



Leaflet media as an effort to increase knowledge of dental health maintenance in elementary school students

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Abstract

Knowledge can be increased through health promotion. In terms of the age at which children are susceptible to disease, counseling is especially aimed at groups prone to dental and oral health problems, namely elementary school-aged children. Leaflet media is the right media to increase the knowledge of fourth grade students where students can already read. This study aims to analyze the effectiveness of dental and oral health maintenance knowledge before and after being given counseling using leaflet media to class IV students at SDN Sawangan 07 Depok in 2022. The research design used was quasi-experimental. The sampling technique with a total sample of 36 students. Data was collected by filling out pre-test and post-test questionnaires given to class IVB students. Data analysis used paired sample test. The results of the study before being given counseling about dental health maintenance using leaflet media had a good level of knowledge category of 25 people with a percentage of 69%, the level of knowledge in the sufficient category was 5 people with a percentage of 14%, and the level of knowledge in the poor category was 6 people with a percentage of 17%. The results of the study after being given counseling about maintaining dental health with leaflet media, most of the respondents had a good level of knowledge, 29 people with a percentage of 81%, the level of knowledge in the sufficient category was 7 people with a percentage of 19%, and no students were included in the poor category. The results of the paired sample test analysis obtained a p-value of 0.000. Conclusion: leaflet media is effective in increasing knowledge about maintaining oral health in elementary school students.

Keywords: Leaflet media, knowledge, dental health, elementary school students

INTRODUCTION

Dental and oral health is part of overall health. Maintaining good and correct dental and oral health will certainly greatly support the realization of optimal dental and oral health. Dental and oral diseases that affect many children and adults are caries or cavities.¹⁻³ Based on data from Basic Health Research the prevalence of dental caries in Indonesia is still quite high, seen in 2018 the prevalence of dental caries in the 5-9 years age category reached 54.0% and the 10-14 years age group was 41.4%. The population of school children aged 6-12 years reaches 40-50% of the general community, so dental and oral health education efforts to target school children are a top priority.⁴⁻⁶

One of the main factors affecting oral health is behavior. Behavior that can affect the development of caries is about how to maintain healthy teeth and mouth, so that behavior is greatly influenced by knowledge. Behavior that is based on correct knowledge will last longer than behavior that is not based on knowledge, including knowledge about how to maintain proper dental health which will greatly affect the incidence of caries.⁷⁻⁹

Knowledge can be increased through health promotion. In terms of the age at which children are susceptible to disease, counseling is especially aimed at groups prone to dental and oral health problems, namely elementary school-aged children. One form of effort to minimize existing morbidity rates is preventive action through health promotion activities. Counseling is an example of efforts to prevent dental and oral

health problems, because this activity can increase public knowledge and awareness to maintain health and improve health status. Dental and oral health promotion is a process of providing information that arises on the basis of dental and oral health needs that aim to produce good dental and oral health and improve living standards. In promoting dental and oral health, individuals gain experience or information through various media for promoting dental and oral health. The media is one thing that needs attention in carrying out health promotion.¹⁰⁻¹²

The media used in this research is leaflet media. This media includes print media in the form of sheets which have the function of conveying health information or messages through folded sheets. Information content can be in sentences or pictures, or a combination. Leaflet sheets are simply folded and then given an attractive design and use simple language to make it easy for readers to understand. Media leaflets are generally placed in public places and are easily visible. This is due to the characteristics of the leaflet media which are specifically designed to be read quickly by the recipient. Research Hadju, shows that there is an influence of counseling through the media of leaflets on increasing knowledge of dental and oral health with an average pre-test score of 3.91 and an average post-test score of 6.21 from the results of the research he conducted on students - 49 grade V students at SD Negeri 18 Mandonga, Kendari City. Another study by Nubatonis also proved leaflet media could significantly increase the knowledge, attitudes and dental and oral hygiene of elementary school students.¹³⁻¹⁵

METHOD AND MATERIAL

The research design used was a quasi-experimental study with a one group pretest-posttest design. The aim of the study was to analyze the effectiveness of dental health maintenance knowledge before and after counseling using leaflet media for fourth grade students at SDN Sawangan 07 Depok. The research was conducted in April 2022.

The sample is the object that is examined and is considered to represent the entire population. The sample used is the total sampling method, which is a sampling technique where the number of samples is the same as the population.¹⁶ The sample used in this study was 36 students in grade IVB at SDN Sawangan 07 Depok. The instruments used in this study were informed consent sheets (statements of consent), questionnaires (pretest and posttest) to obtain data about knowledge of dental and oral health care, and leaflets containing material about dental and oral health care.

The stages of the research were carried out in several stages, first conducting introductions and explaining the research to respondents; conduct a pretest on respondents before counseling is carried out to find out knowledge about maintaining dental and oral health by using a questionnaire and filling in is limited to 10 minutes; distributing leaflets; explain the contents of the leaflet while conducting counseling for 15 minutes; leaflets are given as student self-learning; the last week after doing a posttest to find out knowledge about maintaining oral and dental health after being given dental health education using leaflet media. Analysis of the data used in this study using SPSS with paired sample t test.

RESULT

Measuring knowledge of dental and oral health care before being given counseling using leaflet media, given a pretest questionnaire with a total of 12 questions.

Table 1: Frequency distribution of knowledge of dental and oral health maintenance before counseling using leaflet media

| Knowledge | Frequency | Percentage |
|------------|-----------|------------|
| Good | 25 | 69 |
| Sufficient | 5 | 14 |
| Poor | 6 | 17 |
| Total | 36 | 100 |

Based on Table 1, the level of knowledge of dental and oral health maintenance of respondents before counseling using leaflet media had a good level of knowledge category of 25 people with a percentage of 69%, sufficient category of 5 people with a percentage of 14%, and poor category of 6 people with a percentage of 17%.

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

| Knowledge | Frequency | Percentage |
|------------|-----------|------------|
| Good | 29 | 81 |
| Sufficient | 7 | 19 |
| Poor | 6 | 17 |
| Total | 36 | 100 |

Based on Table 2, the level of knowledge of dental and oral health after being given counseling with leaflet media, most of

the 36 respondents had a good level of knowledge, 29 people with a percentage of 81%, the sufficient category was 7 people with a percentage of 19%, and no students entered the poor category.

Table 3: Different test of debris index before and after counseling using leaflet media

| Knowledge of dental and oral health | Mean | Difference | p-value |
|-------------------------------------|------|------------|---------|
| Pre-test | 8.6 | | |
| Pos-test | 10.2 | 1.6 | 0.000 |

Based on Table 3, the average knowledge of dental and oral health maintenance before being given counseling using leaflet media has an average value of 8.6 and the average knowledge after being given counseling using leaflet media has an average value of 10.2, with $p=0.000$, meaning that the leaflet media is effective in increasing knowledge of dental and oral health care for elementary school children

DISCUSSION

The results of the research conducted regarding the description of knowledge of dental and oral health maintenance before and after being given counseling using leaflet media for Class IVB students at SDN Sawangan 07 Depok, there was a change in students' knowledge before and after being given counseling using leaflet media about maintaining dental and oral health, the data obtained was that there was increase in knowledge in the good category, before counseling there were 25 students with a percentage of 69%, after being given counseling with leaflet media to 29 students with a percentage of 81%, then there was an increase in the sufficient category before being given counseling there were 5 students with a percentage of 14%, after being given counseling there were 7 students with a percentage of 19%, and a decrease in the less category before being given counseling there were 6 students with a percentage of 17%, after being given counseling there were no students who were included in the less category. The results of the paired sample t test obtained a value of $p = 0.000$, meaning that leaflet media is effective in increasing knowledge of dental and oral health maintenance in elementary school children.

The results of this study indicate that there is an increase in the knowledge of respondents before and after being given counseling about dental and oral health maintenance using leaflet media. This is because counseling with leaflet media has the advantage that it is easier to attract attention and stimulate children's understanding. Counseling with leaflet media can also make children see interesting pictures simultaneously related to the material provided.¹² Then according to research conducted by Nubatonis shows that leaflet media can effectively increase children's knowledge. This was reinforced by research conducted by Nubatonis, the results of which showed that there were significant differences in knowledge and attitudes assessed by pretest and posttest between the two elementary school groups using leaflet media. These results prove that dental health education interventions through leaflet media can increase changes in students' knowledge and attitudes in maintaining dental and oral hygiene.¹⁵

From this description, when compared with the results of research conducted by Imelda regarding the effect of leaflet media counseling on dental and oral hygiene knowledge of fifth grade students at Supat 1 Public Elementary School in 2021. Based on the results of his research before counseling (pretest) that the average score - average 8.3 and the average

value after counseling (posttest) is 15.3 meaning that there is a significant difference in the level of knowledge of children from children before counseling compared to after counseling with leaflet media. While the results of the study were obtained for class IVB students at SDN Sawangan 07 Depok in 2022, that the average score before counseling using leaflet media (pretest) was 8.6 and the average score after counseling (posttest) was 10.2. It can be concluded that from this research there is a similarity, namely an increase in the average value of respondents' knowledge before counseling (pretest) and after counseling (posttest) with leaflet media. And the difference is the results of the numbers obtained before and after counseling.

CONCLUSION

Based on the results of the research that has been done, it can be concluded that there is the leaflet media is effective in increasing knowledge of dental and oral health care for elementary school children

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CONFLICT OF INTEREST

The authors declare that they have no conflict interests.

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