

The Effectiveness of Nutrition Counseling with Poster Media in Changing Knowledge about the Importance of Breakfast for Students in Timang Gajah Public Junior High Schools, Bener Meriah Regency

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Abstract

Breakfast is an important eating and drinking activity before doing physical activities. People usually have breakfast at 06.00-09.00 A.M. Breakfast habits are strongly influenced by the level of knowledge. Nutrition knowledge can be increased through formal and informal education (counseling, training, seminars, and counseling) by using media as an attraction. Selecting the right media is expected to create interesting and effective message delivery. Good media are media that convey messages so that the target can know the content of the message and effectively change his behavior. This research employed a quantitative method with a quasi-experimental approach. This research was conducted in February 2021 at Timang Gajah Public Junior High Schools. The data were collected using a pretest-posttest with a control group design and a questionnaire, distributed to class VIII students in Timang Gajah Public Junior High Schools, Bener Meriah Regency. The research sample was 73 people. The data were analyzed using an independent t-test. This study has discovered an increase in knowledge about the importance of breakfast without using poster media with a p-value of 0.000. Meanwhile, counseling using poster media shows a significant increase with a p-value of 0.000. Using and not using poster media to increase students' knowledge about the importance of breakfast at Timang Gajah Public Junior High Schools, Bener Meriah Regency have a p-value of 0.000.

Keywords: breakfast, effectiveness of counseling, knowledge, media poster

Introduction

Breakfast refers to consuming food containing a source of energy, building blocks, and regulatory substances in the morning before performing an activity (Depkes, 2005). Breakfast is important for everyone to start an activity throughout the day because it provides the nutritional needs in the morning. People usually have breakfast after waking up in the morning until 9 A.M. to fulfill 15-30% of their daily nutritional needs. Thus, people realize a healthy, active, and intelligent life. Skipping breakfast could decrease learning concentration as marked by feeling lazy, weak, lethargic, dizzy, and sleepy. Such a condition will decrease children's learning achievement and result in low blood pressure and anemia. Glucose contained in breakfast plays a role in a person's cognitive memory mechanisms; however, glucose does not directly affect the level of intelligence (Ricvan D.N 2017).

The World Health Organization (WHO) reports that in 2014, 10.30% of people skipped breakfast. Breakfast that meets the nutritional criteria refers to a breakfast that supplies carbohydrates (55-65%), protein (12-15%), and fat (24-30%). Moreover, breakfast must fulfill 370-555 kcal of energy and 9.8-14.7 grams of protein. Breakfast gives energy capital to perform daily activities increases concentration, and shapes an excellent physique. To sum up, breakfast will support humans to perform their careers.

Liani (2019) conducted a study in Aceh and has discovered that in general, more than half of the respondents (57.7%) have poor breakfast habits. Moreover, in particular, the majority of the respondents (51.4%) have poor breakfast habits.

Breakfast habits are strongly influenced by a person's level of knowledge, especially knowledge and habits of breakfast. The nutrition knowledge can be increased through formal education (kindergartens, elementary schools, junior high schools, high schools, and universities) or informal education (counseling, training, seminars, counseling, and media).

The selection of the right media is expected to create attractive and effective message delivery. One of the attractive and effective media is posters. A poster is media that consists of very simple words and symbols and visually combines a strong design with colors and messages to attract the audience's attention (Yusandika, 2018). A poster is an image media that has a highly persuasive nature because it displays a problem (theme) that creates strong feelings in the audience (Agitya, 2016). Posters effectively convey information and attract the audience's attention.

Methods

This quantitative research employed a quasi-experimental design and pretest-posttest method with a control group design. Researchers divided two groups: an experimental group (Public Junior High School 3 Timang Gajah) and a control group (Public Junior High School 1 Timang Gajah). The experimental group consisted of 39 samples who received treatment in the form of counseling with poster media. Meanwhile, the control group consisted of 34 samples who received counseling without poster media. This study began with giving a pre-test using a questionnaire to both groups before counseling. Afterward, the researchers conducted counseling. This study explored the effect of counseling using poster media on students' knowledge about the importance of breakfast. After the pre-test, the two groups would be measured a second time using post-test questions to assess the effectiveness of counseling using and not using poster media.

Primary data collected in this study comprised the sample's identity, such as name, gender, and age. The data were collected from the respondents who filled in the questionnaire. Data on students' knowledge about the importance of breakfast were collected from the respondents who answered the pretest and posttest questions.

The data were processed and analyzed using computerized systems, namely Microsoft Office Excel 2007 software and the Statistical Program for Social Science (SPSS) version 26 for windows. The obtained data were tabulated and analyzed descriptively and inferentially. The descriptive statistics carried out in this study included frequency distribution while the inferential statistics included the independent t-test.

Results

This study employed the effectiveness of nutrition extension using poster media in increasing knowledge about the importance of breakfast for students at Timang Gajah Public Junior High Schools, Bener Meriah Regency. The results of this research are summarized in the following tables.

Table 1. Characteristics of Respondents at Timang Gajah Public Junior High Schools, Gajah Putih District Bener Meriah Regency

Variables	N	%
Age (in year)		
11	2	2.73
12	20	27.4
13	41	56.16
14	5	6.9
15	5	6.9
Gender		
Men	48	65.76
Women	25	34.24
Class		
VIII	73	100

Table 1 shows that the majority of the samples are 13 years old (41 students or 56.16%) and males (48 students or 65.76%).

Table 2. Knowledge Level of Students before and after Counseling without Using Poster Media at Timang Gajah Public Junior High Schools, Gajah Putih District, Bener Meriah Regency

Counseling without media	Knowledge				
	N	Min	Max	Mean	SD
Before	34	47	70	59.62	7.127
After	34	65	90	80.62	6.610

Table 2 presents that the average knowledge of the students before the counseling is 59.62. Meanwhile, their knowledge after the counseling is 80.62. These scores indicate that counseling without using poster media increases students' knowledge by 21 points.

Table 3. Knowledge Level of Students before and after Counseling Using Poster Media at Timang Gajah Public Junior High Schools, Gajah Putih District, Bener Meriah Regency

Counseling using media	Knowledge				
	N	Min	Max	Mean	SD
Before	39	33	90	59.59	12.902
After	39	63	100	87.51	10.775

Table 3 signifies that the average knowledge of students before counseling is 59.59, and their knowledge after counseling is 87.51. These scores indicate that counseling using poster media increases students' knowledge by 27.92.

Table 4. The Effectiveness of Counseling with Poster Media in Increasing Students' Knowledge of the Importance of Breakfast at Timang Gajah Public Junior High Schools, Gajah Putih District Bener, Meriah Regency

Variables	Mean	SD	SE	P Value	N
Using Media	84.30	9.659	1.131	0.000	73

Table 4 shows that the average difference between students' knowledge and counseling using poster media is 84.30 with a standard deviation of 9.659. The statistical test has obtained a p-value = 0.000 ($p = 0.05$). Thus, CI is 95%, H_0 is rejected, and H_a is accepted. These results conclude that the students' knowledge effectively increases after receiving counseling about the importance of breakfast using poster media with a significance level of 95%.

Table 5. The Effectiveness of Counseling without Poster Media in Increasing Students' Knowledge of the Importance of Breakfast at Timang Gajah Public Junior High Schools, Gajah Putih District, Bener Meriah Regency

Variables	Mean	SD	SE	P-Value	N
Without Media	59.60	10.542	1.234	0000	73

Table 5 presents that the students who receive counseling without poster media have an average knowledge difference of 59.60 and a standard deviation of 10.542. These results denote that the two groups who receive counseling with and without poster media show different increases by 24.7. The statistical test has obtained a p-value = 0.000 ($p = 0.05$). Thus, CI is 95%, H_0 is rejected, and H_a is accepted. These results conclude that students' knowledge effectively increases after receiving counseling about the importance of breakfast without using poster media with a significance level of 95%.

Discussion

Table 2 shows that counseling without using poster media has an average pre-test value of 59.62 and the post-test average value of 80.62. These scores show an increase of 21% with a p-value of 0.000. Thus, there is a difference between the pre-test and post-test on counseling without using poster media.

Knowledge can be obtained through various ways, such as attending education, training, counseling, seminars, or reading. Knowledge is closely related to education, and education is inseparable from the teaching and learning processes. Nutrition education through counseling using media for school children is believed to increase their knowledge more effectively (Arikunto, 2013).

Health education is an educational activity carried out by spreading messages and instilling confidence so that the respondents not only know and understand but also make recommendations related to health (Effendy, 2012 in Fitriya Hayati, 2017). Meanwhile, Table 4 shows that counseling using poster media has an average pre-test value of 59.59 and an average post-test value of 87.51. These scores indicate an increase

of 27.92%. Moreover, the result shows a p-value of 0.000, indicating a significant difference between the pre-test and post-test on counseling using poster media.

A media poster is a short message in the form of pictures and writing to influence someone to pick an offered thing and to act. Posters are the most frequently used media in the general environment. Taufik (2007) (in Wahyuni, 2017) mentions that media is a tool used to promote health, help and demonstrate action, and deliver messages from the sender to the recipient. Thus, media can explain thoughts and feelings, understand a topic, and appreciate an explanation.

Counseling using poster media is effective because knowledge of the students' at Timang Gajah Public Junior High Schools significantly increases. Statistical tests were conducted using an independent t-test on counseling using media. The test has revealed a sig value of 0.000 (0.05) at a 95% confidence level. These results conclude that poster media effectively increases students' knowledge. Meanwhile, counseling without using media has obtained a sig value of 0.000 (0.05) at a 95% confidence level. These results conclude that counseling without using poster media effectively increases students' knowledge.

Conclusion

Poster media is a health education effort to increase breakfast knowledge, attitudes, actions, and behavior of students at Timang Gajah Junior High School, Gajah Putih District Bener Meriah Regency. This statement is proven by the increase in the average knowledge value of respondents after counseling

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