

The Effect of Nutrition Education Through Media Booklet on Increasing Knowledge, Attitude and Behavior about Anemia on Adolescent Girls in Junior High School Negeri 1 Simpang Tiga Aceh Besar

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Abstract

Anemia is a condition that often occurs in adolescent girls, which can be caused by various factors such as nutritional status, menstruation and socioeconomic status. Anemia can cause a person to experience a decrease in endurance and make the body susceptible to health problems. The prevalence of anemia in Aceh is 36.93% (Rikesdas, 2018). Based on this, providing education to young women can improve knowledge, attitudes and behavior so that they can handle cases of anemia in girls. This quantitative study uses a Quasi Experimental design. The subjects were taken as many as 34 Adolescent Girls, the sampling method was by the Proportional Simple Random Sampling Technique. The research location is in SMP Negeri 1 Simpang Tiga, the research was conducted in May 2022. Data collection includes primary and secondary data. Data analysis uses Dependent T-Test with 95% CI. Research data will be presented in tabular and textual form. The statistical test obtained a value of $p = 0.001$ on knowledge, $p = 0.006$ on attitude and $p = 0.005$ on behavior ($p < 0.05$) so that at CI: 95% H_0 was rejected and H_a was accepted, it can be concluded that there is a significant effect of counseling with Booklet media on knowledge, attitudes and behavior. There is an effect of education with booklet media on knowledge, attitudes and behavior about anemia in SMP Negeri 1 Simpang Tiga.

Keywords : attitude, behavior, booklet, education, knowledge

Introduction

Fulfillment of nutritional needs in adolescence needs to be considered because of an increase in nutritional needs to support growth, physical and psychological development. Changes in lifestyle and eating habits in adolescents affect the needs and intake of nutrients (Hardinsyah, 2017). Faced in adolescence one of which is anemia. Adolescent girls are at higher risk than adolescent boys, because adolescent girls experience menstruation every month so they lose a lot of iron. Anemia is a state of the number of erythrocytes or Hb levels in the blood is less than normal (12 g/dl). This causes a decrease in the ability of Hb and erythrocytes to carry oxygen throughout the body, so that the body becomes tired and weak quickly (Hardinsyah, 2017).

Anemia is still a major health problem that occurs throughout the world and one of the causes is iron deficiency. According to data from the 2018 Riskesdas results, the prevalence of

anemia in Indonesia is 48.9% with the proportion of anemia in the age group 15-24 years and 25-34 years (RI Ministry of Health, 2018). The prevalence of anemia in Aceh is 36.93% (Risksedas 2018) in research conducted by Zubir (2018) on young women at Assyifa School Health Vocational School Banda Aceh, showing that out of 65 respondents, 44.6% had moderate anemia and 15, 4% suffer from severe anemia. The most frequent cause of anemia in Rematri is iron deficiency. During menstruation Rematri lose a lot of iron. Lack of iron intake also increases the risk of anemia in Rematri. Iron supplementation is known to have a significant effect on reducing the risk of anemia. (Who & Chan, 2011).

Another factor in the occurrence of iron nutritional anemia in young women is knowledge about anemia, attitudes and behavior (Listiana, 2016). Anemia in young women has an impact on growth and development, resistance to infectious diseases, activity, concentration and intelligence and comprehension (Ayu Srinigrat et al, 2019). Signs of anemia in young women include lethargy, weakness, fatigue, fatigue and negligence (5L), often complaining of dizziness and dizzy eyes. Further symptoms are pale eyelids, lips, tongue, skin and palms (Sari, 2020).

A study shows that providing nutrition education using media is more effective for increasing adolescent nutrition knowledge daughter compared to providing education without media. Increased knowledge of young women after receiving nutrition education from 7.7% to 82.1%, Rotua (2017). This shows the influence of Booklet media in education. Other studies that are in line also show that the group that was given an intervention using Booklet media had a greater difference in the increase in pre-post test knowledge scores than the group that was given the picture guessing intervention and the control group respectively (Setyawati, 2015).

Media or visual aids are used so that counseling is carried out more effectively. Knowledge in principle can be received or captured through the five senses. The more the five senses are used to receive something, the more and clearer the knowledge obtained. Visual media itself is easier in the process of delivering and receiving health messages and information because according to research the senses that transmit the most knowledge to the brain are the eyes (Notoatmodjo, 2012).

Methods

The method used in this study is the quasi-experimental method. According to (Sugiyono, 2016) the experimental research method is a research method used to seek influence on something that is given treatment on others under conditions that can be controlled. Quasi-experiments use all subjects in the study group (intact group) to be treated (treatment), not using subjects taken at random. In this study, the researcher used examples non examples learning models to find the effect on the educational outcomes of students at SMP Negeri 1 Simpang Tiga.

Result

Statistical results showed significant differences between knowledge, attitudes and behavior before being given education and after being given education (p-value <0.05). It can be concluded that providing education using Booklet media statistically shows a significant effect on increasing knowledge, attitudes and behavior. The results of the research on female students' knowledge have increased, this is evidenced by looking at the statistical test scores obtained by students' knowledge before education was carried out, namely 36.7 and female students'

knowledge after counseling was 50 with a p value of 0.006 so it can be concluded that there is an influence in providing education using Booklet media about anemia in young women at SMP Negeri 1 Simpang Tiga, Aceh Besar.

Table 1. Knowledge level of students before and after education

Knowledge	Knowledge					
	n	Min	Max	Mean	SD	P Value
Pretest	34	26	47	36,7	5,5	0,001
Posttest	34	39	55	50	2,7	

The average value of the pretest and post test on attitudes has increased, the average result of student attitudes before training is 35.0 and student attitudes after counseling is 40 with a value of $p = 0.006$, namely an increase in student attitudes before and after being given education.

Table 2. Attitude levels of students before and after education

Attitude Levels	Attitude Levels					
	n	Min	Max	Mean	SD	P Value
Pretest	34	22	41	35,0	4,8	0,006
Posttest	34	36	44	40	2,0	

The results of the research on behavior show that there is an influence of counseling using Booklet media on behavior change with an average value of student behavior before counseling is given, namely 38.4 and student behavior after counseling is 50, there is an increase in student behavior before and after being given education ($p < 0.05$).

Table 3. Level of student behavior before and after education

Behavior	Behavior					
	n	Min	Max	Mean	SD	P Value
Pretest	34	19,9	52,6	38,4	6,7	0,005
Posttest	34	34,8	73	50	7,7	

Discussion

The Effect of Counseling With Media Booklets on Knowledge, Attitudes and Behavior

Respondents in this study amounted to 34 people with a range of ages 13-16 years. 13 years old (20.6%), 14 years old 18 (52.9%), 15 years old 8 (23.5) and 16 years as much as 1 (2.9%). Age has an influence on one's comprehension and mindset. The older a person is, the more developed their thinking patterns and grasping power will be, so that the level of knowledge will increase. Education about anemia is carried out at SMP Negeri 1 Simpang Tiga, Aceh Besar. The method used in providing education is the lecture and question and answer method using Booklet media.

The results of this study are in line with Rahmawati's research (2007) which states that there is an influence with Booklet media on increasing knowledge, attitudes and behavior of undernourished and severely malnourished toddler mothers in Kotawaringin Barat district, Central Kalimantan province. In health promotion, media is something that can be used to help and demonstrate something. Good educational media is able to convey health information and messages in accordance with the acceptance of young women at SMP 1 Simpang Tiga. More memory retention is produced if the media used involves more of the five senses, for example videos which are audio-visual media. Individuals are able to remember 50% of the visual and auditory experiences obtained through videos (Notoatmodjo, 2011).

Booklets are health education media that function as a tool in conveying health messages/information (Notoatmodjo, 2011). Education with booklets helps increase the knowledge of respondents through the delivery of communicative, concise, clear information accompanied by attractive display of images so as to enable respondents to easily and clearly understand the topic of anemia presented in the booklet in this study.

The results of the research above, the researcher assumes that providing education using Booklet media is an effective thing to apply in increasing knowledge, attitudes and behavior in young female students at SMP 1 3-way junction. This is very clear, because the delivery of information in a simple way using the lecture and question and answer method can be understood by young women so that by itself it will be easy to form an increase in knowledge, attitudes and behavior.

Submission of material using Booklet media brought good enthusiasm from respondents because counseling using Booklet media was a new thing in their environment so that respondents paid attention to counseling.

Knowledge

The increase in the average value of respondents' knowledge was due to the Booklet media provided. In addition, research was also conducted by Minokta Lendra (2018) regarding "the effect of using booklet media on increasing knowledge about the adequacy of youth energy at SMA Negeri 1 Pontianak". With the research results it is known that the knowledge of students has increased, this is evidenced by looking at the mean value of the level of knowledge of students at by 58.5% or an increase of 22.7% to 81.2%. From these results it can be concluded that there was an increase in the average class knowledge score before and after the intervention was carried out using the Media Booklet.

Attitude

Attitude is one of the domains/domains in shaping a behavior. Attitude is also included in the predisposing factor as forming a person to want to behave (Notoatmodjo, 2010). The average value of the pretest and post test has increased, the results of the statistical test obtained a p value of 0.006 so that it can be concluded that there is an influence in providing education using Booklet media about anemia in young women at SMP Negeri 1 Simpang Tiga, Aceh Besar.

Good knowledge will encourage someone to display an attitude that is in accordance with the knowledge that has been obtained. This change in attitude occurred because of the respondents' interest in the media presented. Providing education using Booklet media is a new thing in the respondent's environment.

Behavior

Notoatmodjo (2010) states that there are two intervention efforts on behavioral factors, namely education or coercion/pressure. The educational approach is the most appropriate as an effort to solve public health problems through behavioral factors. Meanwhile Health counseling is defined as Health Education activities carried out by disseminating messages and instilling confidence.

Conclusion

Based on the results of research there was an increase in the average value of knowledge in young women before and after being given education using Booklet media with a standard deviation of 13.3 (4.6). Increase in the average attitude value of young women before and after being given education using Booklet media with a standard deviation of 5.4 (5.1). There was a change in behavior with an average value before and after being given education using the Booklet media with a difference of 11.63 standard deviation 7,1. There is a significant difference (p -value <0.05) between knowledge, attitudes and behavior before and after being given education using Booklet media in young women with a value of $p = 0.001$ on knowledge, $p = 0.006$ on attitude and $p = 0.005$ on behavior. This means that there is an effect of providing education using Booklet media about Anemia to young women at SMP Negeri 1 Simpang Tiga.

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