

THE INFLUENCE OF 'TESIMIA' ON THE KNOWLEDGE AND ATTITUDES OF FEMALE ADOLESCENTS REGARDING ANEMIA

Rosa Yuliana¹, Winda Triana^{1,2}, Egy Sunanda Putra^{1,2}

¹Departement of Health Promotion, Politeknik Kesehatan Kementerian Kesehatan Jambi, Indonesia

²PUI-PK, Politeknik Kesehatan Kementerian Kesehatan Jambi, Indonesia

Corresponding author: rosayuliana2601@gmail.com

ABSTRACT

Background: Anemia is a condition where is a decrease in the number of erythrocytes as indicated by a decrease in hemoglobin levels, hematocrit and erythrocyte count. Based on previous research, the frequency of anemia in adolescent girls is 26.5% in one of the junior high schools in Jambi City, adolescent girlss who have low knowledge was 51.5% and having a poor attitude was 51.5%. this shows that young women do not yet know that anemia has a bigimpact on their own health. This figure shows that anemia is still a health problem that needs attention in Jambi Province.

Method: This type of research is Quantitative research using the pre-Eksperiment method, research design using a One group pretest – posttest design with a total sample of 55 respondents taken by purposive sampling. Data collection used a knowledge questionnaire and attitude checklist instrument. Data analysis used the wilcoxon test,

Result: It is known that Asymp.Sig (2-tailed) has a value of 0.001. Because the value of 0.001 is smaller than ≤ 0.05 , there is a difference in the results of health education using anemia crossword puzzle for class VII students at SMP 19 Jambi City in the pretest and posttest.

Conclusion: Present the main conclusions and their implications. There is an influence of health education using anemia crossword puzzle on knowledge and attitudes towards preventing anemia in class VII students of SMP 19 Jambi City

Keywords: “Health education, crossword puzzle, anemia

INTRODUCTION

According to the World Health Organization (WHO), anemia is a condition where the body has abnormal hemoglobin levels. Hemoglobin (Hb) is needed to transport oxygen, if the concentration is less than normal, the capacity of the blood to transport oxygen also decreases, causing fatigue, weakness, lethargy, dizziness and shortness of breath. (Citrakesumasari, 2016).

The incidence of in adolescent girls occurs at several ages that are usually affected by anemia, consisting of 57.1% of adolescent girls aged 10-18 years and 39.5% aged 19-45 years. Woman have the highest risk of anemia, especially in female adolescents. It can also be seen from the 2018 Health

Research Results that anemia in adolescent girls increased to 48.9% in 2019 due to lifestyle patterns and nutritional deficiencies (Julaecha, 2020).

One Junior High School showed that of the five students who were asked about anemia, three students said they did not know what anemia was, one person knew about anemia and one person could only mention a little about preventing anemia, namely by aeting colored vegetables, green. With the above problems it can be concluded that the knowledge of young women about anemia is very lacking, especially among the young women who are still in junior high school, who need knowledge, prevention and implementation of healthy living policies to protect against anemia. (Efni, 2020).

Mahmudah's research result (2018) stated that the influence of crossword puzzle media on understanding balanced diets by applying crossword puzzle strategies can influence knowledge and attitudes and improve balanced nutrition. The use of crossword puzzle media has not been carried out on junior high school teenagers, so this researcher hopes that this anemia '*Tesimia*' crossword puzzle can create interest in research and make people interested in studying Anemia.

In the initial survey at SMP 19 Jambi City, it was found that the knowledge of the female students who were interviewed regarding the prevention of anemia had absolutely no idea what anemia was, its prevention, the impacts it caused and no one provided information on the importance of preventing anemia in adolescents, only giving supplementary tablets. Blood test data for female students, from UKS data and interview with UKS supervisors, female students often faint suddenly during ceremonies or not during ceremonies, interest in research at SMP 19 Jambi City on the grounds that the location of the research location is affordable.

General Objectives, the general aim of this research is to determine the educational effect of using the Anemia Crossword game '*Tesimia*' in increasing Knowledge and Attitudes about anemia among female Students at SMPN 19 Jambi City.

METHODS

Research design, the method used Quantitative which uses the Pre-experiment method, the research design uses a One Group Pretest – Posttest. The sampling technique is Purposive Sampling, Purposive Sampling with inclusive and exclusive criteria which takes proportions to obtain a representative sample, in choosing this method you can take object from each class that are determined in balance with the number of subjects in each female student so as to obtain a representative

sample. The population in this study were class VII students at State Middle Schools 19 Jambi City with 127 female students. The sample size for this research was class VII junior high school students SMPN Jambi City which met the criteria consisted of 55 respondents. Execution time this research on Tuesday, 21 May 2024.

In this research, knowledge and attitudes can be used using a research instrument in the form of a questionnaire (list of questions) and the attitude variable using this checklist instrument was prepared by the researcher with reference to material about anemia. The questions used are closed or structured questions, the questions are made in such a way that respondents just have to choose or answer existing questions. The data collection method in this research is a questionnaire which has been tested for validity and reliability at SMP 14 Jambi City on 30 students and was declared suitable for use. Data processing in this research is Editing, Coding, Scoring, Tabulating, and Cleaning.

Univariate analysis aims to explain the characteristics of each research variable. To find out the average value. Bivariate analysis explains the influence of education using the '*tesimia*' crossword media in increasing knowledge and attitudes at SMPN 19 Jambi City, a normality test was carried out using Kolmogorov-Smirnov because the research subjects were ≥ 50 people, if the data was normally distributed ($p > 0.05$) then the Pareid T-test we used, while the data was not normally distributed ($p < 0.05$) then Wilcoxon statistical Analysis was carried out, if the statistical test result is ≤ 0.05 it means that H_a is accepted.

RESULTS AND DISCUSSION

This study aims to determine the effect of '*Tesimia*' anemia, crossword education on the knowledge and attitudes of young women regarding anemia among female students at

SMPN 19 Jambi City. The respondents selected as samples were class VII Students aged 12-13 years based on the results of sampling using sampling techniques purposive besides getting 55 respondents, in general the description of the respondents' personal data is age. General data are presented in the results research as follows:

The distribution of respondents based on the age frequency variable for class VII Students at SMPN 19 Jambi City can be seen in table 1, below:

Table 1. Frequency Distribution of Respondents Age

Age	Frequency	Presentase
12 years old	20	36,5%
13 years old	35	63,6%
Amount	55	100%

Based on table 3.1 it is known that the respondents aged 12 years were 18 female students with a percentage 33% while the respondents aged 13 years, were 37 female students with a percentage 67% it can be concluded that respondents aged 13 years dominate again in this study.

Table 2. Distribution of the average value of female students knowledge and attitudes regarding anemia in Class VII students at SMPN 19 Jambi City

Variabel	Mean	Mean Difference	Min	Max	95% / CI Lower-Upper
Knowledge					
Before (pretest)	4.40	3.29	2	6	4.16 - 4.64
After (posttest)	7.69		5	10	7.38 - 8.00
Attitude					
Before (Pretest)	23.93	10.87	20	29	23.17 - 24.68
After (Posttest)	34.80		35	38	34.18 - 35.42

Based on table 1 it shows that on average there was an increase in knowledge before and after the "Tesimia" anemia crossword education where knowledge before anemia crossword education "Tesimia" increased to 7.69. there was an increase in knowledge of (3.29) after the intervention using the anemia crossword game media among female students at SMPN 19 Jambi City. In this study there were 10 knowledge questions, after obtaining the respondent's answers, they were corrected and tabulated before being given the intervention, there were still many errors, but after being given the intervention there was an

improvement. The increase in respondents' knowledge was known from the results of the second questionnaire, namely the post-test, increased knowledge of anemia was caused by being given educational treatment on the "Tesimia" crossword puzzle.

Problem because red blood cells contain hemoglobin which carries oxygen to body tissues, anemia can cause various complications including fatigue and stress on the body's organs. (Ervina, 2018). Adolescent girls who are anemia are at risk of becoming anemia women of childbearing age. Furthermore when they become mothers, anemia can cause chronic energy deficiency during pregnancy (KEMENKES, 2022). Changes in mood, skin that looks pale, often experiencing, dizziness, experiencing Jaundice, heartbeat beating faster than usual, experiencing shortness of breath, restless legs syndrome and even swollen feet and hands if you have severe anemia. (KEMENKES, 2023)

Cause of anemia consist of blood loss, lack of red blood cell production, high levels of blood cell damage, other common causes that cause anemia, namely lack of iron, vitamin B12 or folar axzum, consumption of drugs, the destruction of red blood cells more quickly than usual is caused by immune system problems. (KEMENKES, 2023). Theory Support according to (Notoadmodjo, 2010) which states that high knowledge will cause a person to behave better towards an object whereas less knowledge will cause a person to have a negative attitude towards that object (Lestari, et al., 2023). Impact of anemia is disrupted growth and development, increased susceptibility to infection because the immune system decreases making it more susceptible to infection. (KEMENKES, 2018).

In this study there were 10 attitude question, after obtaining the respondents answers, they were corrected and tabulated it turned out that many of the respondents answers before being given the intervention

were still wrong, but after being given the intervention, there was an improvement in the respondents attitudes, which was known from the results of the second questionnaire, namely the post-test.

CONCLUSION

It this chapter i will conclude this research from the results of the data in the previous chapters, so the conclusion my research is entitled ‘The influence of anemia crossword puzzle education on the understanding and attitudes of young women regarding anemia among female students at SMPN 19 Jambi City this is, The average knowledge value before the education on the anemia crossword game was that the total score 4.40, but after being given education on the anemia crossword game, many positive answers were found to be 7.89, meanwhile the average attitude before the anemia crossword game education was obtained with a total score of 23.93, but after being given anemia crossword game education, many people answered positively as high as 34.00,. It is known that based on the results of data analysis, it is found that the volume is 0.001, which means that there is a significant or meaningful influence on the recognition and words about anemia among female students at SMPN 19 Jambi City, It is known that based on the results of data analysis, it is found that p is 0.001, which means that there is a significant influence of nutritional education and meaning with the media of anemia crossword puzzle at SMPN 19 Jambi City.

This research itself certainly has advantages that need to be continuously improved in this research, including, in changing attitudes, the overall effectiveness takes 3 to 6 months for the attitude to become a habit as expected, the time allocated to carry out intervention activities is very limited because it must be divided into teaching and learning hours, the next limitation is that there are other activities carried out by female

students who are given intervention even though they have been warned to postpone it first, limited space or lack of lighting, which interferes with crossword media intervention.

According to research by Wulan et al (2019) this crossword puzzle is included in the educational game category because in this crossword puzzle there are elements of educational games such as answering questions contained in boxes designed horizontally and downwards, and there is material that discusses the game.

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CONFLICT OF INTEREST

The author has stated that in this article there is no or potential conflict of interest from either the author or the agency in connection with the research that has been conducted, both based on authorship and publication.

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