

THE EFFECT OF COUNSELING ON ADOLESCENT GIRLS' KNOWLEDGE AND ATTITUDE TOWARD ANEMIA PREVENTION

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ABSTRAK : PENGARUH PENYULUHAN TERHADAP PENGETAHUAN DAN SIKAP REMAJA PUTRI TERHADAP PENCEGAHAN ANEMIA

Latar Belakang: Tingginya prevalensi anemia pada remaja dapat disebabkan oleh kurangnya pengetahuan dan sikap terhadap pencegahan anemia. Salah satu upaya untuk meningkatkan pengetahuan dan sikap terhadap pencegahan anemia adalah dengan melakukan penyuluhan kesehatan.

Tujuan: Mengetahui pengaruh penyuluhan terhadap pengetahuan dan sikap terhadap pencegahan anemia pada remaja putri.

Metode: Penelitian merupakan kuasi eksperimen dengan the one-group pre-test-post-test design. Populasi adalah remaja putri usia 10 – 19 tahun di Puskesmas Wanaraja Kabupaten Garut. Sampel sejumlah 40 remaja putri, diambil dengan menggunakan *purposive sampling*. Pengumpulan data dilakukan dengan menggunakan kuesioner untuk mengukur sikap pencegahan anemia dan soal pilihan ganda untuk mengukur pengetahuan tentang anemia. Teknik analisis yang dipergunakan uji sampel berkorelasi.

Hasil: Penyuluhan berpengaruh terhadap peningkatan pengetahuan remaja tentang anemia, dengan selisih rata-rata skor sebesar -2,025 dan p-value sebesar 0,000 ($p < 0,01$). Pengetahuan remaja putri tentang anemia meningkat setelah mendapat penyuluhan. Penyuluhan berpengaruh terhadap peningkatan sikap remaja putri terhadap pencegahan anemia, dengan selisih rata-rata skor sebesar -3,300 dan p-value sebesar 0,000 ($p < 0,01$). Sikap remaja putri terhadap pencegahan anemia meningkat setelah mendapat penyuluhan.

Kesimpulan: Penyuluhan berpengaruh terhadap pengetahuan dan sikap remaja putri terhadap pencegahan anemia.

Saran: Puskesmas Wanaraja Kabupaten Garut hendaknya dapat memberikan edukasi secara berkesinambungan tentang anemia kepada remaja putri di wilayahnya dengan bekerjasama dengan kader desa setempat, sehingga dapat menjangkau seluruh remaja putri di wilayahnya.

Kata Kunci : Pengetahuan, Penyuluhan, Sikap pencegahan anemia

ABSTRACT

Background: The high prevalence of anemia in adolescents can be caused by a lack of knowledge and attitudes towards preventing anemia. One effort to increase knowledge and attitudes towards preventing anemia is by providing health counseling.

Objective: To determine the effect of counseling on knowledge and attitudes towards anemia prevention in adolescent girls in the working area of the Wanaraja Community Health Center, Garut Regency.

Method: The research is a quasi-experiment with the one-group pre-test-post-test design. The population is adolescent girls aged 10 – 19 years at the Wanaraja Community Health Center, Garut Regency. A sample of 40 adolescent girls was taken using purposive sampling. Data collection was carried out using a questionnaire to measure attitude toward anemia prevention and multiple choice questions to measure knowledge about anemia. The analysis technique used is paired-sample t-test.

Results: Counseling had an effect on increasing adolescent girls' knowledge about anemia, with an average score difference of -2.025 and a p-value of 0.000 ($p < 0.01$). Adolescent girls' knowledge about anemia increased after receiving counseling. Counseling had an effect on improving the adolescent girls' attitude toward anemia prevention, with an average score difference of -3.300 and a p-value of 0.000 ($p < 0.01$). The adolescent girls' attitude toward anemia prevention improved after receiving counseling.

Conclusions: Counseling has an effect on adolescent girls' knowledge and attitude toward anemia prevention.

Suggestions: Wanaraja Community Health Center, Garut Regency should be able to provide continuous education about anemia to adolescent girls in its area by collaborating with local village cadres, so that it can reach all adolescent girls in its area.

Keywords: Knowledge, Counseling, Attitude toward anemia prevention

INTRODUCTION

Anemia is a health condition that can appear at all ages, from toddlers to the elderly (Kemenkes, 2023). Anemia is a condition characterized by a reduced ability of the body to transport and supply oxygen to tissues, generally caused by a lack of capacity of red blood cells to carry oxygen (Morgan et al., 2024).). The causes of anemia are multifactorial and complex. Adolescent girls are most affected by anemia, because they have a higher need for iron to replace the iron lost during menstruation. In addition, poor diet quality, high rates of infection and worm attacks, especially due to poor living conditions and less than optimal health services, are also causes of anemia in adolescents (Rai et al., 2023).

According to WHO, there are two billion people suffering from anemia worldwide with around 50% of anemia caused by iron deficiency. Globally, 47.4% of preschool children (<5 years), 41.8% of pregnant women, and 25.4% of school children are anemic. In the Southeast Asia region, the prevalence of anemia in preschool children and pregnant women is 65.5% and 48.2%, respectively, while the prevalence in adolescent girls ranges from 17% – 90% (Sasmita et al., 2022). In Indonesia, around 32% of adolescents experience anemia, which means that around 3 to 4 out of every 10 adolescents suffer from this condition (Zulfajriani et al., 2023).

The prevalence of anemia in adolescent girls in West Java Province in 2018, as recorded in the international nutrition survey (NI) baseline survey, reached 41.93% (Aliyah & Krianto, 2023). In 2019, the prevalence of anemia increased to 42.3%, and in 2020, the figure fell again to 40.6%. In Garut Regency, the incidence of anemia in adolescent girls aged 10-19 years reached 647 people from a total of 1461 adolescents examined in 2020. Meanwhile, in 2021, the number of adolescents with anemia increased to 856 people from a total of 1672 adolescents examined (Puspaidari et al., 2023). As for a preliminary study conducted at the Wanaraja Community Health Center, it was found that 20 of the 50 adolescents examined had anemia.

Anemia can cause fatigue, decreased concentration, impaired growth, and affect work productivity. Furthermore, anemia can reduce the body's resistance, making it susceptible to infection (Kusuma & Kartini, 2021). Anemia in adolescents also affects women's quality of life and study concentration (Agustiani et al., 2022).

The high prevalence of anemia in adolescents can also be caused by a lack of knowledge, attitudes and appropriate practices regarding healthy nutrition to prevent anemia (Abu-Baker et al., 2021). Knowledge is an important factor that is the basis for changing attitudes and practices to prevent anemia (Agustina et al., 2021). Knowledge will influence a good lifestyle and consumption patterns to prevent anemia. The higher a adolescent's understanding about anemia, the smaller the possibility that the adolescents will experience anemia because they already have a lot of information about anemia and its prevention (Madestia et al., 2021). Previous research has proven the influence of knowledge on the incidence of anemia (Putri, 2018; Rangkuti, 2020; Mulianingsih et al., 2021; Putri & Fauziyah, 2023). Meanwhile, research by Indriani et al. (2018) found that knowledge influences attitudes towards preventing anemia.

Several studies have found that adolescent's knowledge and attitudes towards preventing anemia are still not satisfactory. Research by Kasumawati et al. (2020) conducted at SMA Muhammadiyah 04, Depok City, found that 66.7% of students had insufficient knowledge about anemia, and 31 (38.3%) respondents had poor attitudes. Munira & Viwattanakulvanid (2024) research on female high school students in Banjarmasin City found that 147 (42.0%) female students had bad attitudes, and 169 (48.3%) had poor knowledge regarding anemia prevention.

In this regard, it is necessary to increase knowledge and attitudes towards preventing anemia. One effort to increase knowledge and attitudes towards preventing anemia is by providing health counseling (Sihombing et al., 2024). Health counseling is an effort that prioritizes learning principles to obtain changes in knowledge, attitudes and motivation, both to achieve the desired prosperity and to know the steps to achieve these goals, both individually and collectively (Nurmala et al., 2018). The influence of counseling on knowledge and attitudes towards preventing anemia is proven by research by Darmawati et al. (2020); Kusuma & Kartini (2021); Agustiani et al. (2022); dan Hidayani et al. (2024).

The aim of this research was to determine the effect of counseling on knowledge and attitudes towards preventing anemia in adolescent girls.

RESEARCH METHODS

The research is a quasi-experiment with the one-group pre-test-post-test design. In this design, the dependent variable is measured in the group (O_1), and then the experimental treatment (X) is carried out. After the experimental treatment, the main variable in the group (O_2) was measured again and then the difference between the pre-test and post-test scores was calculated by referring to the X effect (Cohen et al., 2018). The population in this study were adolescent girls aged 10 – 19 years at the Wanaraja Community Health Center, Garut Regency. The sample in the study was 40 adolescent girls, taken using purposive sampling. Data collection was carried out using a questionnaire to measure attitude toward anemia prevention and multiple choice questions to measure knowledge about anemia. The analysis technique used is paired-sample t-test.

RESEARCH RESULTS

Univariate analysis

Based on the research results, the characteristics of respondents can be described in the following table:

Table 1
Frequency Distribution of Respondent Characteristics

Karakteristik	N	%
Age		
10-12 years	5	12.5
13-15 years	13	32.5
16 – 19 years	22	55.0
Exposure to Information about Anemia		
Never	23	57.5
Ever	17	42.5

Table 1 shows that based on age, most of the respondents were aged 16 - 19 years, namely 22 respondents (55.0%), and at least 10 - 12 years old, namely 5 respondents (12.5%). Based on exposure to information about anemia, the majority had never received it, namely 23 respondents (57.5%).

Based on the research results, adolescent girls' knowledge about anemia can be described in the following table:

Table 2
Frequency Distribution of Adolescent Girls' Knowledge About Anemia

Knowledge about Anemia	Pretest		Posttest	
	N	%	N	%
Good	11	27.5	23	57.5
Moderate	27	67.5	17	42.5
Poor	2	27.5	0	0.0

Table 2 shows that most of the adolescent girls' knowledge about anemia at the pretest was mostly in the moderate category, namely 27 respondents (67.5%). In the posttest, adolescent girls' knowledge about anemia was mostly in the good category, namely 23 respondents (57.5%).

Based on the research results, adolescent girls' attitude toward anemia prevention can be described in the following table:

Table 3
Frequency Distribution of Adolescent girls' Attitude toward Anemia Prevention

Knowledge about Anemia	Pretest		Posttest	
	N	%	N	%
Good	15	37.5	25	62.5
Moderate	21	52.5	15	37.5
Poor	4	10.0	0	0.0

Table 3 shows that the adolescent girls' attitude towards anemia prevention at the pretest was mostly in the moderate category, namely 21 respondents (52.5%). In the posttest, adolescent girls' attitudes towards anemia prevention were mostly in the good category, namely 25 respondents (62.5%).

Bivariate analysis

Based on the research results, the effect of counseling on adolescent girls' knowledge about anemia can be described in the following table:

Table 4
The Influence of Counseling on Adolescent girls' Knowledge about Anemia

Knowledge	Mean	SD	Mean Difference	P-value
Pretest	8.90	2.34		
Posttest	10.93	2.23	-2.025	0.000

Table 4 shows that the average value of adolescent girls' knowledge about anemia at pretest was 8.90+2.34 and at posttest it was 10.93+2.23, with an average difference of -2.025. The p-value was obtained at 0.000 ($p < 0.01$), so it was concluded that counseling had an effect on increasing knowledge about anemia. Adolescent girls'

knowledge about anemia increases after receiving counseling.

Based on the research results, the effect of counseling on adolescent girls' attitude toward anemia prevention can be described in the following table:

Table 5
The Influence of Counseling on Adolescent girls' Attitude toward Anemia Prevention

Attitude	Mean	SD	Mean Difference	P-value
Pretest	28.10	5.09		
Posttest	31.30	4.13	-3.200	0,000

Table 5 shows that the average value of adolescent girls' attitude toward anemia prevention at pretest was 28.10+5.09 and at posttest it was 31.30+4.13, with an average difference of -3.300. The p-value was obtained at 0.000 ($p < 0.01$), so it was concluded that that counseling had an effect on improving adolescent girls' attitudes towards preventing anemia. Adolescent girls' attitude toward anemia prevention increases after receiving counseling.

that all the information about anemia that is presented can be absorbed well by teenagers. This is also because the information presented concerns adolescent health problems and has the potential to have a long-term impact on their health and life. These information characteristics cause teenagers to pay more attention when information is condensed, so that their absorption of data increases and their knowledge increases.

The research results also showed that counseling had an effect on improving adolescent girls' attitudes towards preventing anemia. The results of this research support the research results of Aidah et al. (2023); dan Hidayani et al. (2024). The aim of health counseling is to influence changes in individual and community behavior in the context of health (Pakpahan et al., 2021). Referring to this goal, during the implementation of outreach, not only information about anemia is provided, but efforts are also made to raise awareness about the importance of anemia prevention behavior and encourage teenagers to implement anemia prevention behavior. This will also have an impact on increasing attitudes towards preventing anemia in a more positive way.

Apart from that, increasing knowledge about anemia obtained during counseling will also improve adolescent girls' attitudes towards preventing anemia. A person's attitude can change when they receive information that is believed to be the truth (Darmawati et al., 2020). Knowledge has the ability to influence a person's attitudes. When a person's knowledge increases, their attitudes also tend to increase because good knowledge can encourage individuals to adopt attitudes that are in line with the

DISCUSSION

Based on the results, it was found that counseling had an effect on increasing adolescent girls' knowledge about anemia. The results of this research support the research results. The results of this research support the research results of Samria & Fitriani (2021); Wisnuwardani et al. (2023); Megawati et al. (2024).

Knowledge refers to everything related to the activity of knowing or having knowledge about something. The definition of knowledge includes all activities performed, methods used, and results obtained. Essentially, knowledge is the result of the activity of knowing about an object, whether in the form of concrete things or events experienced by individuals (Octaviana & Ramadhani, 2021). Health counseling is one factor that can increase a person's knowledge. Extension is an effort to transfer information, knowledge or technology from extension workers and provide it to extension participants (Bakti, 2023)

If you look at the research results, the counseling carried out has proven to be effective so

knowledge they have (Sihombing et al., 2024). This is also supported by research by Indriani et al. (2018) found that knowledge influences attitudes towards preventing anemia. Knowledge will produce beliefs, which is one of the core elements of attitude. Knowledge will create beliefs that become the basis for forming ideas about the nature and general characteristics of an attitude.

CONCLUSION

Counseling had an effect on improving adolescent girls' knowledge and attitudes towards preventing anemia. Adolescent girls' knowledge about anemia and attitude toward anemia prevention increases after receiving counseling.

SUGGESTION

The Wanaraja Community Health Center should be able to provide continuous education about anemia to adolescent girls in its area by collaborating with local village cadres, so that it can reach all adolescent girls in its area.

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