

Video Media and Flipchart on Dental Health Knowledge



Eka Anggredi¹, Pudentiana Rr RE², Rika Amelia³, Tedi Purnama⁴

^{1,2,3,4}Department of Dental Health, Poltekkes Kemenkes Jakarta I, Indonesia

ABSTRACT: Increasing knowledge about dental and oral health can be done with counseling. To facilitate counseling activities, a media is needed as a tool that makes it easier for listeners. Media that can be used include video media and flipcharts which can increase dental health knowledge. Purpose: this study was to analyze the effectiveness of video and flipchart media on dental health knowledge. Methods: The research design of is quasi-experimental. The sampling technique used was total sampling, which was divided into two groups, the intervention group was given video media and the control group was given flipchart media. The data collection instrument uses a questionnaire. Data analysis using t-test. Results: Before counseling was carried out using video media, the results were 75% in the good category, 20.8% in the sufficient category, and 4.2% in the less category. After counseling with video media, the results obtained were 100% in the good category. Prior to counseling using flipcharts, the results were 75% in the good category, 20.8% in the sufficient category, and 4.2% in the less category. After conducting counseling using flipcharts, the results obtained were 91.7% in the good category and 8.3% in the sufficient category. The results of the t-test obtained by video and flipchart media on dental health knowledge with a value of $p = 0.690$. Conclusion: Video and flipchart media are effective in increasing dental health knowledge.

KEYWORDS: Video Media, Flipchart, Dental and Oral Health Knowledge.

I. INTRODUCTION

Dental and oral health is an integral part of general health. The mouth is the first gate in the digestive system. Food and drink are processed in the mouth with the help of the teeth, tongue and saliva. Maintenance of dental and oral hygiene is one of the efforts to improve health. A healthy oral cavity allows a person to communicate effectively, eat a variety of foods, improve quality of life, be confident and have a good social life. On the other hand, an unhealthy oral cavity can affect a person's social life, limited masticatory and speech functions, pain and disruption to work or school [1–3].

One of the causes of dental and oral health problems in society is the behavioral factor or attitude of ignoring dental and oral hygiene. This is based on a lack of knowledge about dental and oral health and its treatment. A person's awareness of the importance of dental health can be seen from the knowledge possessed when a person has a high level of knowledge, the concern for caring for his teeth and mouth is also high [4–6].

According to the 2018 Riskesdas report as many as 57.6% of Indonesian people experience dental and oral health problems in the form of dental caries and periodontal disease. A significant increase in dental and oral problems occurs in adolescents with an age range of 12-18 years. This age range is a period of transition from child to adult or known as adolescent puberty. Puberty adolescents often complain about the condition of their teeth, even though they have brushed their teeth [7–9].

The high number of adolescent complaints about dental and mouth problems is related to the level of knowledge of adolescents in maintaining oral health. Knowledge of dental and oral health is a person's ability to know everything about dental and oral health, knowledge is used as self-education to achieve optimal dental and oral health. In Sitanaya's research (2019) it was found that students' knowledge increased after health counseling was carried out. The results of counseling using audiovisual media were better than counseling using print media as seen from the average value of audiovisual media which was 23.8 higher compared to printed media which was 22.0 [10,11].

Carrying out promotional activities with counseling aims to change behavior from unhealthy aspects of knowledge, attitudes and actions towards healthy behavior so as to create a good understanding of dental and oral health. In carrying out promotional activities in the form of health education, this cannot be carried out optimally considering the number of schools and promotional media that are not quite right. Health promotion media are essentially educational aids used to facilitate the delivery and reception of health messages to information targets. This promotional media is media or props in promoting a

Video Media and Flipchart on Dental Health Knowledge

health problem which is defined as a tool for health promotion that can be seen, heard, touched, felt or smelled, to facilitate communication and information dissemination [12,13].

Video is a display of moving images accompanied by sound. Video media is one type of audio-visual media. Audio visual media itself relies on the sense of hearing and the sense of sight. This media can increase students' interest in learning because students can listen and see pictures at the same time. Videos can present information, describe processes, explain complex concepts, teach skills, shorten or extend time, and influence attitudes [14,15].

Flipchart is one of the printed media that is simple and effective in conveying information so that it makes it easier for educational targets to understand the content of the material provided. Flipchart media consists of sheets of paper that are bundled together with ring bindings so that they can be reversed, which contain messages and are explained with pictures that explain a topic in sufficient detail so that the delivery of information becomes concise and practical accompanied by a direct explanation from the facilitator. Each specific topic of discussion always consists of 2 pages, one illustrated page with limited text facing the participants while the page facing the facilitator contains key information. Presentation of information using flipchart media tools in this study used attractive pictures, as well as concise and clear sentences adapted to the comprehension of educational goals. Bagaray et al. argued in their research that the capture of knowledge imparted through flipchart media utilizes more than one sense, namely the senses of sight and 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 [16,17].

Based on a preliminary study conducted by researchers on several students at SMP PGRI 10 South Jakarta, it was found that there were several grade VIII students who still lacked knowledge regarding dental and oral health maintenance such as when brushing their teeth, using toothpaste, etc. and the school had never conducted research on dental and oral health before.

II. METHOD AND MATERIAL

The research design used in this study was a quasi-experimental study which aimed to analyze the effectiveness of dental and oral health knowledge before and after being given counseling using video media and flipcharts. This research was conducted in class VIII students of SMP PGRI 10 South Jakarta, which was conducted in April 2022.

The sampling technique used was total sampling, so the number of samples used in this study were 48 grade VIII students of SMP PGRI 10 South Jakarta, which were divided into two groups, the intervention group was given video media and the control group was given flipchart media.

The research instrument used was a pre-test and post-test questionnaire. Data collection was carried out by using a questionnaire given to class VIII students at SMP PGRI 10 South Jakarta, the data was taken directly by the researcher using a pre-test and post-test questionnaire given directly to students. The data collection procedure is carried out in the following way:

1. Before conducting the research, the researcher introduced himself to class VIII students at SMP PGRI 10 South Jakarta, then explained the aims and objectives of conducting the research.
2. The researcher gave a pre-test questionnaire sheet to class VIII-A students.
3. Researchers conducted counseling using video media.
4. The researcher gave a post-test questionnaire sheet to class VIII-A students.
5. The researcher continued counseling to class VIII-B, the researcher introduced himself to class VIII-B students of SMP PGRI 10 South Jakarta, then explained the purpose and objectives of conducting the research.
6. The researcher gave a pre-test questionnaire sheet to class VIII-B students.
7. Researchers conducted counseling using flipchart media.
8. The researcher gave a post-test questionnaire sheet to VIII-B class students.

III. RESULT

Table 1. Dental health knowledge before and after counseling with video media

Knowledge	Before		After	
	f	Percentage (%)	f	Percentage (%)
Good	18	75	24	100
Sufficient	5	20.8	0	0
Less	1	4.2	0	0
Total	24	100	24	100

Video Media and Flipchart on Dental Health Knowledge

Table 1 shows that before counseling was carried out with video media, the level of knowledge of dental and oral health of the respondents included in the good category as many as 18 people (75%), in the sufficient category as many as 5 people (20.8%), and in the poor category 1 person (4, 2%). Whereas after counseling with video media, the level of knowledge of dental and oral health of the respondents included in the good category as many as 24 people (100%), the moderate category did not exist (0%), and the less category did not exist (0%).

Table 2. Dental health knowledge before and after counseling with flipchart

Knowledge	Before		After	
	f	Percentage (%)	f	Percentage (%)
Good	18	75	22	91.7
Sufficient	5	20.8	2	8.3
Less	1	4.2	0	0
Total	24	100	24	100

Table 2 shows that before counseling was carried out using flipchart media, the level of knowledge of dental and oral health of the respondents included in the good category as many as 18 people (75%), in the sufficient category as many as 5 people (20.8%), and in the poor category 1 person (4, 2%). Whereas after counseling with flipcharts, the level of knowledge of dental and oral health of the respondents included in the good category as many as 22 people (91.7%), 2 people in the sufficient category (8.3%), and in the less category none (0%).

Table 3. Results of different dental health knowledge tests before and after counseling in the intervention and control groups

Groups	Mean	p-value
intervention	93.3	0.690
control	92.6	

Table 3 shows that the results of the t-test obtained by video and flipchart media on dental health knowledge with a value of $p = 0.690$. meaning that video and flipchart media are equally effective increasing dental health knowledge.

IV. DISCUSSION

Knowledge is the result of human sensing, or the result of knowing someone about an object through the senses they have (eyes, nose, ears, and so on). By itself at the time of sensing so as to produce knowledge is strongly influenced by the intensity of attention and perception of the object. So, knowledge is the result of knowing that occurs after someone senses a certain object. Knowledge is one of the three domains that influence human behavior. Knowledge has a very important role in forming one's actions, because from experience and research it turns out that behavior based on knowledge will last longer than behavior that is not based on knowledge [18].

The results showed that prior to counseling with video media, the results were 75% in the good category. After counseling with video media, the results obtained were 100% in the good category. Meanwhile, knowledge of dental and oral health prior to counseling using flipcharts obtained 75% results in the good category. After conducting counseling using flipcharts, the results obtained were 91.7% in the good category and 8.3% in the sufficient category. The results of the t-test obtained by video and flipchart media on dental health knowledge with a value of $p = 0.690$. meaning that video and flipchart media are equally effective increasing dental health knowledge.

Based on the pyramid with the Cone of Experience by Edgar Dale, students will more concretely gain knowledge through direct experience, through imitation objects, experience through drama, demonstrations, tours, and through exhibitions. This is possible because students can directly relate to the object being studied. While students will be more abstract in obtaining knowledge through objects or intermediary devices, such as television, motion pictures or films, radio or tape recorders, visual symbols, verbal symbols [18].

Video media and flipcharts accompanied by lecture methods have the same concrete level in Edgar Dale's cone of experience theory. Both of these educational media involve the senses of hearing and sight so that people can remember 50% of what they see and hear. In addition, the reach of counseling using video media is relatively larger than flipcharts. Utilization of video media in learning can provide a more complete, clear, varied, interesting and fun learning experience. Video media is included in electronic educational media which has advantages such as involving many senses so that it is easier to understand, more interesting because it has sound [19].

Video Media and Flipchart on Dental Health Knowledge

In the previous research conducted by Utami et al. it was shown that video media was effective in increasing knowledge. while for counseling using flipcharts it also shows that flipchart media is effective in increasing knowledge. The results of the study above, when compared with the results of the researchers, showed the same results, namely an increase in dental and oral health knowledge after counseling was carried out and there was a difference in the increase in dental and oral health knowledge between using videos and flipcharts [20].

V. CONCLUSION

Based on the results of the study, it can be concluded that there is video and flipchart media are equally effective increasing dental health knowledge

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Video Media and Flipchart on Dental Health Knowledge

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