

The Effect of Health Promotion Using Audio Visual Media on Increasing Knowledge Children About The Risk of Overnutrition at State Primary School Plawad IV District Karawang

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Abstract

Obesity occurs in Indonesia in children aged 5-12 years, as many as 18.8% are overweight and 10.8% are obese. Children who are overnourished are at high risk of obesity, which can lead to various health problems such as type 2 diabetes, hypertension, heart disease, and respiratory disorders. The level of children's nutritional knowledge is one of the factors that can affect the occurrence of obesity in children. Video is an audio-visual medium that can reveal objects and events such as real situations. Through video media, students can understand learning messages in a more meaningful way so that the information conveyed through video can be understood as a whole. This study aims to evaluate the effect of health promotion using audio-visual media on increasing children's knowledge about the risk of overnutrition at Plawad IV State Elementary School, Karawang Regency. This study used a quasi-experimental design of One Group Pretest-Posttest Only with 54 elementary school children selected through purposive sampling. The instrument used is a knowledge questionnaire. The data was analyzed using the Paired Sample T-Test. The average children's knowledge score increased from 10.13 before the intervention to 11.17 after the intervention, with a significant increase (p-value < 0.05). The Paired Sample T-Test showed a significant difference in the score before and after the promotion (p-value 0.000). Health promotion using audio-visual media significantly increased children's knowledge about the risks of overnutrition at Plawad IV State Elementary School, Karawang Regency.

Keywords: Children, Audio Visual, Health Promotion, More Nutrition Risks.

Introduction

Overnutrition in children is a condition in which children have excessive calorie intake over their body's needs, which usually results in unhealthy weight gain. This condition is often measured using a body mass index (BMI) adjusted for age and gender. Overnutrition in children can develop into obesity if not handled properly. Obesity, also known as overnutrition, is a serious problem among school-age children (6-12 years old) because it can develop into adults and increase the risk of metabolic and degenerative diseases such as type 2 diabetes mellitus and cardiovascular disease.

In 2016, the number of children around the world, including in Indonesia, with severe obesity reached 41 million. Children who are overweight or obese are more likely to live in developing countries, where the rate of increase is 30% higher than in developed countries. Of the children aged 5 to 12 years in Indonesia, 18.8% are severely obese and 10.8% have severe dental caries. The latest data shows that the obesity situation is not under control³. According to the West Java Health Profile in 2019, of the 3,297,304 people identified as obese in 2018, 291,064 were found to be overweight. The prevalence of obesity in children in Karawang Regency in 2017 was 27.90%.

More nutrition in children is caused by several factors, including socioeconomic and demographic, parents' employment and income, eating patterns and habits, physical activity and lifestyle, parenting styles, and other factors (Banjarnahor et al., 2022). According to research conducted by Sarah¹, several different factors contribute to obesity, including genetic, health, psychological, environmental, and dietary factors. Dietary patterns that contribute to obesity and obesity are excessive food consumption.

Prevention and Treatment of Excess Nutrition According to the Ministry of Health of the Republic of Indonesia in 2012, the prevention of overnutrition which includes overweight and obesity can be done by approaching all children indiscriminately, both in children at risk of overweight and obesity and those who are not. In the successful efforts to prevent and handle malnutrition in children, the role of parents at home in the family environment plays a very crucial role but also requires help from teachers to supervise and control children's growth in the school environment. Research by Novianti et al.⁴ found that the level of children's nutritional knowledge is one of the factors that can affect the occurrence of obesity in children. In health education activities, learning media that

can describe physical concepts in real life is needed. One of the media that can be used is video.

The urgency of this research raises a problem that occurs in Indonesia and research will be carried out on health promotion using audio-visual media to increase children's knowledge about the risk of overnutrition at Plawad IV State Elementary School Karawang Regency, later it will be followed up related to the findings obtained at the Plawad IV State Elementary School Karawang Regency. This study aims to determine the effect of health promotion using audio-visual media on increasing children's knowledge about the risk of overnutrition at Plawad IV State Elementary School, Karawang Regency.

Method

The design of this research uses a quantitative approach, the method used in this research is quasi-experiment or pseudo-experiment. The design quasi-experiment uses One Group Pretest-Posttest Design. The population in this study is all students at SD Negeri Plawad IV Karawang in grades 4 – 6 totaling 116 people, the number of samples is 54 people with purposive sampling as the technique used to take samples. The initiative sampling from June to July 2024. The intervention given is to provide a questionnaire to respondents to assess knowledge before health promotion. After 10 minutes, the researcher provides health promotion with audiovisuals about THE RISKS OF OVERNUTRITION to respondents. One week later, the researcher gave the questionnaire back to the respondents to fill out. After all, respondents are evaluated, all data is measured to see the effect of health promotion using audio-visual media on increasing children's knowledge about the risks of overnutrition at SDN PLAWAD IV Karawang. The data analysis used was using univariate and bivariate tests The reliability test on children's knowledge showed that Cronbach's Alpha was higher at 0.771. Data analysis using Paired Sample T-Test.

Result

Table 1.
Average Level of Children's Knowledge about Riziko Nutrition More

	N	Min	Max	Mean	SD
<i>Pre-test</i>	54	5	14	10,13	2,299
<i>Post-test</i>	54	5	15	11,17	2,393

The results of the descriptive analysis showed that there was a difference in the children's nutritional risk scores in the pretest which was marked by an average value of 10.13 while in the posttest group, there was a difference in the score of the child who was marked with the average score was 11.17 (Table 1).

Table 2.
The Effect of Health Promotion on Children's Knowledge Level about the Risk of Overnutrition

<i>Variable</i>	<i>Pre-test</i>		<i>Post-test</i>		<i>Mean Difference</i>	<i>P-value</i>
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>		
Children's Knowledge Score	10,13	2,299	11,17	2,393	1,04	0,0000

Based on the paired T-test conducted (Table 2), a *p-value* of 0.000 was found, so it was assumed that H_0 was rejected and H_a was accepted. So there is an effect of health promotion using audio media on increasing children's knowledge about the risk of overnutrition at SD Negeri Plawad IV, Karawang Regency.

Discussion

The results of the study showed that the increase in nutrition risk was increased by the promotion of the nutrition risk of the child compared to the increase in the number of students who were involved in the animation of the student. IV, V, and VI SDN Plawad IV. In this study, there is a significant change in data on the pretest and post-test, but there is still 1 student in the post-test who gets a score of 5 there is no improvement, so in this study, there is no improvement. The average increase is only 1-3 points.

The results of the Fitria for students to the fourth class of SDN 08 Kota Bengkulu indicate that the child's score is 1.81 increase in the number of children in the child who is in the same level of knowledge as a result of the child's involvement in the child's education and the child can improve the understanding of the healthy diet and nutritional risks.

In this study, providing education in videos to educate. Educational videos are a form of audiovisual media that cannot be separated as an indoctrination method for viewing. Auxiliary visual media can convey information more realistically through moving images and sound. Educational videos have a greater appeal than other media because they have certain symbols to increase curiosity. I do this to utilize the senses of

hearing and vision. The more senses that are used to record information, the greater the likelihood of receiving the information conveyed (Simanjuntak, 2020).

According to research by Andriyani et al., the combination of visual and audio in educational media is proven to increase information retention in children. The sense of touch (skin) can be activated so that children can remember the interactive tools implied in some audio-visual media, such as touch screens. The senses of smell and taste (tongue), although less directly involved in audio-visual media, can be linked to additional activities such as cooking exercises or cooking the food discussed in the media.

The effectiveness of the information in this program is that the program is considered effective in improving the understanding of children who can convey information in a way that is understood and understood. To visualize clearly and the audio that is listened to the child can more easily remember and understand the information provided, but there is still one child who got a score of 5 both in the pretest and in the post-test, this is something that is noted for this student to be more disciplined again.

Conclusion

The average value of children's knowledge level about nutritional risks before being given health promotion with audiovisual media is 10.13 and after being given health promotion with audiovisual media is 11.17. The Paired Sample T-Test showed a significant difference in the score before and after the promotion (p-value 0.000). Health promotion using audio-visual media significantly increased children's knowledge about the risks of overnutrition at Plawad IV State Elementary School, Karawang Regency.

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