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The Effectiveness Of Snakes Ladder Games In Increasing Children's Knowledge And Attitudes Regarding Reproductive Health

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ABSTRACT

Childhood is the very vulnerable period since children have to depend on their basic need and decision making. Nevertheless, there are many children who cannot get care from their parents or family due to various reasons therefore they are sent to orphanages. Thus, health education for children is something that needs to be given to them. This study aims to analyze the effect of snakes and ladders game on the level of knowledge and attitudes of children about reproductive health. This research is an experimental study conducted on 30 orphanage children using purposive sampling. The intervention is snakes and ladders game. Before and after the intervention, children's level of knowledge and attitudes about reproductive health was measured. Data collection was carried out using pre-test and post-test questionnaires. The statistical analysis showed that there were significant differences in the level of knowledge (p-value: 0.000) and attitude (p-value: 0.001) before and after the intervention. The snake and ladder game is able to increase children's knowledge and attitudes about reproductive health.

Keywords: Children, Health education, Reproductive health, Snake and ladder game

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INTRODUCTION

Children are a very vulnerable period because they are still dependent on their parents. The lack of ability and independence is the reason for this vulnerability. Therefore, the role of parents is very important in caring for children, including reproductive health (Bagattini, 2019). Even though the role of parents is very necessary, there are still many children who cannot receive parental care for various reasons. This condition will have an impact on children's lives, including their growth and development (Shulga et al., 2016).

Apart from that, there are a number of problems faced by children which make them a vulnerable group, namely that there are still children who are in conflict with the law and child trafficking as a result of a lack of care. The Ministry of Women's Empowerment and Child Protection notes that 30% of the 30,000-70,000 sex workers in Indonesia are still children and as many as 344 children, the majority of whom are women, have become victims of child trafficking (Ministry of Women's Empowerment and Child Protection & Central Bureau of Statistics, 2012).

As an effort to ensure that children receive adequate care, many parents and families send their children to orphanages. Even though the orphanage is able to meet the needs of housing, food and education; care for children's growth and development is still not fully fulfilled. Of the various problems that children may face, small problems that are not handled properly will have an impact on the child's future life, namely caring for the child's growth and development (CDC, 2023; Tianingrum et al., 2020). Children need assistance in the process of growth and development, both biologically and psychologically, including in reproductive health, such as getting to know the reproductive organs, maintaining their health, and preventing sexual violence. Thus, health education for foster children is something that needs to be given to foster children. Reproductive health education to children needs to be provided using interesting methods such as using the snakes and ladders game. This method is considered effective because it can have an influence on increasing knowledge about health (Kumar et al., 2015). This research aims to analyze the influence of the snakes and ladders game method on the level of knowledge and attitudes of foster children.

METHODS

This research is experimental research with a pre-experimental design. Respondents' knowledge will be measured before and after providing reproductive health education. The population in this study were foster children from the Yapamama Sehat Ceria orphanage. The research sample was selected purposively as many as 30 people based on data from the orphanage. The independent variable in this research is reproductive health education with the snakes and ladders game. The dependent variable is the child's level of knowledge and attitudes about reproductive health (Tianingrum et al., 2020). The collected data will be analyzed statistically using a paired t-test to determine differences in knowledge levels before and after the intervention

RESULTS

The following is a description of the characteristics of respondents consisting of age, gender and level of education.

Table 1. Characteristics of respondents based on age, gender and level of education

Karakteristik	Kateg	Frekuensi	Persenta
_	ori	(n)	se (%)
Usia: 10-17 tahun; Mean: 1			
Jenis Kelamin	Laki-laki	12	40
	Perempu	18	60
	an		
Total		30	100
Tingkat Pendidikan	SD	21	70
	SMP	7	23.3
	SMA	2	6.7
Total		30	100

Respondents' ages ranged from 10-17 years with an average age of 12,133 years. Table 1 shows that the majority of respondents were women (60%). Based on education level, the majority of respondents at the time of data collection were still attending elementary school (70%) and only 2 respondents (6.7%) were at high school level.

Table 2. Respondents' level of knowledge about reproductive health

Tingkat pengetahuan	Min	Max	Mean	Std. Deviation	p- value
Pre-test	6	9	7.90	0.845	0.001
Post test	7	10	8.90	0.711	- 0.001

The results of data analysis show that the average level of knowledge before and after the intervention has increased significantly. This is indicated by the p-value (0.001) less than α (0.05), which means there is a significant difference between the level of knowledge before the intervention (pre-test) and after the intervention (post-test).

Table 3. Respondents' attitudes about reproductive health

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Sikap	Min	Max	Mean	Std. Deviation	p- value		
Pre-test	6	15	11.633	2.822	- 0.001		
Post-test	9	15	12.667	2.456	0.001		

The results of data analysis show that the average attitude of children regarding reproductive health before and after the intervention has increased significantly. This is indicated by the p-value (0.000) less than α (0.05), which means there is a significant difference between the child's attitude before the intervention (pre-test) and after the intervention (post-test).

DISCUSSION

Respondents had a good average level of knowledge about reproductive health. This could be caused by health information becoming more easily accessible to children and adolescents so that they can independently search for sources of information. Apart from that, teenagers also tend to be interested in information about reproductive health. Thus they will try to find further information (Titiloye & Ajuwon, 2017). Motivation and interest in something influence a person's behavior in seeking information (Savolainen, 2015). Apart from that, currently information is very easy to obtain, including using the internet. Data from the Ministry of Communication and Information states that around 98% of children know about the internet and 79.5% are internet users (Kominfo, 2014). The high number of internet users among children makes the internet a culture or habit because they can use it for school assignments, entertainment and social relations (Internet Society, 2017).

Health education through game media is expected to be able to strengthen children's understanding of reproductive health and to ensure children receive the right information. Playing is an important strategy in learning because games increase motivation and learning outcomes (UNICEF, 2018).

Health education for children can increase gender awareness and children's attitudes about healthy behavior (Asrowi et al., 2019; Song et al., 2022). Reproductive health education is an effort to ensure that children receive appropriate information regarding reproductive health (Ministry of Health of the Republic of Indonesia, 2018). One effort that can be made is to use interesting information media. The use of game media is considered capable of increasing interest and attention so that it makes it easier for children to learn (UNICEF, 2018). Increasing knowledge through the learning process will influence teenagers' attitudes, including regarding reproductive health (Novryani Rani Bawental et al., 2019)

CONCLUSION

Providing health education to children needs to be done in an interesting way, one of which is by using the game media snakes and ladders. The results showed that the snakes and ladders game increased children's level of knowledge and attitudes about reproductive health. Therefore, to ensure that children in orphanages receive appropriate health information, health education needs to be carried out on an ongoing basis.

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