemia can cause a decrease in endurance and productivity. The anemia that occurs in rheumatism can be risky during pregnancy and 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.

Objective : The aim of the research was to find out the differences before and after being given education about preventing anemia.

Method : This research uses a quantitative analysis method using a multiple choice-based questionnaire consisting of 25 questions, conducted on 38 people, tested before and after education (One-Group Pre-Test and Post-Test). This pre-research was carried out in September 2024.

Results : This research shows that the sig (2-tailed) value is  $0.000 < 0.05$ , so  $H_0$  is rejected and  $H_a$  is accepted. So it can be concluded that there is an average difference between before and after, which means there is an influence of education. There is an increase in knowledge before and after the value

Conclusion : The results of this research show that the knowledge of young women experiences changes after being given education. It is hoped that Health Officers will often provide education to young women about preventing anemia and it is hoped that good knowledge will change the behavior of young women in complying with consuming blood supplement tablets.

Keywords: anemia, health education, young women

## INTRODUCTION

Health development public need effort health , sources Power health , and management health For increase degrees health the highest society based on principle welfare , equality , non-discrimination , participatory and sustainable in frame development source Power quality and productive human resources . ( Kemenkes RI, 2023).

Problems and disturbances health in society will lower productivity and generate loss for the country so that required transformation health For achievement improvement degrees health community . development health public the more good and open so that create independence and encourage development industry health national at regional and global levels as well push improvement service safe , quality and affordable health for public For increase quality life community ( Kemenkes RI, 2023).

Teenager Healthy is component main development Source Power human resources (HR) in Indonesia, things This can interpreted that healthy teenager is future investment nation . In the generation young This own very important role important For continue relay development and development nation . Then from That health and nutritional status teenager must prepared since as early as maybe . One of problem health is the focus of the government moment This that is anemia management in adolescents daughter ( Kemenkes RI, 2021).

Anemia is one of the problem health that can happens to everyone group age start from toddler until age continue . In adolescents daughter (rematric ) vulnerable suffer anaemia , thing This can due to Because cycle menstruation every vulnerable month the occurrence of anemia. Anemia can cause decline Power stand body and productivity . Anemia that occurs in rheumatoid arthritis can at risk at the moment pregnant and will have a negative impact on growth and development fetus in content as well as potential cause complications pregnancy and childbirth , even cause death mother and child (Kemenkes RI, 2024).

In 2019, the prevalence of anemia in general The global prevalence was 29.9% (95% uncertainty interval (UI) 27.0%, 32.8%) in women of childbearing age, equivalent to more than half a billion women aged 15–49 years. The prevalence was 29.6% (95% UI 26.6%, 32.5%) in nonpregnant women of childbearing age, and 36.5% (95% UI 34.0%, 39.1%) in pregnant women. Since 2000, the global prevalence of anemia in women of childbearing age has stagnated (WHO, 2021).

The prevalence of anemia in Indonesia is quite high Enough high . Based on results Riskesdas 2018, prevalence of anemia in adolescents which is 32% which means 3-4 out of 10 teenagers have anemia. This is Can also caused by intake suboptimal nutrition and lack of activity physical (Kemenkes RI, 2022).

Effort in lower prevalence of anemia is with Administration of TTD to adolescents daughter done through UKS/M in educational institutions with determine day drink TTD together, as mentioned in the Circular Director General Public Health Ministry of Health Number HK.03.03/v/0595/2016 regarding Supplemental Tablet Administration Blood in Adolescent Girls and Women of Age Dawn . The dose given is one tablet each Sunday during throughout year . ( Kemenkes RI, 2024)

Coverage supplemental tablet administration blood in adolescents daughters in Indonesia experience increase in 2023 , namely by 78.9% compared to 2022 , namely coverage supplemental tablet administration blood that is by 50% ( Kemenkes RI, 2024).

Proportion distribution of additional tablets blood (TTD) in adolescents princess at school by 76.2% even though only 1.4% of teenagers the princess who has get TTD  $\geq 52$  items , then as many as 98.6% of teenagers daughter only get  $< 52$  grains . In addition that , it was reported that at the age of 5-14 years , as many as 26.8% of children suffering from anemia and at the age of 15-24 years as much as 32%. ( Kemenkes RI, 2018). Factor or reason teenager daughter No drink or No spend the TTD he got from School namely 31.5% due to unpleasant taste and smell delicious , 20.5% felt No need drink , 19.2% because forget drink , 10% of it effect side , 3.5% only drunk moment period only , and the rest Because others (Riskesdas , 2018). Author can assume that Behavior teenager the daughter who influences in compliance TTD consumption , thing This Can seen Because majority teenager daughter feel No need drink and forget For For consuming TTD.

Activity promotion health is effort in meaning of education, has understanding that is all planned efforts for influence others, both individual , group or public so that they do What expected by education practitioners . In the changes behavior that has not been or No conducive to conducive behavior This contain meaning dimensions that is change behavior , coaching behavior , development behavior . In matter development behavior (Green, 1980) reveals that there is three causal factors formation behavior namely preposition factors , enabling factors and reinforcing factors . Lawreen Green tried analyze

behavior man from rank health . Health somebody or public influenced by two main factors that is factor behavior ( *behavior causes* ) and external factors behavior ( *non- behavioral causes* ) (Santoso , et al. , 2024).

Another theory that was developed Lawreen Green (1980) said if the behavioral factor will influenced by three factor namely predisposing , enabling and reinforcing factors . In matter this is a predisposing factor namely the factors that encourage the occurrence behavior somebody between other knowledge individual , attitude , belief , conviction , tradition , values or social norms and others that exist within oneself individual and society . Enabling factors namely the factor that makes behavior new will more easy in implement , namely availability means service health and convenience For achieve it , while factor amplifier is a factor that drives and strengthens the occurrence change behavior like figure society that can made into role model (BKKBN, 2021).

## RESEARCH METHODS

Design research used in study This namely pre- experimental with one group pretest-posttest without control design . Population in study This is all over junior high school students C, and the samples used namely 38 people use accidental sampling technique . Research conducted in the year 2024

month September .

Tool measurement used in study This that is instrument consisting of 25 questions closed with four answer that is a,b ,c,d are used in pretest-posttest. In measure knowledge teenager daughter .

Data analysis was performed with data normality test first formerly using the Kolmogorov-Smirnov Test and obtained data result no normally distributed . Then conducted statistical tests using the Wilcoxon 9 Test with degrees 5% error for prove hypothesis study .

## RESEARCH RESULTS

**Table 1**  
**Knowledge Teenage Girls**

Knowledge	Mean
Before	78.68
After	91.89

Table 1 shows that from second the sample studied namely pre- test and post-test scores . The pre-test scores obtained aerage knowledge score or a mean of 74.68. While For post-test scores obtained average knowledge score of 91.89. Because the average value of knowledge in the pre-test was 74.68 < post-test 91.89 , then in a way descriptive There is average difference in knowledge before and after

**Table 2**  
**Difference Knowledge Before and after**

Knowledge	Mean	Std. Deviation	Std.Error Mean	95% Confidence		t	df	Sig. (2-tailed)
				Lower	Upper			
Before after	-17,211	8,288	1,344	-19,934	-14,487	-12,804	37	0,000

Table 2 shows sig value (2-tailed) is of 0.000 < 0.05, then H0 is rejected and Ha is accepted . So that can concluded that There is the average difference between before with after which means There is influence education . From the table above also shows information about the mean paired difference value is of -17,211. This value show difference between the pre-test and post-test averages or  $74.68 - 91.89 = -17.211$  and the difference difference the between -19,934 to with -14.487 (95% Confidence Interval of the Difference Lower and Upper).

## DISCUSSION

From the results research that has been conducted by researchers show show sig value (2-tailed) is of 0.000 < 0.05, that There is the average difference between before with after which means There is influence education . From the table above also shows information about the mean paired difference value is of -17,211. This value show difference between the pre-test and post-test averages or  $74.68 - 91.89 = -17.211$  and the difference difference the between -19,934 to with -14.487 (95% Confidence Interval of the Difference Lower and Upper).

Research result This in accordance with study there is difference level knowledge before and after done education with mark significance 0.000 which means there is significant influence intervention

education to level knowledge teenager Woman about anemia and nutrition ( Hidayah , et all, 2022)

Teenager Healthy is component main development Source Power human resources (HR) in Indonesia, things This can interpreted that healthy teenager is future investment nation . In the generation young This own very important role club For continue relay development and development nation . Then from That health and nutritional status teenager must prepared since as early as Possible so that it is predicted that Indonesia will get binus demographics in 2040 which will come can produce generation successor a creative , productive nation as well as empowered compete . One of the problem health is the focus of the government moment This that is anemia management in adolescents daughter (Kemenkes RI, 2021).

## CONCLUSION

Research result This show sig value (2-tailed) is of  $0.000 < 0.05$ , that There is the average difference between before with after which means There is influence education

## SUGGESTION

From the results study This obtained that knowledge in prevent anemia in adolescents , and by knowledge This will change behavior teenager in compliance in Increased tablet consumption blood . .

## REFERENCES

- Bkkbn . 2021. Communication Change Training of Trainer (Tot) Mentoring Behavior Family In Acceleration Stunting Reduction for Provincial Level Facilitator [https://Lms-Elearning.Bkkbn.Go.Id/Pluginfile.Php/18047/Mod\\_Resource/Content/1/9.%20book%20communication%20change%20behavior%20family%20in%20acceleration%20decrease%20stunting.Pdf](https://Lms-Elearning.Bkkbn.Go.Id/Pluginfile.Php/18047/Mod_Resource/Content/1/9.%20book%20communication%20change%20behavior%20family%20in%20acceleration%20decrease%20stunting.Pdf)
- BKKBN. 2021. Policy and Strategy Acceleration Stunting Reduction in Indonesia. [https://lms-elearning.bkkbn.go.id/pluginfile.php/18037/mod\\_resource/content/1/4.%20Buku%20Kebijakan%20Dan%20Strategi%20Percepatan%20Penurunan%20Stunting%20Di%20Indonesia.pdf](https://lms-elearning.bkkbn.go.id/pluginfile.php/18037/mod_resource/content/1/4.%20Buku%20Kebijakan%20Dan%20Strategi%20Percepatan%20Penurunan%20Stunting%20Di%20Indonesia.pdf)
- Guidance et,all . 2022. THE EFFECT OF EDUCATION ON THE LEVEL OF KNOWLEDGE OF ADOLESCENT FEMALES ABOUT ANEMIA AND NUTRITION IN JIPURA VILLAGE. <https://journal.stikespemkabjombang.ac.id/index.php/jikep/article/download/1314/827/5851>
- Kemenkes RI. 2018. Main Results of RISKESDAS 2018. 53(9).
- Kemenkes R. 2018. Guidelines Prevention and Management of Anemia in Adolescents princess and woman age fertile (WUS). <https://ayosehat.kemkes.go.id/buku-pedoman-pengengahan-dan-penanggulangan-anemia-pada-belas-putri-dan-Perempuan-usia-subur>
- Kemenkes R, 2020. Plan Program Action 2020-2024. <https://p2p.kemkes.go.id/wp-content/uploads/2022/06/RAP-2021.pdf> .
- Kemenkes R, 2021. Adolescents Healthy Main Components of Indonesian Human Resource Development. <https://sehatnegeriku.kemkes.go.id/baca/umum/20210125/3736851/remaja-sehat-komponen-utama-pembangunan-sdm-indonesia/>
- Kemenkes R. 2022. Intervention Stunting Prevention Begins Before and When Pregnancy . <https://sehatnegeriku.kemkes.go.id/baca/umum/20221214/0042022/intervention-pencegahan-stunting-dimulai-sebelum-dan-saat-kehamilan/>
- Kemenkes R. 2022. Three Effort Ministry of Health Take it down Stunting in Indonesia. <https://sehatnegeriku.kemkes.go.id/baca/umum/20220811/4640923/tiga-upaya-kemenkes-turunkan-stunting-di-indonesia/>
- Kemenkes R. 2023. Law Number 17 of 2023 Concerning Health . <https://farmalkes.kemkes.go.id/unduh/uu-17-2023/>
- Kemenkes R, 2024. Vision and Mission . <https://setjen.kemkes.go.id/profil/detail/visi-dan-misi>
- Kemenkes R, 2023. Profile Indonesian Health 2022. <https://kemkes.go.id/id/profil-kesehatan-indonesia-2022>
- Kemenkes R, 2024. Profile Indonesian Health 2023. <https://www.kemkes.go.id/id/profil-kesehatan-indonesia-2023> .
- Kemenkes R. 2024. Report Survey Indonesian Health (SKI 2023. <https://layanandata.kemkes.go.id/katalog-data/ski/ketersediaan-data/ski-2023> [https://drive.google.com/file/d/1rjNDG\\_f8xG6-Y9wmhJUnXhJ-vUFevVJC/view](https://drive.google.com/file/d/1rjNDG_f8xG6-Y9wmhJUnXhJ-vUFevVJC/view)
- Santoso , et al . 2024. Promotion Textbook Health and Health Education . [https://www.google.co.id/books/edition/BUKU\\_AJAR\\_PROMOSI\\_KESEHATAN\\_DAN\\_PENDIDIK/Hy4WEQAAQBAJ?hl=id&gbpv=1&](https://www.google.co.id/books/edition/BUKU_AJAR_PROMOSI_KESEHATAN_DAN_PENDIDIK/Hy4WEQAAQBAJ?hl=id&gbpv=1&)

[dq=teori+lawrence+green&pg=PA146&prints  
ec=frontcove](#)  
WHO. 2021. Anaemia In Women And Children.

[https://www.who.int/data/gho/data/themes/topics/anaemia\\_in\\_women\\_and\\_children](https://www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children)  
WHO. (2023). Anaemia . <https://www.who.int/news-room/factsheets/detail/anaemia>