

The Effect of Counseling on The Importance of Balanced Nutrition Through Poster Media on Breakfast Habits of Students at SDN 155 Gresik

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ABSTRACT

Balanced Nutrition Message recommends getting used to breakfast. If you don't have breakfast, your concentration will be disturbed and your learning achievement will drop. Counseling is carried out to improve a person's behavior with messages conveyed through print media (posters) the aim is to change students' breakfast habits. In order to observe students' breakfast habits, this research used a pre-experimental study with a one group pretest posttest design. A total of 40 children participated in the study at SDN 155 Gresik in grades 4 and 5, using the proportional random sampling method. The average knowledge score before and after counseling was 61.35 78.50. Breakfast behaviors were graded on a scale from 75.58 to 81.55 before and after counseling. According to the study's findings utilizing the paired t-test, balanced nutrition counseling through poster media had an impact on understanding of balanced nutrition ($p < 0.05$), but had no impact on breakfast behaviors ($p > 0.05$). It is preferable to implement balanced nutrition advice, and one of them is establishing a breakfast routine because it can stimulate the brain and aid in concentration and focus while learning.

INTRODUCTION

Elementary school-age children are in a phase of rapid growth and development, and are physically active. Therefore, they require high-quality nutrients in significant quantities. The necessary nutrients include energy and protein. The absorption of nutrients contributes to the improvement of health and the strengthening of the immune system, enhancing resistance to diseases.¹

After someone utilizes their senses (such as hearing, smelling, vision, etc.) to perceive something, they undergo comprehension.² An individual's perception and actions toward the selected food are influenced by their nutritional knowledge. It is hoped that having adequate understanding of nutrition can impact the choice of healthy foods and ultimately lead to achieving optimal nutritional status. Conversely, a lack of knowledge about nutrition and errors in food choices can affect one's eating habits, including breakfast routines.³

Providing information about nutrition to elementary school-age children should be done in an engaging manner to facilitate better understanding. One method employed is the use of posters.⁴ Those educated about nutrition through media exhibit better nutritional knowledge compared to

those who are not. The breakfast habits of elementary school children, with a median breakfast energy of 246 kcal, are influenced by their nutritional knowledge, accounting for 71.7% of the total.⁵

Cultivating the habit of breakfast for children is a way to promote good health and nutrition. Breakfast is a crucial aspect of a child's life and can contribute to fostering discipline.⁶ Breakfast refers to the food and beverages consumed between 6 a.m. and 9 a.m. A balanced meal should ideally comprise around fifteen to thirty percent of your total daily energy needs before starting daily activities.⁷ However, if school children do not consume breakfast before heading to school, they are prone to experiencing energy and protein deficiencies. Adopting the habit of breakfast can assist them in meeting their energy and protein requirements.⁸

In addition, consuming breakfast is a positive habit in maintaining a healthy eating pattern. Research indicates that approximately 31.2% of the adult population and between 16.9% to 59% of school-age children in Indonesia do not have breakfast every day. Data from the Basic Health Research in 2010 states that 4.6% of school-age children do not adopt a healthy breakfast habit. The energy deficiency rate in school-age children is around 70%, while protein deficiency reaches 80%. More than a quarter of them, about 26.8%, only consume water for breakfast, and nearly half of this population, approximately 44.6%, experience daily nutritional deficiencies of more than 15%.¹⁰

The impact of skipping breakfast is that students tend to opt for school snacks as a means to temporarily fill their stomachs, substituting nutritional intake. However, this often results in an unbalanced nutritional intake.¹⁰ Breakfast holds significant benefits for individuals. For elementary school students, having breakfast contributes to improved concentration during learning and facilitates the absorption of materials throughout the learning process, ultimately enhancing academic success. The benefits of breakfast include supplying energy to the brain, increasing vitamin intake, improving memory, and enhancing resilience to stress.¹¹

Ten students from SDN 155 Gresik underwent an initial examination, consisting of three students from grade 4, three students from grade 5, and four students from grade 6. The results indicated that nine out of ten students have healthy breakfast habits, while one student has an adequate breakfast habit. Therefore, eighty percent of the students have good breakfast habits, and ten percent have sufficient breakfast habits. Based on previous research findings, the researchers aim to explore the impact of using posters in balanced nutrition education on the breakfast habits of students at SDN 155 Gresik.

METHODS AND MATERIALS

In this study, a quantitative approach was employed using a One Group Pretest Posttest design, which involved data collection both before and after the intervention, without a control group.

The pretest data was collected prior to the intervention, ensuring that the treatment outcomes could be accurately compared with the conditions before and after the intervention.¹²

This study was conducted at SDN 155 Gresik from November 2022 to March 2023. It involved 67 students from grades 4 and 5. The proportional random sampling method was used to gather samples from 40 respondents. Both primary and secondary data were collected. Primary data consisted of respondent characteristics, knowledge, and habits. The research method used was a questionnaire; secondary data also came from an overview of SDN 155 Gresik. The results of bivariate and univariate analyses (Paired T-test) were obtained.

RESULTS

Characteristics of students in grades 4 and 5 at SDN 155 Gresik

Table 1. Characteristics of Class 4 and 5 Students at SDN 155 Gresik

Variable	Frequency (n)	Percentage (%)
Class		
4	20	50
5A	10	25
5B	10	25
Age		
10 years	24	60
11 years	15	37.5
12 years	1	2.5
Gender		
Male	21	2.7
Female	19	47.5

Source: Primary data, 2023

In Table above the characteristics of students in grades 4 and 5 are presented, including their class, age, and gender. Based on the class, the largest sample is from grade 4, consisting of 20 students (50%), while the remaining students are from classes 5A and 5B, each with 10 students (25%). Regarding the age group, the majority fall into the 10-year-old category, comprising 24 students (60%), followed by the 11-year-old group with 15 students (15%), and the 12-year-old group with 1 student (2.5%). In terms of gender, the majority of the sample is male, accounting for 21 students (25%), while the remaining 19 students are female (47.5%).

Before conducting Balanced Nutrition Knowledge Counseling Through Poster Media

Table 2. Categories of Balanced Nutrition Knowledge Before Counseling

Knowledge	Before		After	
	n	%	n	%
Good	4	10	25	62.5
Enough	23	57.5	15	37.5
Less	13	32.5	0.0	0
Total	40	100	40	100

Source: Primary data, 2023

Based on the results in Table above, student's knowledge before being provided counseling using poster media was categorized as good at 10%, and after counseling, it increased to 62.5%. Then, the average scores of student's understandings of balanced nutrition through poster media in grades 4 and 5 are as follows:

Table 3. Average Scores of Balanced Nutrition Knowledge for Students in Grades 4 and 5

Knowledge score	n	Minimum	Maxsimal	Average
Pretest	40	27	93	61.35
Posttest	40	60	100	78.50

Source: Primary data, 2023

The average pretest knowledge score for students was 61.35 with a minimum score of 27 and a maximum score of 93, as shown in Table 2.3. After one counseling session, the average posttest knowledge increased to 78.50, with a minimum score of 60 and a maximum score of 100. Based on the information in the table above, it can be concluded that providing balanced nutrition education through poster media increased the average knowledge by 17.15.

After Conducting Balanced Nutrition Knowledge Counseling Through Poster Media

Table 4. Categories of Breakfast Habits for Students in Grades 4 and 5

Breakfast Habits	Pretest		Posttest	
	n	%	n	%
Good	14	35	20	50
Often	21	52.5	18	45.5
Less	5	12.5	2	5
Never	0.0	0	0.0	0
Total	40	100	40	100

Source: Primary data, 2023

Based on the results in Table above, students breakfast habits before being provided counseling using poster media were categorized as good at 35%, and after counseling, it increased to 50%. Then, the average scores of students understanding of balanced nutrition through poster media in grades 4 and 5 are as follows:

Table 5. Average Scores of Breakfast Habits For Students In Grades 4 And 5

Breakfast Habits Score	n	Minimum	Maksimal	Average
Pre test	40	50	90	75.58
Post test	40	60	100	81.55

Source: Primary data, 2023

The average pretest scores regarding students' breakfast habits were 75.58, with a minimum score of 50 and a maximum score of 90. After the intervention, the average posttest scores increased to 81.55, with a minimum score of 60 and a maximum score of 100. From this data, it can

be concluded that awareness of breakfast nutrition increased by approximately 5.97 points after the implementation of poster media, both before and after its use.

The Influence of Counseling on the Importance of Balanced Nutrition on Breakfast Habits of Grade 4 and 5 Students at SDN 155 Gresik

Table 6. The Influence of Balanced Nutrition Knowledge Counseling Using Poster Media

Knowledge	Average	SD	t-count	P
Pretest	1.78	620	8.540	0.000
Posttest	2.65	483		

Source: Primary data, 2023

Results from the paired simple t-test analysis show a p-value of 0.000 ($p < \alpha 0.05$), as seen in Table 3.1. Therefore, it can be concluded that there is a significant difference in understanding balanced nutrition before and after counseling.

Table 7. The Influence of Breakfast Habit Counseling using Poster Media

Breakfast Habits	Average	SD	t-count	P
Pre test	3.23	660	2.317	0.026
Post test	3.50	555		

Source: Primary data, 2023

Results of the Paired Simple T-Test analysis is shown in Table above The p-value is 0.026 ($p > \alpha 0.05$). Therefore, it can be concluded that an individual's breakfast habits did not change significantly either before or after participating in the balanced diet program.

DISCUSSION

1. Before implementing Balanced Nutrition Knowledge Counseling through Poster Media

The results after conducting the pretest for students from SDN 155 Gresik, specifically in grades 4 and 5, with a sample size of 40, revealed the following categorizations: 10% of students were classified as having good knowledge, 57.5% had moderate knowledge, and 32.5% were classified as having poor knowledge. Knowledge is the result of an individual's understanding through various sensory processes that they possess, which can be influenced by the level of sensitivity and perception towards objects. Most of the knowledge that humans possess comes from hearing and seeing. Because students in grades 4 and 5 have not yet learned about balanced nutrition, they are unaware. Balanced nutrition education is provided through counseling, which is essentially a strategy to change human eating patterns.

2. After conducting Balanced Nutrition Knowledge Counseling through Poster Media

After implementing the intervention on balanced nutrition education and conducting a posttest, there was an improvement in knowledge among students in grades 4 and 5, with a good category percentage of 62.5%. The education provided was in the form of counseling, resulting in an increase

in students' knowledge. Additionally, counseling is closely tied to media, and in this study, poster media was utilized. Posters were chosen to capture students' attention and enhance their understanding of the conveyed messages.

The findings from the study indicate that after receiving nutrition training through posters, the group that did not receive special treatment experienced an improvement in better understanding. Similarly, there was a significant improvement in the group that received special treatment. There was no significant difference between the control group and the treatment group in the good category. In the counseling process, the increase in knowledge was influenced by the method, media, and designated time. Other studies also show that visual messages in the form of images tend to convey information better than words, especially when the target audience for counseling is elementary school students.¹³

3. Before conducting Breakfast Counseling Through Poster Media on Breakfast Habits

After conducting the pretest on breakfast habits for grades 4 and 5, the results showed that 35% of students had a good breakfast habit, 52.5% had a frequent habit, and 12.5% had a poor habit. The most common reason for the frequent breakfast habit before the study was a lack of knowledge among students about breakfast. Other factors such as the role of parents in preparing breakfast and economic factors also contribute. The absence of these factors leads to a decline in the breakfast consumption of an individual.

4. After conducting Breakfast Counseling Through Poster Media on Breakfast Habits

After counseling using poster media regarding breakfast habits, students' breakfast habits improved in the post-test. In grades 4 and 5, students' breakfast habits improved, with 50% of students categorized as good and 45% categorized as frequent. However, this improvement was not statistically significant. Behavioral change undergoes a process involving a change in knowledge about the importance of breakfast, student attitudes, and student practices. It can be concluded that the knowledge is already good, but the breakfast habits are still in the process of transitioning to improvement.

5. The Influence of Balanced Nutrition Counseling Through Poster Media on Breakfast Habits of Students at SDN 155 Gresik

After refraining from eating in the evening, the body receives breakfast as its first meal.¹⁴ Having breakfast every day is crucial to maintaining a healthy and balanced body.¹⁵ Breakfast is crucial for many people to engage in activities, especially for schoolchildren, as it aids in learning and development. This is because carbohydrates increase blood glucose, helping children concentrate, become more focused, and attentive during learning, making it easier for them to absorb information.

In this study, the Paired Simple T-Test method indicates that breakfast habits before and after counseling did not undergo significant changes. This is evidenced by the probability value (p) of 0.785 ($p > 0.05$). Therefore, it can be concluded that students at SDN 155 Gresik did not significantly change their breakfast habits after being informed about the importance of balanced nutrition through posters.¹⁶

The findings of this study indicate that students accumulate more knowledge about balanced nutrition, both before and after the exam. Educational posters about nutrition have a positive effect in enhancing students' understanding of balanced nutrition, which, in turn, can deepen their pre-existing knowledge. The purpose of this activity is to encourage people to adopt a healthy lifestyle so that they not only know and understand but also can follow the advice on health.¹⁷

Meanwhile, there was a change in breakfast habits from the Pre-Test and Post Test measurements. The researcher argues that nutritional counseling using poster media for students at SDN 155 Gresik has no effect because changing someone's behavior is difficult when the time used is only brief. The researcher argues that behavior change will occur if the process used requires a sufficiently long stage. Even in daily life, differences occur. This is because individuals can exhibit positive behavior even though knowledge and attitudes still tend to be negative.

Nearly one in four schoolchildren skips breakfast. On average, female students are more likely to skip breakfast. Often, skipping breakfast can lead to an unhealthy lifestyle, characterized by an imbalanced diet, lack of engagement in physical activities, insufficient sleep, as well as the risk of overweight or obesity. In the school environment, skipping breakfast has become a common occurrence.¹⁸

In line with previous research findings, this study found that despite differences in knowledge, both groups of students did not experience a difference in breakfast habits after the intervention. Other studies have found that students in the consistent action category still have poor action outcomes. This is because students are still reluctant to have breakfast before going to school, attempting to meet their water needs with eight glasses every day, and dislike eating vegetables.¹⁹

According to another study, despite students increased nutritional knowledge about the importance of breakfast, there are still students who do not practice it. The research analysis results indicate that respondents cannot have breakfast for several reasons. The first is that they do not have enough time, do not have an appetite for anything in the morning, and there is no food available. Second, because the parents who answered the survey have to go to work in the morning, they do not have enough time to prepare breakfast for themselves. This results in the available food having to be divided for two days due to economic reasons.²⁰ In another study, there

are still students who use media such as visual presentations, wayang performances, and drama with picture cards. Because they don't feel hungry, the main reason for not eating.²¹

Some of the explanations about the factors influencing their breakfast habits are influenced by external factors, such as their school friends and the environment where they live. Elementary school students are not aware of the importance of breakfast and maintaining a healthy eating pattern.²²

In addition, a mother's involvement in the family, particularly in caregiving for family members, also has an impact on a child's breakfast habits in the morning. One common challenge faced by mothers in organizing their children's breakfast is the lack of knowledge about how to arrange suitable menu options to prevent children from feeling bored.²³ Furthermore, students' poor breakfast habits can be influenced by parents who do not implement a morning breakfast routine.²⁴ Positive breakfast habits formed during childhood are influenced by social aspects, education, and economic factors, and are generally sustained into adulthood.²⁵

Schools can play a crucial role in promoting breakfast habits. In this context, active engagement by schools in educating and encouraging the practice of breakfast can have positive effects on students' cognitive performance, reduce discipline and psychological issues, decrease tardiness and absenteeism, enhance focus, and create a more optimal learning environment.²⁶

CONCLUSION

Before conducting balanced nutrition knowledge counseling through poster media, the average score was 61.35. After the balanced nutrition knowledge counseling, the score increased to 78.50. There was a difference in balanced nutrition knowledge before and after the counseling through poster media. Before conducting breakfast counseling through poster media, the average habit score was 75.58. After the breakfast counseling, the average student habit score increased to 85.15. There was a difference in breakfast habits before and after the counseling through poster media. However, there was no significant impact on breakfast habits from balanced nutrition knowledge counseling through poster media.

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