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Education Through Audiovisual Media To Increase Students' Knowledge And Attitudes About Oral Health

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ABSTRACT

This research examines dental and oral health problems in Islamic boarding schools, which are influenced by the lack of knowledge and attitudes of the students. Knowledge of dental and oral health is an effort that is included in prevention to maintain healthy teeth and mouth, if dental and oral health is not paid attention to it can cause problems with dental and oral disease. This research aims to increase students' knowledge and attitudes towards dental and oral health through audio-visual education at the Putra Al-Badriyah Mranggen Islamic boarding schools. This type of research is a quasi-experimental pre-post test with control group design with a sample of 50 students, using a questionnaire given before and after the counseling intervention through audio-visual education, with data analysis using the Wilcoxon test. The results showed a significant increase in students' knowledge and attitudes ($p: 0.000 < \alpha (0,05)$) and yaitu $p: 0,000 < \alpha (0,05)$. In conclusion, audio visual education is effective in increasing students' knowledge and attitudes about dental and oral health.

Keyword: Dental and Oral Health; Education; Knowledge; Attitude; Students

Introduction

Dental and oral health is an essential part of general health that has a significant influence on quality of life.[1,2] Maintaining oral and dental hygiene is not only important for physical health, but also plays a role in mental and social well-being, and is part of the teachings of the Islamic religion which emphasizes personal hygiene.[3] However, the behavior of maintaining oral health among teenagers, including students at Islamic boarding schools, is often still low.

As an example due to a lack of understanding of dental and oral health, boarding school students often use one toothbrush together, and they rarely even brush their teeth regularly twice a day [4,5] This is of particular concern considering the role of Islamic boarding schools as religious-based educational institutions which aim to shape positive behavior in students.

Islamic boarding schools (Ponpes) have the responsibility to educate their students in accordance with Islamic principles, and one aspect of this responsibility is to address health problems, especially those related to the mouth and teeth. Among the many health problems that still exist, many Islamic boarding schools in Indonesia deal with oral health problems [1]

A number of previous studies have highlighted the dental and oral health conditions of students in various Islamic boarding schools in Indonesia. According to research by Rahaju (2015), only 43.8% of students at Islamic boarding schools Al Ashriyyah Nurul Iman Parung are aware of the importance of maintaining dental hygiene, while 56.2% still do not know.

The results of a survey conducted at the Al-Yasini Islamic Boarding School in Pasuruan, East Java found that around 90% of students had poor dental health status [7]. The survey results can be

influenced by many things, one of which is the behavior of students in maintaining oral health.

In addition, out of 80 students at Islamic boarding schools Al-Muawanah Cibiru, 65 percent (52 out of 80) had a good understanding of oral health, according to Huda's research [8]. Oral health education among students is currently the main cause of this gap.

In addition, 58 students (or 55.2% of the total) at MA Darunnajah Jakarta demonstrated substandard oral hygiene practices in terms of frequency, duration, frequency of dental check-ups, and sugar intake. Considering that more than 50% of students did not perform good oral hygiene practices, these results suggest that students still do not fully understand the importance of this issue [6].

From this date, it is clear that most previous studies only evaluated the level of knowledge and behavior of students regarding dental and oral health, without providing innovative interventions to increase their understanding and awareness. The low level of knowledge and behavior of dental and oral care among students shows that there is a gap in health education efforts in the Islamic boarding school environment. Most Islamic boarding schools have not utilized technology-based educational methods, even though methods such as audio-visual media have the potential to convey health information in a way that is more interesting and easy for students to understand.

This research is to educational dental and oral health through audio-visual media for students at Pondok Putra Al-Badriyah Mranggen. The use of audio-visual media is expected to be able to

overcome the limitations of conventional methods and increase students' understanding and attitudes towards dental and oral health. By selecting students at this Islamic boarding school, this research will of audio-visual media as an interesting and effective educational method in improving students' dental health behavior. Because Several studies show that audiovisual media can get the audience's attention.[9–11]

This study aimed to determine the relationship between audiovisual media in increasing students' knowledge and attitudes toward dental health in the the Al-Badriyah 2 Mranggen Demak Islamic boarding school.

Research Methods

This study uses a quasy experimental method, the research design used in this study is a one group pre and posttest design. The number of respondents in this study were 50 people. All samples were given oral health education through audiovisual. Before the intervention in the form of education through audiovisual media about oral health, a pretest was conducted. After that, a posttest was conducted to observe changes in knowledge and attitudes after education through audiovisual media was carried out. Therefore, the results of oral health education are more accurate because they can compare conditions before and after providing education through audiovisual media about dental health. Differences in knowledge and attitude were analyzed using the Wilcoxon test.

Results and Discussion

Images at the time of data collection are as follows:



The results are displayed in the form of a pie chart as follows:

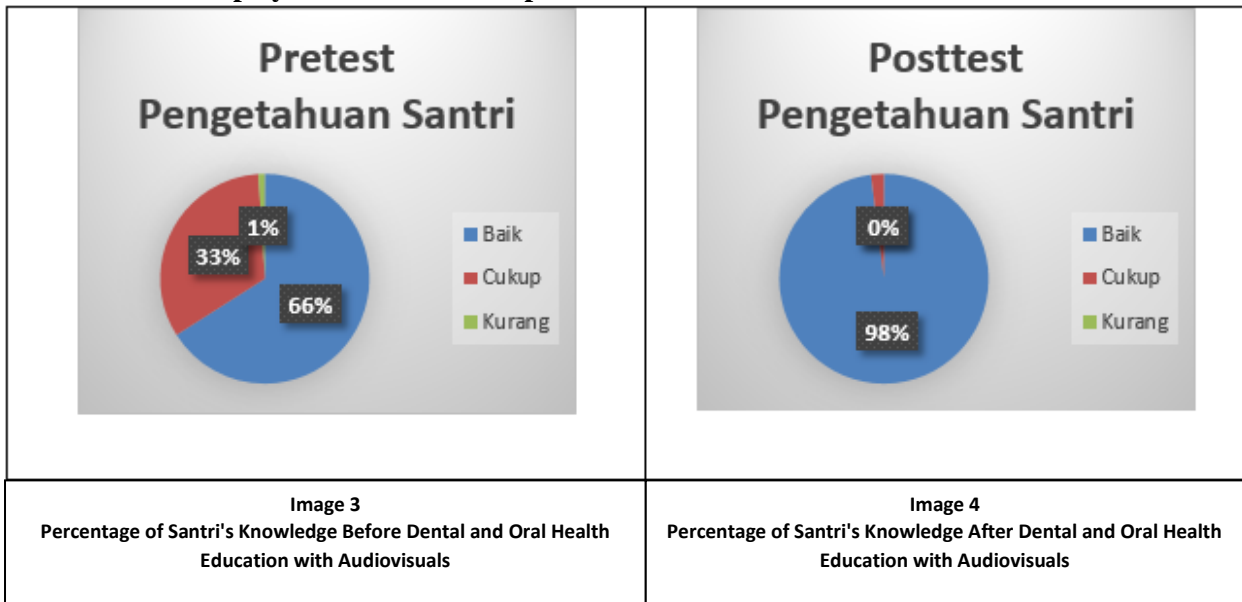
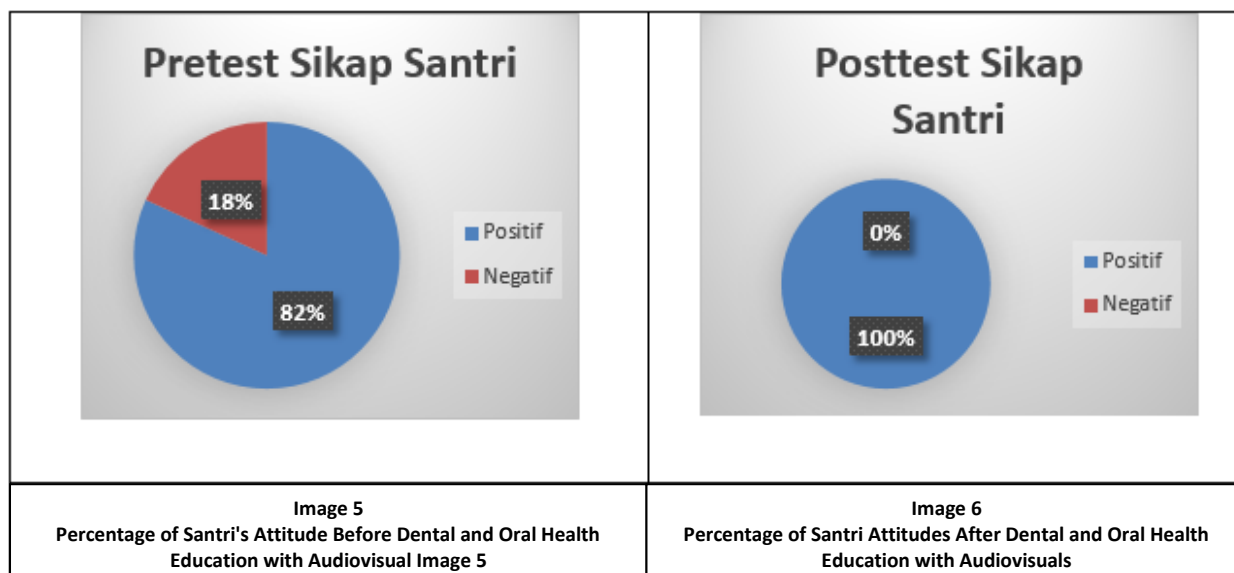


Image 3 and 4 show that the percentage of students' strong knowledge increased from 33% to 98% and the percentage of students' poor knowledge decreased from 1% to 0%. The level of students' oral health knowledge before and after audiovisual education was significantly different ($p=0.00$), according to the Wilcoxon test.

The p value (Asymp.Sig. (2-tailed)) is $0.000 < \alpha$ (0.05), it can be concluded that there is a significant effect on knowledge after the provision of educational interventions to students using audiovisual media about oral health on the results of pretest and posttest scores.



As shown in Image 5 and 6, there was a considerable increase (from 82% to 100%) in the positive student attitude category and a decrease (from 18% to 0%). From the Wilcoxon test, it is known that there is a significant difference ($p=0.00$) between the attitude of students about oral health before and after education with audiovisuals.

The results of data testing that have been carried out show a p value (Asymp.Sig. (2-tailed)) of $0.000 < \alpha (0.05)$ which means that there is a significant influence between the attitudes of students after being given educational interventions with audiovisual media on oral health on the results of pretest and posttest scores.

Providing education through audio-visual media about Dental and Oral Health is expected to have an effect on increasing a knowledge and attitude. this study proved effective in increasing the knowledge and attitudes of students about the knowledge and attitudes of students. This research was strengthened by research by Hermien et al. [12] after being given dental health education with video media, it was found that the level of knowledge of respondents was mostly in the good category as many as 27 people (90%). The results showed that respondents' knowledge had increased after being given dental health education with video media. Researchers also argue that the provision of video media in appropriate and interesting health education can affect information from knowledge in health education.

This study also agrees with Yunitasari et al., [13] that efforts to improve oral health knowledge in students are through oral health counseling which can change oral health knowledge in students. This study also shows that there are

changes in increasing knowledge about dental and oral hygiene after intervening on respondents in the form of providing animated media about dental and oral hygiene to students of SD N Getas 3.

Attitude is influenced by knowledge, as well as in this study when children's knowledge increases, there is also an increase in children's attitudes towards how to brush their teeth properly. Research in China found that children with good knowledge about how to maintain dental health will have good attitudes as well. [14]

Notoatmodjo [15] argues that attitude formation can be influenced by several factors, one of which is experience. Attitude is the action of a person in the form of a response to a stimulus or object. The suitability of reactions involving opinions and emotional factors is called attitude.

In this study, there were differences in attitudes in respondents before and after providing educational interventions with audiovisual media about oral health. It was concluded that oral health education using audiovisual media assistance had a significant effect on changing attitudes in respondents.

A person's attitude can be shaped by their knowledge, ideas, beliefs and emotions [15]. A person's oral health is strongly influenced by his or her behavior. Oral and dental health habits have a major influence on overall public health, so the community needs to strive to improve it. Environment and personality both have a role in shaping individual behavior [16]. The research findings show that in this study the existence of audiovisual media on oral health has an influence on the attitude of students to change attitudes that previously did not maintain teeth and mouth properly, now they are better.

This explanation adds to the evidence that audiovisual media is an effective educational media for students in increasing knowledge about oral health.[17] The use of media in dental education provides benefits such as stimulating respondents' interest, overcoming limitations of space, time, language and sensory power in the process of receiving information, overcoming respondents' passivity, and creating the same perception.

The use of media as a tool to facilitate respondents in understanding information that is considered difficult to understand [18]. Audiovisual media has the advantage of explaining a situation in accordance with the reality of the situation at hand and is dynamic. The educational video in this study, made with material that is in accordance with the objectives and made with simple language so that it can arouse the respondent's interest and increase the respondent's interest in receiving this information and can pass on the message to people around.

According to Lismurtini [19], audio-visual media are usually used for smooth learning activities. The way this audio-visual media works is to unite the functions of the two senses, namely hearing and sight simultaneously. Through this media can be used to get a message or information, whether it is a message that is verbal or nonverbal. Meanwhile, according to Surbrigus[20], visual aids media is one of the visual media used to stimulate the sense of sight, then audio aids media is media used to stimulate the sense of hearing. Based on the description of the data above, the researcher argues that health education using audiovisual has proven to be able to increase students' knowledge about the dental health of students at the Al-Badriyah 2 Mranggen Demak Islamic boarding school.

According to Syofia (2018) attitude is a view accompanied by a tendency to act towards an object. The attitude that is formed in a person is influenced by several components including the cognitive component which is related to a person's beliefs, opinions or thoughts about the object [15]. In this case, the respondent's attitude towards maintaining oral health is influenced by sensing the video or object that has been displayed in oral health education activities.

Conclusion

There is a relationship between the variable of the influence of audiovisual media on oral

health and the affected variable of the level of knowledge and attitude towards maintaining oral health. which is significant and unidirectional, also has a strong correlation.

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