

EDUCATION USING BOOKLET MEDIA IN INCREASING KNOWLEDGE OF ADOLESCENTS ABOUT ANEMIA AT THE GARUDA PUTIH JAMBI HEALTH SCIENCES COLLEGE

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ABSTRACT

Background: Anemia in teenagers is a condition where the number of red blood cells or hemoglobin levels in a teenager's body is lower than normal limits, adolescents it can be said to be anemia if Hb < 12 gr/dl. Anemia is a health problem that has symptoms of tiredness, tiredness and lethargy so it will have an impact on creativity and productivity. . In Southeast Asia, the highest prevalence of anemia was found in school-aged children, around 60%. The aim of this research is to increase the knowledge of young women about anemia.

Method: The method used was pre-experimental with one group pre and post-test. The sampling technique used simple random sampling with a total of 36 people. Statistical tests with univariate and bivariate analysis using the t-test.

Results: The results of this research prove that there has been an increase in knowledge. The results of the analysis showed that the results of the t test with p value = 0.000 < 0.05

Conclusion: that there was an influence of implementing education using booklet media in increasing young women's knowledge about anemia

Keywords: adolescents, anemia, booklet

INTRODUCTION

Adolescence is a developmental stage between childhood and adulthood which is characterized by general physical changes as well as cognitive and social development that takes place between the ages of 12-19 years. Adolescent groups generally have better nutritional conditions than toddlers and school children, because this age group is easily reached by various nutritional improvement efforts carried out by the government and private groups. However, there are still various nutritional conditions in adolescents that occur, such as underweight, excess weight or obesity and anemia (Aras et al., 2021).

Anemia is a health problem that has symptoms of tiredness, tiredness and lethargy so it will have an impact on creativity and productivity. Not only that, anemia also

increases disease susceptibility in adulthood and impacts generations with nutritional problems (Ministry of Health of Indonesia, 2021). Globally, anemia is the most common nutritional problem in the world's population of around 2 billion, which has an impact on social and economic development. In Southeast Asia, the highest prevalence of anemia was found in school-aged children, around 60% (Subratha, 2020). The incidence of anemia in Indonesia is still quite high. Based on 2018 Riskesdas data, the prevalence of anemia in teenagers is 32%, meaning that 3-4 out of 10 teenagers suffer from anemia. This is influenced by suboptimal nutritional intake habits and lack of physical activity. (Ministry of Health Indonesia, 2021).

Iron deficiency anemia is an anemia that is often a problem in teenagers because of the high need for iron for growth. Adolescent girls are vulnerable to anemia because they

experience a menstrual cycle. Young women are very concerned about their body shape, so most of them follow an incorrect diet and have many food restrictions (Kalsum & Halim, 2016). Anemia is a micronutrient problem that needs attention because it can cause various complications in groups as well as in newborns and women. Anemia that occurs in teenagers will have an impact on decreased concentration in learning, impaired growth and decreased physical fitness, resulting in abnormal height and weight according to their age (Herwandar & Soviyati, 2020).

Adolescents' knowledge influences their behavior in consuming Fe tablets. A person's knowledge is influenced by the environment, intelligence, emotions and a person's perspective. However, it could also be due to low awareness so that the ability of young women to acquire knowledge about anemia in adolescents is low (Lestari et al., 2016). According to Nikmah (2021), providing nutrition education using E-Booklet media has an effect on the knowledge and attitudes of young women about anemia at SMPN 1 Gemuh, Kendal Regency.

The results of the study show that nutrition education using booklet media can increase knowledge and attitudes about anemia in young women. According to the research results of Nurul (2006), there was a difference in knowledge before and after providing counseling via booklet media regarding knowledge about overweight 35 in teenagers.

Based on the background above, researchers are interested in conducting research on the application of education using booklet media in increasing the knowledge of young women about anemia at the Garuda Putih Jambi College of Health Sciences in 2024.

METHOD

This research is pre-experimental research with a one group pre and post-test design. The aim of this research is to determine the application of education using booklet media in increasing the knowledge of young women about anemia at the Garuda Putih Jambi College of Health Sciences in 2024. The population in this study were all female students of the Garuda Putih Jambi College of Health Sciences. The sampling technique uses Simple Random Sampling. The sample in this study was the result of simple random sampling of all female students who would be used as respondents. This research was carried out on June 19-20 2024. Data collection was carried out by filling out questionnaires using questionnaires for young women. Data analysis used univariate and bivariate analysis with the t test.

RESULTS AND DISCUSSION

Overview of adolescent knowledge before and after interventions using booklet

Table 1. Descriptive knowledge

Knowledge before Education	n	%
Good	5	13.9
Enough	14	38.9
Less	17	47.2
Total	36	100.0
Knowledge after education	n	%
Good	24	66.7
Enough	11	30.6
Less	1	2.8
Total	36	100.0

Based on table 1, it is known that the knowledge of adolescent girls about anemia before the implementation of education with booklet media as much as 47.2% is still lacking, as many as 38.9% have sufficient knowledge and as many as 13.9% have good knowledge. After implementation with booklet showed can be seen that the knowledge of adolescent girls about anemia after the implementation of education with booklet media as much as 66.7% is well knowledgeable.

The effect of the implementation of education with booklet media in increasing the knowledge of adolescent girls about anemia

Table 2 shows that the results of the t test with p value = $0.000 < 0.05$ means that there is an influence of implementing education using booklet media in increasing the knowledge of young women about anemia at the Garuda Putih Jambi Health Sciences College in 2024. Based on the results of the analysis it is found that the test results t test with p value = $0.000 < 0.05$ means that there is an influence of implementing education using booklet media in increasing young women's knowledge about anemia at the Garuda Putih Jambi Health Sciences College in 2024.

Table 2. Bivariate analysis

Variabel	N	Mean	Min	Max	SD	P
Knowledge Before Education	36	11,56	3	18	3,573	0,000
Knowledge After Education	36	16,11	1	20	2,447	

These results show that there was an increase in knowledge after education was carried out using booklet media. This is in accordance with research Wijayanti & Mulyadi, (2019) that health education using booklets is effective in increasing understanding of anemia patients. Apart from booklets, health education can also be delivered through videos, routine education, poster placement, and by including health messages during classroom learning. Generally, the health education resources available in schools are very limited. Students receive more health information from their teachers and the internet. Booklet media is an alternative health education substitute for textbooks that can be taken anywhere (Kusuma & Pertiwi, 2019; Nasiatin et al., 2021; Pertiwi & Annissa, 2019).

Choosing the right educational media can also influence student learning motivation. Interesting and effective educational media will make students more interested in learning and actively participating in learning activities. Apart from booklets, other

educational media that can be used are video, audio, posters or educational games (Dewi Haris, 2018). However, choosing the right educational media must be adjusted to the learning objectives and characteristics of students. By selecting appropriate and effective educational media, it is hoped that health education activities can run more effectively and have a positive impact on increasing students' health knowledge and awareness (Wijayanti & Mulyadi, 2019).

In this study, booklets were used as a medium for Health Education. The booklet contains information related to the concept of adolescent anemia (definition, etiology, risk factors, signs, symptoms, impacts), as well as efforts to prevent and treat anemia in adolescent girls. By providing booklets, young women can read repeatedly and understand the content of the material in the booklet so that they can indirectly increase knowledge and understanding related to anemia. The booklet media used in this research was developed by the researchers themselves and has been reviewed by several teams of experts from the nursing and pediatric departments who were appointed to review this booklet. The material presented in this booklet consists of the definition of anemia, the causes of anemia, clinical manifestations, the impact of anemia, efforts to prevent and treat anemia. The information presented in the booklet is also accompanied by attractive images that support the information provided, making it easier for young women to understand the information provided through writing and images.

The increase in the average knowledge score of female students from 11.56 to 16.11 was obtained through increasing the understanding obtained through booklet media so that female students were able to understand the problem of anemia in adolescents and were expected to be able to make efforts to prevent and treat anemia. Apart from knowledge, the incidence of anemia in adolescent girls is also influenced

by other factors, namely family support, family income, nutritional status and menstruation (Harahap, 2018; Rahayu et al., 2022).

For this reason, one way to increase a person's knowledge is by providing education through counseling using booklets. This is supported by research conducted by Nurul (2006) on "the influence of nutrition education with lectures and booklets on increasing the knowledge of overweight adolescents" with the research results of the group that was given education through booklets experiencing an increase in pre-test knowledge scores which at the start of the research had a good category of as much as 3 subjects (21.4%), the sufficient category was 11 subjects (78.6%) increasing to 8 subjects (57.2%) in the good category and 6 subjects (42.9%) in the sufficient category at the post-test. This shows that there is a difference in knowledge before and after providing counseling via booklet media regarding knowledge about overweight 35 in adolescents. This increase occurred in connection with the advantages of the booklet, namely that the material contained in the booklet is more complete, more detailed, clear and educative and the preparation of the booklet material is made in such a way as to attract the attention of teenagers, according to the needs and conditions of teenagers. Apart from that, the booklet can also be taken home, so that the subject can read or study it.

Research was also conducted by Minokta Lendra (2018) regarding "the influence of using booklet media on increasing knowledge about energy adequacy of teenagers at SMA Negeri 1 Pontianak". The results of the research show that students' knowledge has increased, this is proven by looking at the mean value of students' knowledge level at 58.5% or an increase of 22.7% to 81.2%. These results can be concluded that there was an increase in the average knowledge score of class students before and after the intervention using booklet media.

This shows that there is a difference in knowledge before and after providing counseling via booklet media regarding knowledge about energy adequacy by teenagers. It is also supported by Suiroaka's research that there is a significant effect of better nutritional knowledge on respondents who were given nutrition education using media compared to respondents who were not given nutrition education without using media.

This is in accordance with Zulaekah who stated that with the Communication, Information and Education (KIE) Program print media is quite effective in conveying nutrition information and education. In the IEC program, print media is more effective in conveying nutritional information and education, because print media is a static medium, prioritizes visual messages, and generally consists of a number of words, pictures or photos in color, namely in the form of posters, leaflets, brochures, magazines, modules and pocket books. Of the several print media that can be used in IEC programs for children, they include pocket books or booklets and leaflets.

It can be concluded that counseling is a process of planned behavior change in individuals, groups and communities from not knowing about health values to knowing, and from not knowing how to overcome their own health problems to becoming independent. The change in knowledge scores after being given media about anemia to female students was very significant. This change occurred due to factors including: 1). Providing media booklets about anemia, given one by one so that the reception of information is clearer, 2). The counseling intervention uses booklet media about anemia where the media clarifies the ideas or messages conveyed, apart from that it can also recall what was read because this booklet media is not only in the form of pictures but there is writing that explains the images in the media, 3.) Material contained in the booklet media are exactly the same as the

pre-test and post-test questionnaire questions, so that young women can immediately understand and answer the post-test questions correctly, 4.) The information provided is in accordance with the students' needs, so that during the intervention the booklet media is given. Students enthusiastically read the information contained in the booklet media.

CONCLUSION

Based on the results of this research, it was concluded that there was an increase in knowledge. Meant that there was an influence of implementing education using booklet media in increasing young women's knowledge about anemia at the Garuda Putih Jambi Health Sciences College in 2024

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CONFLICT OF INTEREST

There was no conflict of interest in this article.

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