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THE INFLUENCE OF GAME MEDIA ON CHILDREN'S KNOWLEDGE AND ATTITUDES IN DIARRHEA PREVENTION AT SDN KEMBANG TANJONG SUB-DISTRICT

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ABSTRACT

Diarrhea is an environment-based disease and occurs in almost all geographical areas in the world. *Sustainable* Development Goals (SDGs) are improvements to the *Millennial Development Goals* (MDGs). SDGs target number three, namely healthy and prosperous life, is to ensure a healthy life and improve the welfare of all people of all ages. The purpose of this study is to analyze the influence of snakes and ladders game media on children's knowledge in diarrhea prevention at SDN Kembang Tanjong District. This research is quantitative research with a *quasi-experimental* research design (pseudo-experiment) using *a non-equivalent control group* design. **Gender**. In this study, the results of frequency distribution based on the characteristics of respondents totaling 80 people were as many as 40 people (50%) were male and as many as 40 people (50%) were female. Based on the results of the distribution of efficiency based on class characteristics, as many as 16 people (20%) are in class IV (four), as many as 28 people (35%) are in class V (five) and as many as 36 people (45%) are in class VI (six). The results of the analysis using *the Wilcoxon* test with a confidence level of 95% using snake and ladder game media with a p-value of knowledge *value of* 0.000 ≤ 0.05 so that it can be concluded that there is an influence of health education with snakes and ladders game media on children's knowledge in preventing diarrhea in children at SDN Kembang Tanjong District.

Keywords: *diarrhea, SDGs, SDN Kembang Tanjong District*

INTRODUCTION

Diarrhea is an environment-based disease and occurs in almost all geographical areas in the world. Sustainable Development Goals (SDGs) are improvements to the Millennial Development Goals (MDGs). SDGs target number three, namely a healthy and prosperous life, is to ensure a healthy life and improve the welfare of all people of all ages. One of the targets to be achieved by 2030 is to end preventable infant and toddler mortality, by reducing Neonatal Mortality Rate to 12 per 1,000 KH and Infant Mortality Rate of 25 per 1,000 KH and ending the epidemic of AIDS, tuberculosis, malaria, and neglected tropical diseases, and combating hepatitis, waterborne diseases, and other infectious diseases (Maisyarah et al., 2021).

Diarrhea is one of the many infectious diseases that have become a global health problem in various countries, especially in developing countries. Diarrheal disease is a disease that until now is still one of the main focuses that must be resolved because it often causes Extraordinary Events (KLB) and if the handling is not appropriate it can lead to death (Pratiwi, 2017). The World Health Organization (WHO) suggests that diarrheal disease is a disease described by changes in the shape and consistency of soft stools into liquid and an increase in the frequency of bowel movements, yaitKu at least more than three times a day (Saputri, 2019).

According to the United Nations International Children's Emergency Fund (UNICEF), diarrhea is an infectious disease that is the second largest cause of child death in the world. WHO data globally states that there are about two billion cases of diarrheal diseases that have caused the death of 525,000 children that occur every year (WHO, 2017).

Diarrhea is a disease that can be prevented and treated but is also often considered trivial, but in fact there are about four billion cases of acute diarrhea with a mortality rate of 34 million cases per year. In the UK, one in every five people has infectious diarrhoea (Friedman, 2012). It is caused by food poisoning and waterborne infections from microorganisms Salmonella spp, Compylobacter jejuni, Strailococcus aureus, Bacillus careus, Clostridium perfringens, and enterohemorrhagic Escherichia coli (EHEC). According to UNICEF data, one point five million children worldwide die from diarrhea, yet only thirty-nine percent of patients receive serious care. The United States as a developed country also puts diarrhea third in the list of complaints of clinical patients, while in developing countries, diarrhea kills about three million people every year, such as in African countries, children experience infectious diarrhea seven times a year. In Indonesia, diarrhea is a major factor in child mortality at the age of under five years. This is due to high morbidity that causes many deaths, especially in newborns (Lazamidarmi et al., 2021).

Diarrhea is endemic, especially in developing countries. In Indonesia, diarrhea is a public health problem with a high incidence rate and can allow for extraordinary events (KLB) and can cause death. The Indonesian Ministry of Health stated that in 2018 the prevalence of toddler diarrhea cases was around 1,516,438 (37.88%), but the prevalence increased in 2019 to 1,591,944 (40%) cases in toddlers (Jatmika et al., 2019).

Based on the results of the 2018 Basic Health Research, there were 18,225 (9%) children in Indonesia with diarrhea in the <1 year age group, 73,188 (11.5%) children with diarrhea in the one to four years age group, 182,338 (6.2%) children with diarrhea aged five to 14 years, and there were 165,644 (6.7%) children with diarrhea aged 15-24 years.

In accordance with the Aceh Health Profile, the Government of Aceh targets 20% of the estimated number of patients under five with diarrhea who receive services at health service centers. In 2019, the frequency of people with infant diarrhea receiving services was 24,690 (32%) of the number assessed in health facilities. Service coverage is targeted at 10% of the number of diarrhea sufferers of all ages (SU) who receive health services, in 2018 there were 72,203 SU diarrhea sufferers who received services at health facilities and this increased in 2019 to 74,415 (51%) patients from estimated diarrhea in health facilities. In general, the incidence of diarrhea at all ages is 270/1,000 people (Dinkes Aceh, 2019).

Diarrheal disease is also one of the worrying diseases in the working area of the Kembang Tanjong Health Center. In 2021 there were 324 people (1.4%) suffering from diarrhea. However, in 2022 until May, diarrhea cases occurred at 224 (39.7%). This means that this year until May, there was an increase in the incidence of diarrhea in the working area of the Kembang Tanjong Health Center by 39.7 percent.

Diarrhea in most cases is accompanied by several clinical signs and side effects such as vomiting, fever, dehydration, and electrolyte disturbances (Masriadi & KM, n.d.). Dehydration due to the loss of fluids and electrolytes through the stool is the leading cause of death in people with diarrhea. In that condition, it will cause sufferers to reduce appetite, causing loss of nutrients which is the main cause of malnutrition then makes the body weak, and can inhibit children's growth and development (Andreas et al., 2017). In addition, children who experience diarrhea will experience malabsorption of nutrients and loss of nutrients and if not immediately followed up and balanced with appropriate intake, it can cause failure to grow to cause stunting. This is in line with research conducted by Dewi et al (2016), namely a history of infectious

diseases, including diarrhea, is one of the dominant risk factors for stunting. Another causative factor that makes children diarrhea is the lack of information about diarrheal diseases (Fitriani, 2011).

One of the government programs known as Five Steps to Complete Diarrhea (LINTAS diarrhoea) is one of the government's strategies in controlling diarrheal diseases in Indonesia with the aim of reducing morbidity and death rates due to diarrhea together across related programs and sectors. The five steps in question are; Give ORS, give zinc tablets for 10 consecutive days, continue breastfeeding, give antibiotics selectively and give advice to mothers and/or family (Ariani, 2016).

Regulation of the Minister of Health of the Republic of Indonesia number 82 of 2014 explains that the control of infectious diseases is carried out with health efforts that prioritize promotive and preventive aspects aimed at reducing and eliminating morbidity, disability, and death, limiting transmission, and the spread of diseases so that they do not spread and have the potential to cause extraordinary events/outbreaks. One of the preventive efforts that can be done is through health promotion activities. Increasing health knowledge in schools is very important, this is also to support one of the health programs in schools, namely providing information specifically to students so that they can prevent diarrheal diseases.

Kembang Tanjong District is one of the sub-districts in Pidie Regency. In this sub-district, there are 15 public elementary schools spread across various villages. The results of interviews conducted by researchers with several school principals and homeroom teachers of class V suggested that there were several children who had permission to check their health while attending the teaching and learning process at the Kembang Tanjong Health Center because of stomach pain. In addition, based on interviews with the principal and homeroom teacher V mentioned that, there are some children who do not enter school for reasons because of diarrhea.

Based on the results of interviews conducted by researchers with the head of the Kembang Tanjong Health Center and diarrhea program holders, it was stated that so far there have been several school-age children coming for treatment to the puskesmas because of diarrhea, and since the pandemic due to corona virus-19 (covid-19) various activities were stopped, but now counseling activities have begun to be carried out again such as counseling about diarrhea to schools. This counseling is usually carried out during school children's networking activities and in tandem with other activities.

Observations made by researchers in several elementary schools in Kembang Tanjong sub-district, there is a tendency for children to have a high interest in eating snacks sold near the school area. Students are seen eating foods such as fried rice, fried noodles, caluk noodles (peanut soup noodles), fried skewered meatballs, sausages, and drinks such as fruitamin drinks, fresh cold and so on where some contain a lot of artificial sweeteners and dyes that are sometimes excessive even some processed foods are not directly visible to buyers. Snacks are also sold on the side of the causeway and are not covered which are susceptible to contamination with dust and flies that have the opportunity to cause diarrheal diseases. In addition, the behavior of children who did not wash their hands after playing was also a concern for researchers. The children just patted their hands and then immediately held the food. There are also children who clean but do not use soap. Because washing hands with soap is one way to prevent diarrheal diseases. The results of research by Almanfaluthi (2015) in his journal

entitled. The relationship between the consumption of street food and diarrheal diseases in school children at SDN 2 Cipete Banyumas shows that there is a significant relationship between street food and the incidence of diarrheal diseases in children.

The results of interviews with students from several elementary schools in Kembang Tanjong sub-district found that out of 10 students, four (40%) said they had experienced diarrhea. Students say that they don't often eat breakfast before school because they like to be given pocket money and often don't bring lunch to school. They also said that they did not know how to prevent diarrhea, even though according to the health promotion officer of the Kembang Tanjong Health Center, officers had already provided counseling on how to prevent diarrhea.

Healthy living behavior is determined by three main factors: predisposing factors (knowledge, belief attitudes, values, and traditions), enabling factors (habits), and reinforcing factors (educational treatment in the family). Knowledge of healthy living is needed by everyone in maintaining habits that are in accordance with health which will further create well-being and will realize optimal health. This explains that one of the factors for diarrhea in children is caused by lack of knowledge which affects poor and unhealthy lifestyles and habits (Notoatmodjo, 2007).

In an effort to overcome diarrhea cases, it is not only done with treatment for people who have diarrhea but also for people who are still healthy to maintain their health with disease prevention efforts. This can be done by trying to take preventive steps by expanding the information and attitudes of children in order to prevent diarrhea. Diarrhea can also be caused by a person's ignorance about how to prevent diarrhea and the importance of maintaining environmental cleanliness. In addition, a person's negligence in maintaining the habit of washing hands before eating and after it, after going from the bathroom both urinating and defecating and using clean water sources for daily activities such as washing and cooking can result in diarrheal diseases.

The general objective in this study was to analyze the influence of Snakes and Ladders game media on children's knowledge and attitudes in diarrhea prevention at SDN Kembang Tanjong District. The benefit of this study is as input and consideration for the Pidie District Health Office in efforts to overcome, prevent and reduce the incidence of diarrhea in Pidie Regency.

METHOD

This research is quantitative research with a quasi-experimental research design (pseudo-experiment) using a non-equivalent control group design. In this case, there will be two groups that are not randomly selected, then given a pretest to find out whether there is a difference between the experimental group and the control group before the intervention is given (Sugiyono, 2013). The design is very good when used in evaluating a health education program and is good for comparing the results of program interventions in an area (Notoatmodjo, 2010). Therefore, researchers want to know the most effective promotional media in providing information that can be conveyed well so that it becomes an informative message for all circles.

Population is a generalized category that includes objects of study or individuals selected for research because they meet certain criteria. However, due to time and cost constraints, it is not possible to conduct studies on the population as a whole (Sugiyono, 2018). The population

in the study was all students at SDN Kembang Tanjong District, which was 1,394 people. **Samples,** representative of the population under study is referred to as a sample. Since it is not possible to obtain samples from the entire population, the population as a whole must be represented by the sample selected for the study (Payadnya & Jayantika, 2018). The sample selection process in this study uses proportionate stratified random sampling techniques, which is a sampling technique used when the population has members/elements that are not homogeneous and stratified proportionally (Sugiyono, 2018). The method and data collection are carried out in several ways, namely primary data and secondary data. The implementation of data collection is carried out in two stages of preparation and stages of implementation.

RESULTS AND DISCUSSION

Demographics

Kembang Tanjong District has a working area of 45 villages with a population of 23,087 people, and has 15 public elementary schools. The SDN in question is as follows:

Table 6.
Kembang Tanjong Sub-District Public Elementary School

No	Name of SD Negeri	Number of Students
1	SD Negeri Kembang Tanjong	78
2	Arusan State Elementary School	62
3	Asan Beetle State Elementary School	100
4	Gampong Asan Public Elementary School	88
5	Ie Leubeue Public Elementary School	127
6	Jurong State Elementary School Mosque	121
7	SD Negeri Kandang	64
8	SD Negeri Kuala Tari	26
9	Kuta Baro State Elementary School	75
10	Lamkawe Public Elementary School	228
11	Meuraksa State Elementary School	57
12	SD Negeri MNS Krueng	75
13	SD Negeri Pasi Lhok	150
14	Pusong Public Elementary School	56
15	Jeumeurang State Elementary School	87
Total		**1.394**

Univariate Analysis

Univariate analysis in this study was carried out in order to get an overview of each frequency distribution of research subject criteria. Some of the criteria for research subjects studied in this study are;

Characteristics of Respondents

Gender

The characteristics of respondents referred to in this study are in the form of gender which is categorized into two, namely men and women. Based on this, the frequency distribution of research subjects by gender at SDN Kembang Tanjong District is as follows:

Table 7
Frequency distribution of research subjects by sex

No	Gender	Control		Experiment		Total
		n	%	n	%	N
1	Man	18	45	22	55	40
2	Woman	22	55	18	45	40
Total		**40**	**100**	**40**	**100**	**80**

Based on table 7, it was found that male respondents in the control group amounted to 18 people (45%) and female respondents amounted to 22 people (55%). While in the experimental group, male respondents amounted to 22 people (55%) and female respondents as many as 18 people (45%).

Class

The selection of research samples in this study uses proportionate stratified random sampling techniques because the objects studied are stratified, consisting of several grade levels ranging from classes IV, V, and VI. The frequency distribution of respondents based on class characteristics is as follows:

Table 8
Frequency distribution of respondents based on class characteristics

No	Class	Control		Experiment		Total
		n	%	n	%	N
1	IV	15	37.5	1	2.5	16
2	V	5	12.5	23	57.5	28
3	VI	20	50	16	40	36
Total		**40**	**100**	**40**	**100**	**80**

Based on table 8, it was obtained that in the control group of class IV (four) respondents amounted to 15 people (37.5%), class V (five) amounted to 5 (12.5%) and class VI amounted to 20 people (50%). While in the experimental group of class IV respondents amounted to 1 person (2.5%), class V amounted to 23 people (57.5%) and class VI amounted to 16 people (40%).

Knowledge

In this study, the knowledge studied was the knowledge of research subjects who in this case were children of public elementary school students before and after intervention through snakes and ladders game media (experimental group) and turning sheet media (control group). The results of the pre-test and post-test children's knowledge about diarrhea prevention in the experimental group can be seen in table 9 below:

Table 9

Average Knowledge Before and After Health Education on Diarrhea Prevention using Snakes and Ladders Game Media

Variable	Mean	N
Knowledge		
Before	5.48	40
After	7.40	40

Based on table 9 out of 40 students, the average (mean) knowledge score before being given education about diarrhea prevention through Snakes and Ladders game media was 5.48 while the average (mean) knowledge score after being given education about diarrhea prevention through Snakes and ladders game media was 7.40.

The results of the pre-test and post-test children's knowledge about diarrhea prevention in the control group can be seen in the following table 10:

Table 10

Average Knowledge Before and After Health Education on Diarrhea Prevention using Flipchart Media

Variable	Mean	N
Knowledge		
Before	5.98	40
After	6.05	40

Based on table 10 out of 40 students, the average (mean) knowledge score before being given education about diarrhea prevention through flipchart media was 5.98 while the average (mean) knowledge score after being given education about diarrhea prevention through back sheet media was 6.05.

The frequency distribution of children's knowledge categories before and after intervention using Snakes and Ladders game media and return sheets in this study can be seen in the table below:

Table 11
Frequency Distribution of Children's Knowledge Level Before and After Intervention

No	Category	PreTest Control		Post Test Control		PreTest Experiment		Post Test Experiment	
		n	%	n	%	n	%	n	%
1	Good	26	65	26	65	22	55	33	82,5
2	Less	14	35	14	35	18	45	7	17,5
Total		40	100	40	100	40	100	40	100

Based on the table above, it can be seen that the knowledge of the control group with good categories before the intervention of 40 people was 26 people (65%) and less categories as many as 14 people (35%). After being given knowledge intervention, respondents with good categories of 26 people (65%) and less categories of 14 people (35%). While in the experimental group, it was seen that knowledge with good categories before intervention from 40 people was given as many as 22 people (55%) and less categories as many as 18 people (45%). After being given knowledge intervention, respondents with good categories of 33 people (82.5%) and less categories of 7 people (17.5%).

Attitude

The results of the pre-test and post-test attitudes of children about diarrhea prevention in the control group can be seen in the following table:

Table 12
Average Attitude Before and After Health Education on Diarrhea Prevention using Flipchart Media

Variable	Mean	N
Attitude		
Before	42.65	40
After	43.48	40

Based on Table 12, the average (mean) attitude score before being given education about diarrhea prevention through the return sheet media from 40 students was 42.65 while the average (mean) attitude score after being given education about diarrhea prevention through the return sheet media was 43.48.

The results of the pre-test and post-test children's attitudes about diarrhea prevention in the experimental group can be seen in the following table:

Table 13

Average Attitude Before and After Health Education on Diarrhea Prevention using Snakes and Ladders Game Media

Variable	Mean	N
Attitude		
Before	41.25	40
After	44.08	40

Based on Table 13, the average (mean) attitude score before being given education about diarrhea prevention through the snake and ladder game media from 40 students was 41.25 while the average (mean) attitude score after being given education about diarrhea prevention through snakes and ladders game media was 44.08.

The frequency distribution of children's attitude categories before and after intervention using Snakes and Ladders game media and the return sheet in this study can be seen in the table below:

Table 14

Frequency Distribution of Children's Attitudes Before and After the Intervention

No	Category	PreTest Control		Post Test Control		PreTest Experiment		Post Test Experiment	
		n	%	n	%	n	%	n	%
1	Positive	40	100	40	100	38	95	40	100
2	Negative	0	0	0	0	2	5	0	0
Total		40	100	40	100	40	100	40	100

Based on the table above, it can be seen that the attitude of children in the control group with a positive category before being given intervention from 40 people as many as 40 people (100%) and a negative category as many as 0 people (0%). After the intervention, the attitude of respondents a positive category of 40 people (100%) and a negative category of 0 people (0%). While in the experimental group, it was seen that attitudes with positive categories before intervention from 40 people were given as many as 38 people (95%) and negative categories as many as 2 people (5%). After the intervention, the attitude of respondents a positive category of 40 people (100%) and a negative category of 0 people (0%).

The results of the analysis of the difference in average knowledge and attitudes of the two media can be seen in the following table:

Table 15

Differences in Average Knowledge and Attitudes of Children About Diarrhea Prevention using Snakes and Ladders Game Media and Turning Sheets

Variable	Snakes and Ladders Game Media			Turnback Sheet Media		
	Mean		$\bar{x}$	Mean		$\bar{x}$
	Before	After		Before	After	
Knowledge	5.48	7.4	1.92 (35%)	5.98	6.05	0.07 (1.7%)
Attitude	41,25	44.03	2.83 (6.8%)	42.65	43.48	0.83 (1.94%)

From the results of Table 15, it can be seen that the average knowledge before and after using the snake and ladder game media is 5.48 and 7.4. From these results, it can be seen that there was an increase in the average knowledge before and after by 1.92 (35%). Meanwhile, the average knowledge before and after using the return sheet media was 5.98 and 6.05 so there was an increase in the average knowledge before and after by 0.07 (1.7%). Furthermore, it was seen that the average attitude before and after using the Snakes and Ladders game media was 41.25 and 44.03. From these results, it can be seen that there was an increase in the average attitude before and after by 2.83 (6.8%). While the average knowledge before and after using the return sheet media was 42.65 and 43.48 so there was an increase in the average knowledge before and after by 0.83 (1.94%).

Bivariate Analysis

The bivariate analysis in this study was conducted using the Wilcoxon signed-rank test. This is based on the results of the data normality test, so it was found that the data in this study was abnormally distributed. In this study, researchers wanted to analyze the influence of respondents' knowledge and attitudes before and after the intervention in each group (experiment and control), namely:

Table 16

The Influence of Health Education with Snakes and Ladders Game Media on the Knowledge and Attitudes of Elementary School Children at SDN Kembang Tanjong District

Variable	N	Mean	Sig. (2-Tailed)
Knowledge	40	17.44	.000
Attitude	40	20.52	.002

Based on table 16, it was found that the influence of health education with Snakes and ladders game media with a p-value of knowledge is 0.000 and a p-value attitude is $0.002 \leq 0.05$

using a 95% confidence level, it can be concluded that there is an influence of health education with snakes and ladders game media on children's knowledge and attitudes in preventing diarrhea in elementary school children at SDN Kembang Tanjong District.

Table 17
The Influence of Health Education with Feedback Media on the Knowledge and Attitudes of Elementary School Children at SDN Kembang Tanjong District

Variable	N	Mean	Sig. (2-Tailed)
Knowledge	40	3.67	.334
Attitude	40	7.00	.059

Based on Table 17, it was found that the effect of health education with the media of the return sheet with the p-value of knowledge was 0.334 and the p-value of attitude was 0.059 ≥ 0.05 using a 95% confidence level, it can be concluded that there is no influence of health education with the media of the return sheet on children's knowledge and attitudes in preventing diarrhea in elementary school children at SDN Kembang Tanjong District.

DISCUSSION

Characteristics of Respondents

Gender

In this study, the results of frequency distribution based on the characteristics of respondents totaling 80 people were as many as 40 people (50%) were male and as many as 40 people (50%) were female. In this case, the gender of the respondents did not affect the knowledge and attitude of the child in the prevention of diarrhea. Gender is a biological sign that can distinguish humans based on male and female groups (Notoatmojo, 2011).

Class

Respondents in this study are stratified, consisting of several grade levels. Based on the results of the distribution of efficiency based on class characteristics, as many as 16 people (20%) are in class IV (four), as many as 28 people (35%) are in class V (five) and as many as 36 people (45%) are in class VI (six).

Knowledge

Knowledge is a person's ability about something, the ability to know, recognize and recall an object, ideas, procedures, principles, and theories that have been discovered by experience without manipulating it. Most of a person's knowledge is obtained through the eyes and ears and can also be obtained from experience and learning processes in formal and informal education (Notoatmodjo, 2012).

Knowledge of Public Elementary School Children of Kembang Tanjong District About Diarrhea Prevention Using Snakes and Ladders Game Media and Turning Sheet Media

The results of the analysis of the average (mean) knowledge of children in the experimental group before (pretest) given intervention using snake and ladder game media obtained results of 5.48 and the average (mean) after (posttest) given intervention about diarrhea prevention

using snake and ladder game media was 7.40. From these results, it can be seen that the mean value increased before and after the intervention was given by 1.92 (35%). In this study, the knowledge of respondents with good categories before intervention was given as many as 48 people (60%) and less categories as many as 32 people (40%). However, after being given knowledge intervention, respondents with good categories amounted to 62 people (77.5%) and less categories as many as 18 people (22.5%). Based on this, it can be concluded that there is an increase in children's knowledge before and after the intervention. This is in line with research conducted by Fadhilah (2020), namely an increase in children's knowledge score about diarrhea using Snakes and Ladders game media with a pretest score (of 7.6667) after the posttest became (9.200). Another study was also conducted by Landangkasiang et al (2017), with the results of students' knowledge before the intervention was categorized as good as 25 people (62.5%) and less than 15 people (37.5%) after being given the intervention increased to 40 people (100%) students with good knowledge about diarrhea.

Health education is an activity or effort to convey messages to the community, groups or individuals so that there is a change in better health behavior. There are several methods including video playback, leaflets, and health education with the method of playing while learning (Notoatmodjo S, 2010).

A game is any contest between players who interact with each other by following certain rules to achieve certain goals. Health education in the form of games is a form of learning to find and find answers on your own through procedures and steps and rules of the game that must be followed during learning. Programs that contain games can provide motivation for students to learn the information contained in them. One of the games often played by elementary school children is the Snakes and Ladders game. With regard to the results of the research obtained, it can be concluded that the method of playing, namely the game of snakes and ladders while learning is very effective in health education.

The mean of knowledge before intervention was 5.98 while the mean of knowledge after intervention through the media was 6.05. From these results, it can be seen that there was an increase in the mean before and after the intervention by 0.07 (1.7%). These results are in line with research conducted by Rohima (2020), namely an increase in the average knowledge score of students after a health promotion intervention using worksheet media by 1.58 from before the intervention mean of 7.71 to 9.29 after the intervention. Another study conducted by Valenza (2020) showed that the average knowledge of respondents before being given an intervention was 4.82 and the average knowledge after being given an intervention using a back sheet media became 9.34 so it could be concluded that there was an increase in the average knowledge score of students before and after the intervention using the return sheet media of 4.52.

Health promotion is the improvement of health. and efforts to market, disseminate, introduce or "sell" health, which ultimately people want to behave in a healthy life. Health promotion cannot be separated from the media because, through the media, the messages conveyed can be more interesting and understood so that the target can learn the message until decide to adopt a positive behavior (Notoatmodjo, 2010). Flipchart or more commonly known as sheet turning media is one example of media that can convey various types of health messages needed by the community. So this media was chosen as one of the health promotion media used in this study. The results of Valentina's research (2020) showed that there was an

increase in children's knowledge about obesity prevention before and after the intervention using the mean of before the intervention of 5.90 and after the intervention of 8.41.

In research conducted by Masthura et al (2019), the mean results for respondents' knowledge about complementary foods before counseling using a return sheet has a value of 8.73, while the mean value of respondents' knowledge after counseling with a value of 9.67, shows an increase in the value of knowledge before and after counseling using a turning sheet. The test results using the T-paired test obtained a significance value of 0.002 so it can be concluded that there is a difference between the pre-test and post-test values of pregnant women's knowledge about complementary foods.

The attitude of public elementary school children in Kembang Tanjong sub-district regarding the prevention of diarrhea using snakes and ladders game media and turning sheet media.

The results of the analysis in this study showed that the mean of children's attitude scores before intervention was 41.25 while the mean of attitude scores after intervention through the Snakes and Ladders game media was 44.08. From these results, it can be seen that there was an increase in the average children's attitude score before and after the intervention by 2.83 (6.8%). The results of this study are similar to research conducted by Fadhilah (2020) with an average attitude score before which was 8.3667 and after intervention using snake and ladder diarrhea game media of 9.8333. Furthermore, similar results were also obtained by Dari (2021) in his study with an average attitude before the intervention of 15.50 to 45.50 after the intervention using snakes and ladders. The results of the study (Pratiwi &; et al, 2015) for students who were positive were (78.9%) before the intervention and increased to (94.7%) after the intervention on diarrhea prevention. In the results of the study (Azizah &; et al, 2015), had a negative attitude of (60.6%) before the intervention and increased to (64.8%) after the intervention.

The results of Kurniasari's (2020) research are that there are significant differences in attitudes before and after intervention using snakes and ladders media, namely the influence of snakes and ladders media has succeeded in increasing attitudes in diarrhea prevention efforts. Rosenberg's theory, known as the Affective Cognitive Consistency theory, it states that in order to change or form attitudes can be through cognitive components and affective components. Through the cognitive component, namely by providing knowledge, opinions, attitudes or other things, so that with this material will change the affective component, and ultimately attitudes will change. The affective component is to provide things about feelings or emotions so that with changes in feelings, it will also change its cognitive aspect, which in turn will also change its attitude.

In this study, the mean of attitude before using the reverse sheet media was 42.65 while the mean of attitude after was 43.48. From these results, it can be seen that there is a difference in the average score before and after of 0.83 (1.94%). The results of this study are in line with research Rohima (2020), namely the average attitude before using the return sheet media was 30.19 and after 32.55 so it can be seen that there was an increase in attitudes before and after by 2.36. In another study was also conducted by Valenza (2020), the average attitude of respondents before being given intervention was (32.07) with a standard deviation (3.113). The average attitude after the intervention increased to (36.82) with a standard deviation (2.904),

there was an increase in the average attitude score of students before and after the health education intervention about worms using the feedback sheet media of 4.75.

The Influence of Knowledge and Attitudes of Public Elementary School Children in Kembang Tanjong District on Diarrhea Prevention Using Snakes and Ladders Game Media and Turning Sheet Media

In this study, the results of the analysis using the Wilcoxon test with a confidence level of 95% using snakes and ladders game media with a p-value of knowledge is 0.000 and p-value attitude is 0.002 ≤ 0.05 it can be concluded that there is an influence of health education with snake and ladder game media on children's knowledge and attitudes in preventing diarrhea in elementary school children at SDN Kembang Tanjong District. This is in line with research conducted by Fadhilah (2020) with the results of research using the Wilcoxon test obtained p value = 0.000 ≤ 0.05 which means there is an influence of health education with the snake and ladder game method on knowledge and attitudes about diarrhea in elementary school children at SD Negeri 79 Kota Bengkulu.

The results of Maarif's research (2017) showed the influence of health education with the snake and ladder method on the level of knowledge and attitudes of students (p-value = 0.000). Health education with Snakes and Ladders game media has been proven to make students more enthusiastic in the implementation of learning and students can enjoy the flow of Snakes and Ladders from beginning to end. Furthermore, another study was conducted by Nuranisah &; Kurniasari (2020), with the results of data analysis using Wilcoxon's statistical test. With a knowledge p-value of (0.007<0.05) and an attitude p-value of (0.008<0.05) and the results obtained from interventions using Snakes and Ladders game media related to CTPS in efforts to prevent diarrhea is an influence on increasing knowledge and attitudes in students.

The results of other analyses using the reverse sheet media in this study which also used the Wilcoxon test with a 95% confidence level obtained the p-value of knowledge was 0.334 and the p-value of attitude was 0.059 ≥ 0.05 it can be concluded that there is no effect of health education with worksheet media on children's knowledge and attitudes in preventing diarrhea in elementary school children at SDN Kembang Tanjong District. However, these results are inversely proportional to research Valenza (2020), using the Wilcoxon test obtained p value = 0.000 <0.05 which shows the influence of the use of worksheet media on the knowledge and attitudes of students of SDN 66 Bengkulu City.

There are several disadvantages of the return sheet media, namely if the quality of the writing is less artistic, there is a less professional impression; sheets can tear easily or dull if stored improperly; in large rooms, the turning sheet is not clearly visible within a distance of more than 15 meters; the tendency to look at the turning sheet can eliminate eye contact with the audience (Harefa, 1999).

Differences in Increasing Knowledge Scores and Attitudes of Public Elementary School Children in Kembang Tanjong District About Diarrhea Prevention After Intervention Using Snakes and Ladders Game Media and Turning Sheet Media

There were differences in the average knowledge and attitudes of children before and after between the experimental group using the Snakes and Ladders game media and the control group using the turning sheet media. In the experimental group the average knowledge before

was 5.48 while in the control group, the average knowledge before was 5.98 so the difference in the average knowledge before the two groups was 0.5. Furthermore, the average knowledge after the two groups was 7.40 and 6.05 so the difference in the average knowledge of the two groups was 1.35.

There were differences in the mean attitudes of the experimental group and the control group before and after the intervention. In the experimental group, the average attitude before was 41.25 while in the control group, the average attitude was 42.65. There was a mean difference in the two groups was 1.4. The mean post-attitude in both groups was 44.08 and 43.48. The average difference in attitudes after the intervention was 0.6.

The results of the analysis in this study clearly show that there is an increase in children's knowledge and attitudes before and after using Snakes and Ladders game media and turning sheet media. The average increase in knowledge before and after using snakes and ladders media was 1.92 (35%), while the average knowledge before and after using the return sheet media was 0.07 (1.7%). From these results, it can be concluded that health promotion using Snakes and Ladders game media affects children's knowledge more (p-value = $0.000 \leq 0.05$) compared to return sheet media (p-value $0.334 \geq 0.05$) so it can be interpreted that snakes and ladders game media are more effective in increasing knowledge about diarrhea prevention.

The average increase in attitude before and after using snakes and ladders media was 2.83 (6.8%), while the average knowledge before and after using the back sheet media was 0.83 (1.94%). From these results, it can be concluded that health promotion using Snakes and Ladders game media affect children's attitudes more (p-value = $0.002 \leq 0.05$) compared to return sheet media (p-value $0.059 \geq 0.05$) so it can be interpreted that snakes and ladders game media are more effective in improving children's attitudes about diarrhea prevention.

Learning in the form of games is a form of learning to find and find answers on their own through procedures and steps and game rules that must be followed during learning. In addition, the use of snakes and ladders has advantages, Snakes and ladders games can be used in teaching and learning activities because this activity is fun for students so students are interested in learning while playing. Students can participate in the learning process directly. Snakes and ladders games can be used to help all aspects of student development. The game of snakes and ladders can stimulate students to learn to solve problems. The use of snakes and ladders can be done both in the classroom and outside the classroom. The use of Snakes and Ladders games is easy to do / easy to understand, has simple rules, is educational if given a good and correct theme, and entertains students in a positive and interactive way.

Media that is basic about games will be more accepted by elementary school children because playing while learning will be easily absorbed by children. Media games that are usually played by elementary school children are Monopoly, puzzle, scrabble, picture cards, and Snakes and Ladders. The results of the study Sara (2016) were an increase in the median value of knowledge in the intervention group with health education methods through a simulation of snakes and ladders games with a difference in pretest-postest values of 6.00. So that the health education method with snake and ladder game simulation is effective in increasing students' knowledge and attitudes.

Research Limitations

This research is a Pre-experimental study, so it has not been able to fully ascertain the effectiveness of the interventions provided for changes in knowledge and attitudes. But in this study, researchers confirmed it statistically through testing with statistical tests. The limitation in this study is that the study used questionnaires in Indonesian and there were some respondents who could not read well, so the researcher had to explain the contents of the questionnaire using regional languages because there were some respondents who did not understand the meaning of the questions in the questionnaire. In this study also only had 10 questions to represent the child's knowledge and 15 statements to represent the child's attitude in diarrhea prevention. Due to time constraints, this study was only conducted for two weeks. In addition, in this study only replicated or repeated once as a reinforcement of research results.

CONCLUSION

The results of the analysis using the Wilcoxon test with a confidence level of 95% using snake and ladder game media with a p-value of knowledge value of $0.000 \leq 0.05$ so that it can be concluded that there is an influence of health education with snake and ladder game media on children's knowledge in preventing diarrhea in children at SDN Kembang Tanjong District.

The results of the analysis using the Wilcoxon test with a confidence level of 95% using snake and ladder game media with an attitude p-value of $0.002 \leq 0.05$ can be concluded that there is an influence of health education with snake and ladder game media on attitudes in preventing diarrhea in children at SDN Kembang Tanjong District.

The results of the analysis using the Wilcoxon test with a confidence level of 95% obtained the p-value of knowledge is $0.334 \geq 0.05$ it can be concluded that there is no effect of health education with media turning sheets on knowledge in preventing diarrhea in elementary school children at SDN Kembang Tanjong District.

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