

Efficiency Of Audio-Visual Use Of Short Films To Improve Halitosis Knowledge

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ABSTRACT

Knowledge of adolescents in maintaining healthy teeth and mouth is very important to prevent halitosis (bad breath). Health promotion efforts to target adolescents are the first and foremost priority. Current technological developments have a lot of influence in various aspects of human life. By developing very rapidly, information and communication technology in this era can be used as a potential container for promotional media in the field of dental and oral health. One of the interesting and easy-to-understand media is audio-visual short films. **Objectives:** To determine the efficiency of using audio-visual short films to increase knowledge of halitosis. **Methods:** This study used a survey method with a pre-post design approach. The sample in this study were 32 first-level students of the Puskesmas Dental Health Academy who were taken by simple random sampling. **Results:** The statistical test shows that there is a difference between the results of the Pre-Test and Post-Test knowledge of the respondents, where the Asymp value. Sig (2-tailed) is 0.000, which means that the variable is smaller than 0.05, then it can be said that H_a is accepted. **Conclusion:** There is efficiency in using audio-visual short films to increase knowledge of halitosis.

Keywords: Halitosis, Short Films, Knowledge, Efficiency.

Introduction

The oral cavity is the first entrance of materials necessary for the overall growth of individuals. If the maintenance of teeth and mouth is carried out regularly, the probability of oral cavity disease will be smaller than if it is neglected. Poor dental and oral health and untreated oral conditions are often troublesome because they cause pain and also inferiority in sufferers due to bad breath or referred to as halitosis (Adnyani et al., 2016).

Halitosis is caused by volatile sulfur gas Sulfur Sulfur Compounds or volatile VSC, these compounds are byproducts of bacteria. Inflammation in the oral cavity, deep pocketing, bleeding, especially spontaneous bleeding can increase the concentration of VSC in the mouth, causing halitosis (Adnyani et al., 2016).

Halitosis affects about 50-65% of the population, it is estimated that 50% of the population has halitosis whose severity varies (Asep, 2012). About 23.8% of the public said they had bad breath, 95.2% of the public said they had met someone with bad breath, and 52.4% rarely visited the dentist. All societies claim that bad breath is annoying in getting along (Aninda et al., 2022). Many people suffer from the unpleasant condition of their mouth (halitosis) but lack of awareness of the state of the mouth he suffers from (Husna & Abral, 2014).

Adolescent adults are vulnerable to dental and oral diseases due to lack of understanding and awareness in maintaining dental and oral hygiene (Hidayati et al., 2021). One of the data obtained from the results of the situation analysis conducted by researchers is known that AKG Puskesmas level I students on

average have unpleasant oral conditions which indicate a lack of oral and dental hygiene.

Halitosis is an oral disease that often occurs in society. Halitosis is not fatal, but it can have a significant impact on a person's psyche, social life and quality of life. Halitosis can make sufferers feel ashamed and insecure, as well as being an inhibiting factor in social interactions. Halitosis is a dental and oral disease that can make the sufferer get social rejection by those around him. Halitosis can also have a negative impact on a person's career (Widyastuti Ratih, 2021).

One of the factors for the onset of halitosis problems is the lack of knowledge in maintaining the hygiene of their teeth and mouth. Knowing the level of community knowledge is a process of community empowerment efforts to improve the degree of health. This is important for preventing and treating halitosis as well as being the first step in diagnosing further dental and oral diseases (Aninda et al., 2022).

Information about halitosis can be obtained from various sources, such as print media, teachers, the environment and along with the development of the times such as electronic media can also be a source of information (Aninda et al., 2022). One of the most popular electronic media today is audio-visual media such as short films. Short films are one of the factors that influence the effectiveness of learning media in supporting the material presented by educators. Because audio-visual media is easier to understand because it represents an event that occurs in the material presented and contains a message that can be absorbed by the audience (Hartino et al., 2021).

Short films are the kind of films that have been highlighted in recent years. No less great than professional film makers in general, many young people in Indonesia, especially those who live in big cities, are starting to be enthusiastic about finding, watching, and even

making short films. Short films can generally be interpreted as films with a short duration, and short films usually only convey a message briefly. The duration of the short film is less than 5 minutes-30 minutes (Gogali, 2017).

Short films are less than sixty minutes long, while feature films are more than sixty minutes long (Diah, 2019). This short duration of media allows the speaker to convey a short and interesting learning message.

Knowledge is a result of human knowledge through the union or cooperation between a knowing subject and an object that Known. Everything that is known about a particular object. Knowledge is the result of human perception or knowledge of an object through the five senses (eyes, nose, ears, etc.). Therefore, knowledge is a variety of things that a person obtains through the five senses (Khoirunisa, 2019).

Halitosis (bad breath) is an unpleasant, unpleasant and nose-piercing odor caused by volatile sulphur compounds (VSC's). Halitosis is basically caused by two things, namely: physiological and pathological. The physiological cause of bad breath is a condition on the surface of the tongue derived from bacteria and VSC's, this compound is formed from the decomposition of proteins by anaerobic bacteria. Another cause is the accumulation of bacteria in a person's mouth (Asep, 2012). 87% of the causes of bad breath come from intra-oral and 13% extra-oral or systemic diseases. Ear, nose, and throat disorders such as sinusitis are also associated with halitosis (Alibasyah & Rozan, 2021).

There are several ways to measure halitosis, one of the most common is Organoleptic testing. Assessing a person's breath by organoleptic testing means, researchers assess breath using nasal smell alone (Ketut et al., 2017) Historically, this kind of breath testing has become an option that dental researchers often use. This check is cheap and easy, because it does not require

special tools. The nose can detect up to 10,000 different odors (Ketut et al., 2017).

The problem related to organoleptic examination is that this technique is not really objective. In addition, other factors can also influence organoleptic evaluation. Such as hunger, menstrual cycle, head position, consumption of coffee, tea, juices, tobacco products, and fragrant cosmetics before organoleptic testing. These organoleptic measurements cannot measure mild, severe, or moderate halitosis rates (Ketut et al., 2017).

In maintaining healthy teeth and mouth, especially halitosis, one of the important elements is the knowledge factor. From the beginning, the ignorant become aware of the increase in one's knowledge, from that knowledge to being aware of the good and the bad, and realized in his daily behavior.

Research methodology

In this study, the method used was quantitative with a simple random sampling technique with quasi-experimental (pseudo-experiment) namely research where researchers gave treatment and examined changes from the treatment that had been given (Qudsyi et al., 2011). Where the treatment given is in the form of counseling through short films and researching changes in knowledge from the counseling.

The research design used was one group pre-test-post test design, where the study was carried out in one group only without a comparison group and measured using a pre-test conducted before being treated

and a post test carried out after being treated for each learning series (Nuryanti, 2019).

Result and discussion

This research was conducted in January 2023 at the Puskesmas Dental Health Academy campus which is located at Jl. Abdul Rahman Saleh, Kec. Senen, Central Jakarta City. This research was conducted using knowledge questionnaires and organoleptic measurements, the target was aimed at level I students of the Puskesmas Dental Health Academy. The sample or respondents in this study were 32 people who had been approved on the informed consent sheet. Data collection was carried out by providing questionnaires given directly and organoleptic measurements by researchers to all respondents. The results of the study were carried out an analytical test using SPSS with the following results:

1. Univariate Analysis Results

Univariate analysis in this study was used to describe a data set in the form of frequency, values with the most frequency, minimum values and maximum values of knowledge variables and prevalence in level I students of the Puskesmas Dental Health Academy. The distribution can be seen in the table below:

a. Knowledge Level Analysis Results

1) PreTest Knowledge Level

Data was obtained on knowledge tests conducted before being educated in the form of screening short films.

Table 1 Frequency Distribution of Knowledge Level Pre Test

No	Value Interval	N	Percentage	Criterion
1	0-20	0	0%	Very Bad
2	21-40	2	6%	Bad
3	41-60	15	47%	Enough
4	61-80	6	19%	Good
5	81-100	9	28%	Very Good
	Sum	32	100%	

Based on the frequency table of pre-test values above, it is shown that the criteria are very good (values 81-100) with the number of respondents 9 people or 28% of the total sample of 32 people. For good criteria (grades 61-80) with the number of respondents 6 people or 19%. For sufficient criteria (grades 41-60) with the number of respondents 15 people or 47%. For bad criteria (grades 21-40) with the number of respondents only 2 people or 6% and no respondents get very bad criteria (grades 0-20). These values indicate that the respondent's knowledge before the short film

counseling was good enough, Because from the table of pre-test research results, the percentage is sufficient with the number of respondents 15 or 47%, the highest among other percentages. However, there are still some people who need to be educated to improve their level of knowledge in avoiding halitosis.

2) Post Test Knowledge Level

Data was obtained on a knowledge test conducted after being given education in the form of screening short films.

Table 2 Distribution of Knowledge Post Test Frequencies

No	Value Interval	N	Percentage	Criterion
1	0-20	0	0%	Very Bad
2	21-40	0	0%	Bad
3	41-60	0	0%	Enough
4	61-80	3	9%	Good
5	81-100	29	91%	Very Good
	Sum	32	100%	

The post-test results above show that most respondents have experienced an increase in knowledge after being given counseling using short film media. It is proven by the absence of respondents who fall under the criteria very badly, badly and moderately, There was also a significant increase in halitosis knowledge on the good criteria reaching a percentage of 9% and the excellent criteria reaching a percentage of 91%, the most compared to other criteria.

Bivariate analysis is used to determine the influence of short film media on increasing halitosis knowledge and decreasing the prevalence of halitosis before and after counseling, The first step taken in analyzing is to test the normality of Shapiro- Wilk because the sample is under 50.

Table 3 Shapiro-Wilk Normality Test

Variabel	Df	Sig
Pre Knowledge	32	.010
Post Knowledge	32	.000
Pre Prevalence	32	.000
Post_ Prevalence	32	.001

*Uji Shapiro-Wilk

The results of the data analysis above using the Shapiro-Wilk test, where pre-test knowledge has a significant value of 0.010, post test knowledge has a significant value of 0.000, pre-test prevalence has a significant value of

0.000, post test prevalence has a significant value of 0.001. Data is said to be normally distributed when a significant value is greater than 0.05 and data is said to be abnormally distributed when a significant value is less

than 0.05. The table above shows that all variables have a value significantly smaller than 0.05, which means that the data from the variables is abnormally distributed. The next step is to test abnormal and paired data using the Wilcoxon test.

1. Differences in Halitosis Knowledge Before and After Education

Knowledge of halitosis before being given education in the form of short film screening showed that the frequency of pre-test scores was 0% for very bad criteria, 6% for bad criteria, 47% for sufficient criteria, 19% for good criteria and 28% for excellent criteria. This score shows that the knowledge of Level I students of the Puskesmas Dental Health Academy is still not good enough considering that the respondents are students in the health sector. Therefore, this encourages researchers to provide counseling to improve knowledge that is still lacking.

However, after students were given education in the form of showing short films, the value of knowledge in the post test experienced a significant increase, namely excellent criteria of 91% for 29 respondents and good criteria of 9% with a total of 3 respondents, the most compared to other criteria which had a percentage of 0%. This is due to the influence of short films given in order to increase knowledge of halitosis.

2. Differences in the Prevalence of Halitosis Before and After Education

The results of the analysis for the prevalence of halitosis also decreased after counseling using short films. This is shown in the pre-test values of 0% for severe halitosis criteria, 25% for strong halitosis criteria, 40% for intermediate halitosis criteria, 16% for slight odor criteria, 19% for criteria for no odor but cannot be recognized as halitosis and 0% for no odor criteria. However, after students were given education in the form of short film screenings, the prevalence value on the post test decreased significantly, namely 13% for

the criteria of no smell, 44% for the criteria for no odor but could not be recognized as halitosis, 37% for the criteria for slight odor, 6% for the criteria for intermediate halitosis, and the remaining 0% for the criteria for strong and severe halitosis. This is due to the influence of short films given in order to reduce the prevalence of halitosis.

The results of data analysis in bivariate trials for the level of knowledge and prevalence of halitosis were smaller than 0.05 which showed that there was an influence exerted by short film media used in increasing halitosis knowledge and decreasing halitosis prevalence.

Conclusion

1. Short film media has an effect and is efficient in increasing respondents' halitosis knowledge. This is evidenced by the value of the knowledge variable using the Wilcoxon Signed Rank Test test being at 0.00 smaller than 0.05.
2. There was a change in knowledge in respondents before and after being given material in the form of short films in a positive or better direction. This is evidenced by the Wilcoxon Signed Rank Test being at 0.00 smaller than 0.05.
3. There was a change in the prevalence of halitosis in respondents before and after being given material in the form of a short film in a positive or better direction. This is evidenced by the Wilcoxon Signed Rank Test being at 0.00 smaller than 0.05.

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