

INFLUENCE OF MEDIA COUNSELING BOARD GAME “JAGATES” ON KNOWLEDGE AND ATTITUDE FOR DIABETES PREVENTION AT SDN 93 JAMBI CITY

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ABSTRACT

Background: Diabetes is a chronic disease characterized by increased blood sugar levels due to the inability to produce or use insulin effectively. The risk factor for type 2 diabetes is lifestyle. One effort to reduce the prevalence and improve attitudes towards preventing diabetes mellitus is outreach through the board game "JAGATES". This research aimed to determine the effect of counseling through the board game "JAGATES" in increasing knowledge and attitudes towards preventing diabetes mellitus in class V students at SDN 93 Jambi City.

Method: This research is a non-probability research with a one-group pre-test post-test design using total sampling. This research was carried out at SDN 93 Jambi City. Univariate descriptive analysis includes frequency and percentage distribution, bivariate test with Shapiro-Wilk and Wilcoxon signed-rank test

Result: It is known that Asymp.Sig (2-tailed) has a value of 0.000. Because the value of 0.000 is smaller than ≤ 0.05 , there is a difference in the results of counseling through the board game "JAGATES" for class V students at SDN 93 Jambi City in the pretest and posttest.

Conclusion: Present the main conclusions and their implications. There is an influence of counseling through the board game "JAGATES" on knowledge and attitudes toward preventing diabetes mellitus in class V students at SDN 93 Jambi City

Keywords: diabetes mellitus; knowledge; attitudes; board game; JAGATES

INTRODUCTION

Diabetes is a chronic disease characterized by increased blood sugar levels because the body cannot produce or use insulin effectively. Type I diabetes is a chronic disease characterized by the body's inability to produce insulin caused by damage to pancreatic beta cells due to autoimmune, genetic or idiopathic factors. On the other hand, type II diabetes mellitus is characterized by the inability to maintain normal blood sugar levels due to lifestyle changes due to progressive dysfunction of pancreatic beta cells due to insulin resistance. (ADA, 2017).

Diabetes mellitus (DM) is caused by metabolic disorders that occur in the pancreas

and is characterized by increased blood sugar levels, often called hyperglycemia, which is caused by a decrease in the amount of insulin in the pancreas. Diabetes mellitus can cause various macrovascular and microvascular complications. DM disease can cause cardiovascular disorders. This disease is a very serious disease that can cause stress and heart attacks if not treated immediately (Lestari, et al., 2021).

According to the 2023 Indonesian Health Survey, the prevalence of diabetes mellitus at all ages according to Jambi province is 0.9% with 11,588 cases, the highest cases occurred in DKI Jakarta 3.1% with 33,552 cases, while the lowest cases occurred in Papua Mountains 0, 2% with 4,563 cases and for Indonesia the

prevalence is 1.7% with 877,531 cases. The prevalence of diabetes mellitus according to characteristics is the highest at age 65-74 years, 6.7% with 44,881 cases, while the lowest is at age ≤ 1 year, 0.19% with 11,518 cases.

Based on data obtained from the Jambi City Health Service, it is known that diabetes mellitus data shows that the number of sufferers in 2022 will reach 57.9% with a total of 12,232 people. Based on 2022 data, there were 389 cases of diabetes mellitus at the Rawasari Community Health Center and this will increase in 2023 by 44.73% with 582 cases. Based on this initial data, it can be seen that diabetes cases increase every year.

Knowledge can be increased through health education activities through various types of health promotion media, namely through leaflets, posters, banners, flyers, brochures, games, etc. that can increase knowledge. The media used to increase knowledge in elementary school students can be games. Playing while learning is an effective method that can be used to increase knowledge, by using board games students become more responsive because students are more active and interactive and can increase cooperation between players. With board games, the message you want to convey to the audience can be achieved. delivered.

Based on the background of the problem, there is still a lack of students' knowledge and attitudes towards preventing diabetes mellitus, the problem formulation in this research is: Is there an influence of counseling using the board game media "JAGATES (Prevent and Prevent Diabetes)" on increasing knowledge and attitudes towards preventing diabetes mellitus? in class V students of Elementary School 93 Jambi City. The aim of this research is to determine the effect of counseling using the board game "JAGATES" on knowledge and attitudes towards preventing diabetes in class V students at SDN 93 Jambi City.

METHODS

This type of research is quantitative research with a non-probability method. The design used in this research is one group pre-post test design,

This research design was used to test the effect of counseling on the board game "Jagates" on knowledge and attitudes towards preventing diabetes mellitus in students at SDN 93 Jambi City. Measurements of knowledge and attitudes were carried out before being given counseling (pre-test) and after being given counseling (post-test).

This research was conducted at SDN 93 Jambi City in May 2024. The population in this research were all class V students at SDN 93 Jambi City. Data processing is collected using a questionnaire, data processing will be carried out using Editing, Coding, Transferring, Tabulating.

Data analysis was carried out univariate and bivariate. The statistical test for bivariate analysis is using the Shapiro-Wilk and Wilcoxon signed rank test using the SPSS application tool at a confidence level of 95% ($\alpha = 0.05$). Hypothesis testing is carried out by comparing the P value at the 95% confidence level with the following criteria; if the distribution is normal ($P \geq 0.05$) then the analysis used is Paired T - Test. If the normality test is not ($P \leq 0.05$) if it is not normally distributed then the Wilcoxon test is carried out if the P-value $P \leq 0.05$ then H_a is accepted. Data is presented in tabular and textual form.

RESULTS AND DISCUSSION

Table 1 Frequency distribution of research subject characteristics based on age and gender

Characteristics of research subjects	F	%
Age		
11 years old	35	78,7
12 years old	12	21,3
Gender		
Boy	24	51
Girl	23	49

The characteristics of the subjects in the study can be seen in Table 1. The results of the study show that the sample characteristics of students at SDN 93 Jambi City were predominantly male (51%) with ages 11 years (78.7%). The normality test uses the Shapiro-Wilk test. Pre-test and post-test sig values.

Table 2 Effect of Counseling Using the Board Game "JAGATES" on Knowledge and Attitudes about Diabetes Mellitus

Variabel	Mean ± SD	Mean Different ± SD	Min-Max	95%CI Lower-Upper	P-value
Knowledge Before	2.26±0.607	3.95±0.276	3-6	4.08-4.43	$P \leq 0.001$
After	8.21±0.883		6-10	7.95-8.47	
Attitude Before	5.55±0.686	2.92±0.118	4-7	5.35-5.55	$P \leq 0.001$
After	8.47±0.804		7-10	8.23-8.70	

The effect of counseling on class V students at SDN 93 Jambi City using the board game "JAGATES" to increase knowledge and attitudes is presented in table 2. These results have shown that counseling in efforts to prevent diabetes mellitus has increased knowledge and attitudes in class V students at SDN 93 Jambi City is presented in table 2.

The results of the statistical data analysis show that there is a difference in average knowledge (difference of 3.95) and average attitude (difference of 2.92) between before being given counseling and after being given counseling using the board game "JAGATES". Therefore, it can be concluded that counseling using the board game media "JAGATES" can significantly ($p \leq 0.05$) improve the knowledge and attitudes of fifth grade students at SDN 93 Jambi City.

The results of this research show that there is an influence of counseling using the board game "JAGATES" on the knowledge and attitudes of elementary school children regarding efforts to prevent diabetes mellitus. These results are in accordance with research on elementary school children in Bogor regarding increasing elementary school students' knowledge and attitudes regarding balanced nutrition through monopoly game

intervention. The results of this research showed that there was an increase in elementary school children's knowledge after playing the monopoly game and discussing balanced nutrition. The intervention using the monopoly game with discussion had the effect of increasing knowledge and attitudes compared to just playing the monopoly game without discussion. There was an increase in the average value of students' knowledge scores about balanced nutrition after being given intervention using the monopoly game media (Fitriyanti, et al., 2021).

These results are in line with research conducted by (Islamiyah, et al., 2023), namely that there is a difference in the effectiveness value of snakes and ladders media in the pretest and posttest. This can be said to be effective because there is an increase in pretest and posttest scores, from this snakes and ladders media it is also easy to understand what good learning attitudes and behavior are, what are the tips for having good learning attitudes and behavior Increasing the knowledge of elementary school students must also be accompanied by changes. his behavior. To support this process, incentives are needed that can improve the attitudes of elementary school students through efforts that can encourage them to implement healthy behavior in their daily lives.

Learning using board games has a positive impact on the development of students' skills, this game creates an atmosphere of learning through playing, learning through communication and learning through thinking. The use of board games can help make it easier for students to better understand and remember learning material in a comfortable atmosphere (Triastuti, et al., 2017).

Basically, a game that is good for children is one that has benefits, especially in terms of educational learning. Currently, board games have various types, especially to educate children. The aim of the board game itself is to help improve the quality of memory

because the game requires you to remember the written rules of the game (Rizkha & Pangganguspa, 2022).

In this research, researchers used the theory of planned behavior. This is because this theory shows that behavioral control is also considered by individuals independently of subjective attitudes and norms. Behavioral control refers to the ability to carry out a behavior. TPB explains that a person's behavior is based on their intention to behave (Ajzen, 2005).

In a similar study entitled "prediction of healthy eating patterns through the Theory of Planned" this is that the information a person has influences the behavior and beliefs they will display, this kind of attitude causes a person to receive a positive or negative assessment of themselves (Sulaeman, et al., 2017). A similar researcher entitled "Nurse Behavior in the Implementation of Diabetes Mellitus Education Based on the Theory of Planned Behavior" states that a person feels good if it is based on intentions and desires for what is good for him (Rohmatul Laili, 2016).

CONCLUSION

There is a difference in the average knowledge and attitudes towards preventing diabetes mellitus among fifth grade students at SDN 93 Jambi City between before and after being given counseling using the board game "JAGATES". Extension using the board game media "JAGATES" can significantly increase knowledge and attitudes towards preventing diabetes mellitus.

Suggestions, therefore, it is necessary to disseminate information related to diabetes mellitus through attractive and creative health promotion methods and media in schools as a support for successful prevention and improving the health status of school children.

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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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