

# The Influence of Poster Media on Increasing Knowledge about Anemia among Female Students at Arrahmah Modern Islamic Boarding School

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## ABSTRACT

Anemia is a common health problem among adolescent girls, affecting daily activities and academic performance. Low knowledge about anemia is one of the main contributing factors to its high prevalence. This study aims to determine the effectiveness of poster media in increasing knowledge about anemia among female students at the Arrahmah Modern Islamic Boarding School. This study employed a pre-experimental design with a one group *pretest-posttest* approach. A total of 66 students at Modern Arrahmah Islamic Boarding School were selected using simple random sampling. A structured questionnaire was used for pretest and posttest, and data were analyzed using the McNemar test. Before the intervention, most respondents had moderate knowledge (60.6%), which increased to 87.9% in the high category after the intervention. The McNemar test showed a Chi-Square value of 22.132 with a p-value = 0.000 ( $p < 0.05$ ). Poster media significantly improves students' knowledge about anemia. It is recommended as a simple yet effective educational tool, especially in Islamic boarding school environments.

## I. Introduction

Anemia is condition medical marked with low hemoglobin levels in blood so that bother transportation oxygen to all over body (WHO, 2011). Adolescents daughter is the most vulnerable groups Because menstruation , pattern Eat No balanced , and lack of knowledge about nutrition ( Ministry of Health of the Republic of Indonesia, 2018).

In Kediri Regency , the prevalence of anemia in teenager daughter reached 20.13 % of the 16,611 female students examined ( Dinas Health , 2023). Results interview with administrator Cottage Arrahmah Modern Islamic Boarding School show Not yet Once There is counseling or educational media about anemia. Low knowledge female students related to potential anemia lower quality health And performance Study .

Poster media is tool effective visual communication For increase understanding health . Posters are able to interesting attention , convey message in a way concise , and easy remembered (Otaverina, 2022). Research This aim For know the influence of poster media on improvement knowledge about anemia in female students Cottage Arrahmah Modern Islamic Boarding School.

The phenomenon that is the focus of this research is the lack of knowledge among female students about anemia and its impact on their health. Previous research has shown that a lack of knowledge about anemia contributes to the high incidence of anemia among adolescent girls. In Kediri Regency, particularly at the Arrahmah Modern Islamic Boarding School, no research has



specifically examined the effect of posters on increasing knowledge about anemia among female students.

This indicates a research gap that needs to be filled. A possible solution to address this problem is to conduct outreach using posters. Posters are an effective tool for conveying information visually and attracting attention (Amelia Sherly Otaverina, 2022). Previous research also shows that the use of posters in health outreach can increase knowledge and positive attitudes toward health issues, including anemia (Ester et al. 2021). Therefore, this study aims to examine the effect of posters on increasing knowledge about anemia among female students at the Arrahmah Modern Islamic Boarding School. Posters are a practical, attractive, and easily accessible health communication tool. Posters designed with attractive visuals and relevant information can help improve female students' understanding of the importance of preventing and treating anemia (Ester et al. 2021).

## II. Methods

Type study This is pre-experimental with one *group pretest-posttest* design . Population study is all over female students Cottage Arrahmah Modern Islamic Boarding School , which has 78 students, with sample as many as 66 female students were selected use technique *simple random sampling*. Data collection was carried out with use pretest and posttest questionnaires , while data analysis using test McNemar with level significance  $p < 0.05$  .

## III. Results and Discussion

Table 1. Characteristics Respondents Based on Age

Age	Frequency	Percentage (%)
13 years old	7	10.6
14 years old	9	13.6
15 years old	13	19.7
16 years old	12	18.2
17 years old	8	12.1
18 years old	15	22.7
19 years old	2	3.0
<b>Total</b>	66	100.0

Based on Table 1, majority respondents 18 years old as many as 15 respondents (22.7%), while the least 19 years old namely 2 respondents (3.0%).

Table 2. Characteristics Respondents Based on Class

Class	Frequency	Percentage (%)
7	11	16.7
8	6	9.1
9	16	24.2
10	10	15.2
11	8	12.1
12	15	22.7
<b>Total</b>	<b>66</b>	<b>100.0</b>

Respondents most originate from class 9 as many as 16 people (24.2%) and class 12 as many as 15 people (22.7%), while the least from class 8 , namely 6 people (9.1%).

Table 3. Characteristics Respondents Based on Knowledge Level Pretest and Posttest Groups

Knowledge	Pretest		Posttest	
	N	%	N	%
<b>Low</b>	0	0%	0	0%
<b>Currently</b>	40	39.4%	8	12.1%
<b>Tall</b>	26	39.4%	58	87.9%
<b>Amount</b>	<b>66</b>	<b>100%</b>	<b>66</b>	<b>100</b>

Before given intervention , partly big respondents is at on category knowledge moderate ( 60.6 %), whereas after intervention majority respondents increase become category high (87.9%).

Table 4. Tabulation Cross Based on Knowledge with Age Respondents Before And After Read And Observing Posters About Anemia

Age	Knowledge							
	Pretest				Posttest			
	Low N (%)	Medium N (%)	Height N (%)	Total N (%)	Low N (%)	Medium N (%)	Height N (%)	Total N (%)
13 years old	0 (0.0%)	4 (6.1%)	3 (4.5%)	7 (10.6%)	0 (0.0%)	3 (4.5%)	4 (6.1%)	7 (10.6%)
14 years	0 (0.0%)	6 (9.1%)	3 (4.5%)	9 (13.6%)	0 (0.0%)	0 (0.0%)	9 (13.6%)	9 (13.6%)
15 years	0 (0.0%)	10 (15.2%)	3 (4.5%)	13 (19.7%)	0 (0.0%)	2 (3.0%)	11 (16.7%)	13 (19.7%)
16 years	0 (0.0%)	4 (6.1%)	8 (12.1%)	12 (18.2%)	0 (0.0%)	2 (3.0%)	10 (15.2%)	12 (18.2%)
17 years	0 (0.0%)	5 (7.6%)	3 (4.5%)	8 (12.1%)	0 (0.0%)	1 (1.5%)	7 (10.6%)	8 (12.1%)
18 years	0 (0.0%)	9 (13.6%)	6 (9.1%)	15 (22.7%)	0 (0.0%)	0 (0.0%)	15 (22.7%)	15 (22.7%)
19 years old	0 (0.0%)	2 (3.0%)	0 (0.0%)	2 (3.0%)	0 (0.0%)	0 (0.0%)	2 (3.0%)	2 (3.0%)
<b>Amount</b>	<b>0 (0.0%)</b>	<b>40 (60.6%)</b>	<b>26 (39.4%)</b>	<b>66 (100%)</b>	<b>0 (0.0%)</b>	<b>8 (12.1%)</b>	<b>58 (87.9%)</b>	<b>66 (100%)</b>

Results analysis show there is influence significant use of poster media for improvement knowledge about anemia in female students ( $p < 0.05$  ). Results study show that before given education with poster media, the majority female students is at on category knowledge moderate ( 60.6 %). Condition This describe that understanding base about anemia still limited , so that potential cause risk

the occurrence of anemia due to lack of information about causes, symptoms, and prevention. After intervention, occurs improvement significant, where part big female students is at on category knowledge high (87.9 %). Findings This prove that poster media is effective in convey information health in a way concise And easy understood.

Results test McNemar show existence influence significant impact of poster media on improvement knowledge female students about anemia with Chi-Square value = 22.132 and p-value = 0.000 ( $p < 0.05$ ). This is in line with study Otaverina (2022) who stated that the poster is capable increase attention, understanding, and Power remember about issue health. Posters as a visual educational medium have superiority compared to method lecture, because more interesting, practical, and can accessible When just by female students.

Findings study This Also support theory learning cognitivism, which explains that information new more easy understood when associated with knowledge previously. Poster media that displays images, text short, and color interesting help female students understanding anemia in simple context. Besides that, the result study This in line with Ester et al. (2021) which states that use of visual media in counseling health capable increase motivation And attitude positive to prevention disease.

Improvement knowledge female students after intervention show that poster media can made into alternative strategic in education health in the environment Islamic boarding school. Considering limitations access information health in Islamic boarding schools, posters can placed on site strategic like class, dormitory, or board announcement to continue read And remembered. With Thus, the poster is not only functioning as means education while, but Also become reminder term long for female students For guard pattern eat, take additional tablets blood, and prevent the occurrence of anemia.

#### IV. Conclusion

Results study This show that poster media is influential significant to improvement knowledge female students about anemia in Pondok Arrahmah Modern Islamic Boarding School. Before intervention, majority respondents own knowledge moderate, but after given education with poster media, knowledge increase in a way significant to category tall.

With Thus, poster media is proven become means education simple, cheap, but healthy effective For increase knowledge teenager daughter regarding anemia. The parties Islamic boarding school recommended For Keep going using posters and other educational media continuous, whereas power health can make study This as reference in promotional program development health at school and Islamic boarding school.

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