Dental story sticker media as an effort to increase dental and oral health knowledge of elementary school students

Aulia Salsabila Putri¹*, Tri Widyastuti², Rr. Megananda Hiranya Putri³, Yonan Heriyanto⁴

¹²³⁴Department of Dental Health, Health Polytechnic Ministry of Health Bandung, Indonesia

ABSTRACT
Introduction: The results of the National Basic Health Research 2018, as many as 57.6% of Indonesia's population has oral dental problems and only 10.2% do get the services of a dentist. The health education given to the community, including for children, is usually implemented using various preventive and promotional measures. Giving education can be one way to increase knowledge prevent dental and oral health problems. Media Dental Story Sticker is a tool that can be used for education dental health. Dental Story Sticker is a media for dental and oral health in its presentation using stickers that can be removed and installed back and apply the storytelling method as an extension method where the instructor talks about the counseling material related to dental and oral health. Purpose: The purpose of this study was to analyze the effect of dental health education using dental media story stickers on dental health knowledge of second grade elementary school students. Methods: Using the analytic research method with a pre-experimental research design with a one group pretest-posttest design. Samples were taken using total sampling with a total of 34 people. Research analysis used the Wilcoxon Results test: The results showed that children's knowledge of maintaining oral hygiene before Dental Health Education was carried out using dental story sticker media, namely 22 children (64.7%), while after Dental Health Education was carried out using dental story sticker media, all respondents (100%) have knowledge in a good category with a p value = 0.000 (p <0.05). This means that there is a dental influence health education using dental story sticker media. Conclusion: It can be concluded that dental story sticker media as a dental health education media has an influence on the level of dental and oral health knowledge.

INTRODUCTION

Dental and oral health is an important part of health individual. Oral health includes the ability to speak, laugh, smell, taste, chew, swallow, and show a variety of facial expressions confidently and without pain or discomfort. Children are no exception, every parent wants their children to grow and develop optimally, and this can be achieved if their bodies are in a healthy condition (Erdiyani et al., 2023; Pitoy et al., 2021).

Status or level of dental and oral health of elementary school children determined by several factors, such as knowledge and behavior of parents, environment, and health services. Children's dental and oral health in Indonesia still needs serious attention from health workers. Dental and oral health is often not a priority for some people, even though teeth and mouth are "gates" for germs and bacteria to enter so that they can interfere with the health of other organs of the body (Abdullah, 2018).

Dental and oral health is still a problem in Indonesia. This problem is illustrated by the high prevalence of dental and oral problems in Indonesia, according to the findings of the National Basic Health Survey report. According to the results of the National Basic Health Research (2018), as many as 57.6% of Indonesia's population have dental and oral problems and only 10.2% receive services from dentists. Indonesia's largest population is on the island of Java, with three densely populated provinces namely West Java, East Java and Central Java. Based on 2018 RISKESDAS data, West Java Province has the highest dental caries rate among the three provinces (45.6%) (Kemenkes RI, 2018).

Health education provided to the community, including for children, is usually carried out using various preventive and promotional measures. Providing education can be one way to increase knowledge...
to prevent dental and oral health problems (Tauchid et al., 2022). Dental Health Education (DHE) is the provision of information in the form of a comprehensive understanding of dental and oral health as well as determinants, various methods, and requires a plan appropriate action by all parties (Pitoy et al., 2021).

Methods that can develop children's cognitive intelligence, for example the storytelling method used to convey messages or learning, can improve children's cognitive development which refers to the development of children's ability to think and the ability to provide feedback on the stimulus given to them (Puspitaningtiyas & Leman, 2017). To attract children's learning interest, props and games are needed as a trigger for interest. Learning activities for children should be fun, because learning in a fun atmosphere will foster positive emotions in children (Putri et al., 2021).

The provision of Dental Health Education generally requires tools aids or props to make it easier for the target to receive the message conveyed. There are various kinds of tools that can be used in conducting dental health education to maximize message delivery, such as print media, board media, electronic media, and entertainment media. According to Dale, the capture of knowledge imparted through the sense of sight is 75% to 87%, through the sense of hearing 13%, and 12% from other senses (Bagaray et al., 2016). Game media is considered appropriate to the target characteristics of school-age children who like to play, move, work in groups and carry out direct activities (Himmamie et al., 2019). Media Dental Story Sticker is a tool that can be used to conduct dental health education. Dental Story Sticker is a dental and oral health media which in its presentation uses stickers that can be removed and re-attached and applies the storytelling method as an outreach method where extension workers talk about counseling material related to dental and oral health.

Based on research by Luke Yutfiani Putri and Muijyati, Tri Syahniati regarding the effect of health promotion using dental story stickers on children's knowledge in maintaining oral hygiene concluded that there was an increase in knowledge between before health promotion was carried out and after health promotion was carried out (Putri et al., 2021).

METHOD

The type of research in this research is pre-experimental with one group pre-test post-test design. The design used is the pretest-posttest design, where a pretest (initial observation) is carried out and then treatment is given after that followed by a posttest (final observation). The location of this research was carried out at SDN Sukataris, Karangtengah District, Cianjur Regency, West Java. When the research was conducted in March. The population in this study were class II students at SDN Sukataris with a total of 34 students.

The sampling procedure in this study used total sampling, which is a sampling technique where the number of samples is equal to the total population. The sample used in this study was class II students at SDN Sukataris, totaling 34 people. Types and methods of data collection used, namely primary data data on students' knowledge regarding the level of knowledge of dental and oral health which was carried out using a collection method, namely by questionnaire. Test the hypothesis in this study using the Wilcoxon Sign Rank Test to see the effect of dental health education using dental story sticker media on the level of dental and oral health knowledge of grade II elementary school students. This research has received ethical clearance from the health research ethics commission of the Bandung Health Polytechnic, Number No.58/KEPK/EC/II/2023

RESULT

Research entitled The Effect of Dental Health Education Using Dental Story Sticker Media Regarding the Level of Dental and Oral Health Knowledge of Class II Elementary School Students was held in March 2023 at SDN Sukataris, Cianjur Regency. There were 34 students who became respondents in this study.
Table 1. Knowledge Before and After the Intervention using Dental Story Sticker media

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Good</td>
<td>12</td>
<td>35.3</td>
</tr>
<tr>
<td>Moderate</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bad</td>
<td>22</td>
<td>64.7</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1 shows the knowledge of children in maintaining dental and oral hygiene before Dental Health Education was carried out using dental story sticker media as many as 22 children (64.7%) with a lack of knowledge category. Meanwhile, after Dental Health Education was carried out using dental story sticker media, all respondents (100%) had knowledge in the good category.

Table 2. The influence of Dental Health Education using Dental Story media Sticker on the level of knowledge of children’s dental and oral health

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>5.58</td>
<td>9.61</td>
</tr>
<tr>
<td>p-value</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows the data analysis with the Wilcoxon test obtained a value of P = 0.000 (<0.05), which indicates that there is a difference in knowledge before and after being given Dental Health Education using Dental Story Sticker media on the level of dental and oral health knowledge in class II elementary school children.

DISCUSSION

The use of the Dental Story Sticker is the right media Dental Health Education, especially in class II elementary school students. This was proven when conducting research on an increase in dental and oral health knowledge of class II students after the Dental Health Education was carried out using the Dental Story Sticker media. This condition proves that there are differences in the level of students' dental and oral health knowledge before and after the Dental Health Education is carried out using the Dental Story Sticker media. In table 1, as many as 22 children (64.7%) have less knowledge category. Meanwhile, after Dental Health Education was carried out using dental story sticker media, all respondents (100%) had knowledge in the good category. Dental health education is an educational process that arises based on dental and oral health needs produce good dental and oral health and improve living standards. In the educational process including dental and oral health education, individuals gain experience or knowledge through various means educational media. According to Edgar Dale, described through Dale's Cone of Experience, "the educational process by involving more senses will be more easily accepted and remembered by the educational targets. The provision of health education will also be more effective, and the results will be optimal when using the right health education methods and media and involving more senses (Kantohe et al., 2016).

Table 2 shows that there are differences in knowledge before and after dental health education is carried out using dental story sticker media. This is in accordance with research conducted by (Putri et al., 2021) concerning the effect of health promotion using dental story stickers on children's knowledge of maintaining oral and dental hygiene to increase knowledge of dental and oral health in students Elementary school. Dental and oral health education can be carried out using various media, including the Dental Story Sticker media. The role of the media in health education is as a means of building an atmosphere conducive to positive behavior change towards health.

This counseling media can significantly increase the respondent's knowledge. After conducting dental health education using the dental story sticker media, the respondent's knowledge increases to a good level. Dental health education uses dental story sticker media, namely media sticking stickers on an
80 x 80 board using the storytelling method where the researcher tells a story with the theme of maintaining cleanliness and healthy teeth and mouth where in the story there are several sentences that are emphasized and later the child has to look for stickers that match the sentence and then paste it on the board that has been provided. Image media in this study serves to channel messages from the source to the recipient of the message pertaining to the sense of sight. According to (Erni, 2022) the use of media images can encourage students to learn actively in learning because they can see directly images related to the material to be studied.

Image media is one of the media that is used as a media support to improve student learning outcomes. Media images give a very good influence in improving student learning outcomes. This is because the use of media images in the learning process can attract the attention of students so that students are more serious in defending the teacher's explanation (Utami, 2020; Wardani et al., 2013).

Play while learning by sticking stickers in the form of pictures related to dental and oral health and then placing them in the correct column. Learning activities carried out with their own will and without coercion will be easier for children to remember. Methods that can develop children's cognitive intelligence, the storytelling method used in delivery of messages or learning can improve children's cognitive development which refers to the development of children's ability to think and the ability to provide feedback on the stimulus given to them (Putri et al., 2021).

Choosing the right media in providing counseling will make it easier for children to understand when given dental and oral health counseling. In accordance with the theory of dental health education (DHE) that giving DHE will have an effect in the form of changes in values that lead to good health, in this case the changes that occur are about dental and oral health. Success in dental health education efforts to school children is inseparable from educational methods and the importance of the role of a media because it can support the learning process and make it easier for students to understand the material. Learning, Through the media, the messages conveyed can be more interesting and easier to understand. At the time of counseling students were interested in the activities being carried out, because apart from listening to the material provided students could practice directly what has been heard before. In addition, students played an active role in these activities because they had never been given counseling using dental story sticker media before. This makes students explore their thinking abilities more naturally by playing without feeling that they are carrying out the learning process. And students become independent because they are driven by great curiosity and want to carry out the orders given by the instructor without assistance. Things like this make stories more fun and interesting for children to enjoy (Husna & Prasko, 2019).

CONCLUSION

Dental story sticker media as a dental health education media has an influence on the level of knowledge of dental and oral health. With a comparison of the average score of the level of knowledge before dental health education is 5.58 and after dental health education is 9.61

REFERENCES


media promosi kesehatan gigi dan mulut pada anak usia sekolah. Sport Science and Health, 1(2), 164–175.


