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Research Article

Dental health education: Maintenance of dental health using flipchart media

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Abstract

Background: Dental and oral health maintenance is an effort to improve health. One of the reasons a person ignores dental and oral health problems is the lack of knowledge about dental and oral hygiene. Provision of dental and oral health knowledge should be given to school-age children. Efforts to increase knowledge are dental health counseling using flipchart media. **Purpose:** to analyze knowledge of dental and oral health maintenance before and after being given counseling using flipchart media for fifth grade students at SDN Tidung Island, 2022. **Method:** Pre-experimental research with pretest-posttest one group design. This research was conducted on 69 students of class V SDN on Tidung Island, who were obtained using a total sampling technique. The research instrument used a questionnaire and data analysis used the descriptive analysis. **Results:** The correct answers to the pre-test questions in the good category were 32 students with a percentage of 46.4%, in the sufficient category were 26 students with a percentage of 37.7%, and in the poor category were 11 students with a percentage of 15.9%. While the results of the correct answers to the post-test questions in the good category were 64 students with a percentage of 92.2%, the sufficient category was 5 students with a percentage of 7.2%, and the poor category was 0 with a percentage of 0%. **Conclusion:** there is a change in students' knowledge after being given dental health education using flipchart media.

Keywords: flipchart media, knowledge, dental health education.

INTRODUCTION

Dental and oral health is an inseparable part of overall body health. Dental and oral care as a whole starts with dental and oral hygiene for each individual. The 2018 basic health research results explain data from various indicators of community dental and oral health, it is known that 57.6% DMF-T index (damaged, missing and filled teeth) in Indonesia, with 45.3% of the population experiencing dental caries and 14% of the population suffering from gingivitis. Both dental caries and gingivitis are caused by dental plaque or poor oral hygiene.¹⁻³

Dental and oral health maintenance is one of the efforts to improve health. One of the reasons a person ignores dental and oral health problems is the lack of knowledge about dental and oral hygiene. Dental and oral health knowledge should be given from an early age, because at an early age children begin to understand the importance of health and the prohibitions that must be avoided or habits that can affect the condition of their teeth. Provision of dental and oral health knowledge should be given to school-age children.⁴⁻⁶

Good dental and oral hygiene can be achieved with good and correct knowledge and habits regarding the maintenance of dental and oral health. Knowledge is an aspect that forms a person's behavior. Lack of knowledge will shape wrong behavior towards maintaining oral health. Efforts to increase knowledge is with health counseling. Counseling is an activity to provide knowledge, information and various abilities in order to shape attitudes and behavior in life that should be. In essence, counseling is a non-formal activity in order to change society towards a better condition as aspired.⁷⁻⁹

Dental and oral health education is an activity that aims to improve, set an example, to provide warnings about the importance of maintaining healthy teeth and mouth. This program can be said to be an important part of a comprehensive program. The Ministry of Health itself has a program to periodically provide counseling to the community, especially school children. Counseling with various targets is more emphasized on vulnerable groups of school children. The school environment is an extension of the family in laying the foundation for healthy living behaviors for school children. In addition, the total population of school children aged 6-12 years reaches 40% - 50% of the general community, so health education efforts to target school children are the first and foremost priority.¹⁰⁻¹²

Media is an intermediary or introduction used by educators in conveying educational or teaching materials. Media can also generate interest and stimulation in learning. Where the more senses are used to receive something, the clearer the understanding or knowledge obtained. Capturing the knowledge provided through flipchart media utilizes more than one sense, namely the sense of sight and the sense of hearing (13% of the sense of hearing and 75% - 87% of the sense of sight) (Bagaray et al., 2016). Another study by Puspitawati et al proved that flipchart media was effective in increasing dental health knowledge in elementary school students.¹³⁻¹⁵

Based on an initial survey of primary school principals on Tidung Island using Whatsapp, it was found that since the Covid-19 pandemic, dental and oral health education had not been carried out, knowledge about maintaining dental and oral health in class V students at SDN on Tidung Island was

still lacking.

METHOD AND MATERIAL

The research design used was a pre-experimental research with pretest-posttest one group design. The type of data used in this study is primary data, namely data taken directly by researchers from respondents in the form of the results of Knowledge of Dental and Oral Health Care Before and After Counseling with Flipchart Media.

The sampling technique with total sampling is a sampling technique when all members of the population are used as samples. The reason for taking total sampling is because the total population is less than 100 people, so the entire population is used as a research sample. The sample in this study was taken from the total population/total sampling of fifth grade elementary school students, namely SDN 01, SDN 02 and SDN 03, each class of 23 students on Tidung Island, South Thousand Islands, DKI Jakarta Province. In this study the number of samples used was 69 students of class V SDN on Tidung Island, South Thousand Islands who met the criteria. The criteria used as research samples are: Students who are registered in class V at SDN 01, SDN 02 and SDN 03 on Tidung Island; Willing to be a research respondent. The instruments used in data collection used at the time of data collection were pre-test and post-test questionnaires, totaling 10 questions. Data analysis used the descriptive analysis.

RESULT

This research was conducted after obtaining permission from the parents and principals of SDN 01, SDN 02, and SDN 03 Pulau Tidung to conduct the research. Data collection was carried out directly by the researchers themselves and assisted by homeroom teachers for class V SDN 01, SDN 02, and SDN 03 Pulau Tidung. Starting from class V SDN 03 at 08.00 until 09.00 WIB, class V SDN 02 at 09.30 until 10.30 WIB and class V SDN 01 at 11.00 until 12.00 WIB. The researcher explained the aims and objectives of the fifth grade students at SDN 01, SDN 02, and SDN 03 Pulau Tidung, each class consisting of 23 students. Data collection was carried out by distributing pre-test sheets first and given 5 minutes to fill out the pre-test questionnaire. After that, it was continued with counseling on maintenance of oral health using flipchart media after the counseling was finished, followed by filling out the post-test questionnaire and given 5 minutes. The results of the pre-test and post-test questionnaires were collected by the researcher.

Table 1. Frequency distribution of knowledge of dental and oral health maintenance before counseling using flipchart media

Knowledge	Frequency	Percentage
Good	32	46.4
Sufficient	26	37.7
Poor	11	15.9
Total	69	100.0

Table 1 shows that the results of measuring knowledge before being given dental and oral health maintenance counseling included in the good category as many as 32 students with a percentage of 46.4%, in the sufficient category there were 26 students with a percentage of 37.7%, and in the poor category there were 11 people with a percentage of 15.9%.

Table 2. Frequency distribution of knowledge of dental and oral health maintenance after counseling using flipchart media

Knowledge	Frequency	Percentage
Good	64	92.8
Sufficient	5	7.2
Poor	0	0
Total	69	100.0

Table 2 shows that the results of measuring knowledge after being given dental and oral health maintenance counseling included in the good category as many as 64 students with a percentage of 92.8%, in the sufficient category there were 5 students with a percentage of 7.2% and no students entered in less category.

DISCUSSION

Counseling is an activity of educating something to individuals or groups, providing knowledge, information and various abilities so that they can form attitudes and behave in life as they should. In essence, counseling is a non-formal activity in order to change society towards a better condition as aspired. Dental and oral health education is an activity that aims to increase, give an example, to provide warnings about the importance of maintaining healthy teeth and mouth.^{9,10} Health promotion media is also known as a visual aid in approaching health promotion efforts. With the use of media, it can support success and facilitate the process of conveying information provided by extension workers. This teaching aid is structured based on the principle that the knowledge that exists in every human being is received or captured through the five senses. The educational process can gain experience or knowledge through various educational aids, but each tool has a different intensity in helping to overcome one's problems.¹⁶⁻¹⁸

The results of measuring knowledge of dental and oral health maintenance before being given counseling using flipchart media were included in the good category at 46.4%, the sufficient category at 37.7%, and the less category at 15.9%. SDN on Tidung Island is an elementary school managed by the Tidung Island Health Center in the South Thousand Islands under the School Dental Health Program (UKGS). UKGS activities are carried out every 6 months including dental examinations and sometimes accompanied by other programs from the health center such as deworming and school children's posyandu. Because several programs were carried out at the same time, dental and oral health education was only carried out briefly. Basically, elementary school-age children already understand the importance of maintaining healthy teeth and mouth, but knowledge about how to maintain healthy teeth and mouth still needs to be improved.

From the study, the results of measuring knowledge of dental and oral health care after being given counseling using flipchart media were in the good category at 92.8%, the sufficient category was at 7.2% and no students were included in the poor category. According to Notoatmodjo knowledge is the result of human sensing or the result of knowing someone about an object through their five senses. Most of one's knowledge is obtained through the sense of hearing and the sense of sight. Knowledge is influenced by several factors such as motivation, available information, environment, social culture and economy of each individual. Based on this, the results of this study showed that there was a change in students' knowledge after being given dental and oral health counseling using flipchart media for fifth grade students at SDN on Tidung Island.⁹

From the description above, when compared with the results of research conducted by Pratiwi et al entitled the effect of dental and oral health counseling using flipcharts on the level of knowledge of brushing teeth for Parakan adolescent elementary school students in 2019. Based on the results after counseling (post- test) with flipchart media it was found that there was a change in knowledge which showed that the results in the good category were 85%, the sufficient category was 15% and the less category was 0%. Meanwhile, from the research, the results obtained after counseling (post-test) were in the good category at 92.8%, the sufficient category at 7.2% and the less category at 0%.¹⁹

It can be concluded that there is an increase in knowledge about maintaining oral and dental health because students are cooperative, then use counseling media which is quite effective, namely flipcharts, which can be presented in stages to provide a time lag to understand the contents of the material presented during counseling and do not use medical language so that the language used is easily understood by respondents. According to Bagaray et al flipcharts are an educational tool that is very simple and quite effective for use in conveying information including health messages such as DHE given. The flipchart media used in this study can increase target knowledge, because it is able to present health messages in a concise and practical manner accompanied by direct explanations from the carrier of the material. The explanation provided will clarify and make it easier to capture the contents of the DHE material provided. The use of flipchart media becomes more effective because it is applied to a target with a total of 24 participants (less than 30 people), so that it can adjust the visibility of the educational target. Presentation of information using flipchart media in this study used attractive pictures, as well as concise and clear sentences of educational objectives. In a study by Bagaray et al that the capture of knowledge imparted through flipchart media utilizes more than one sense, namely the sense of sight and the sense of hearing (13% of the sense of hearing and 75% -87% of the sense of sight). The more senses involved in providing information, the easier the message can be received and understood properly.¹⁴

CONCLUSION

Based on the results of the research that has been done, it can be concluded that dental health education using flipchart media increased knowledge of dental and oral health maintenance

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CONFLICT OF INTEREST

The authors declare that they have no conflict interests.

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