Dental and Oral Health Promotion Video Media on the Knowledge of Prolanis Patients

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A R T I C L E   I N F O

A B S T R A C T

Dental and oral health is a top priority for everyone, including prolanis patients. Prolanis is a proactive and integrated chronic disease management program involving participants, health facilities, especially community health centers and BPJS Health, aimed at encouraging chronic disease patients to achieve optimal quality of life services, one of which is dental and oral health. Education about dental and oral health needs to be provided to prolanis patients. This education needs to use media so that targets can more quickly understand the education provided, such as video and non-video media (flipcharts). The aim of this research is to analyze changes in knowledge before and after being given counseling using video media to prolanis patients, in the work area of the Mangkubumi Health Center, Tasikmalaya City in 2023. This research method uses a quantitative approach with a Quasi-Experimental research type with a Two Group Pretest and Posttest Design. Based on the results of statistical knowledge tests in the experimental group and control group, it was found that there was no significant difference between the results of dental and oral health knowledge before and after being given intervention using video and non-video with a significance value of 0.910, meaning p > 0.05. The results of the Mann-Whitney statistical test showed that the knowledge of the experimental group was an average of 20.30 and the control group had an average of 20.70. p=value of 0.910 is greater than the significance level of p > 0.05. This means that there is no significant difference between the results of dental and oral health knowledge using video and non-video. In conclusion, it was found that flipcharts were more effective than videos in increasing dental and oral health knowledge in Prolanis with a difference of 0.5 more effective in increasing flipchart media.

INTRODUCTION

Dental and oral health is an inseparable part of general health. Poor oral and dental health will have a negative impact on growth and development, limit activity, work productivity, reduce a person's quality of life and well-being (World Health Organization, 2013). Dental and oral health is often not a top priority for some people. In fact, teeth and mouth are the gateway for germs and bacteria to enter and can disrupt the health of other body organs (Hamidah et al., 2021).

According to the results of Basic Health Research in 2018, dental and oral health problems doubled compared to 2013, from 25.9% to 57.6% (Batara & Hamzah, 2021). As many as 20 provinces have a higher incidence of dental and oral diseases than the national figure. The results of the 2018 Basic Health Research in West Java Province show a high level of dental and oral health problems, slightly exceeding the national figure of 58%(Afifah, 2022). One way to reduce the number of diseases related to dental and oral health problems is to make preventive efforts by improving health from an early age. One way to improve health is by providing knowledge about maintaining dental and oral health (Nurlila, 2015).

Increasing knowledge can be achieved by promoting dental and oral health through the media (Notoatmodjo, 2012). Until now, socialization still uses printed media such as brochures, pamphlets, flipcharts, but as time goes by, people start to get bored with this material and start looking for other, more interesting ways (Riskesdas, 2018). This is because more and more human resources and tools are available to create and develop tools that can help humans in aspects of their lives in daily activities. (Aprilia et al.,

2020). Therefore, digital media is a solution that can help achieve health promotion goals (Kristianto et al., 2018).

Increasing knowledge can be done by conducting counseling, where extension activities are a two-way communication process between the communicator (extension) and the communicant in an interaction (Rofiki & Famuji, 2020). The dental and oral health education carried out is a learning process aimed at the community so that the level of dental and oral health can be maximally improved. Choosing the right method in the process of delivering counseling material really helps achieve efforts to increase knowledge and change target behavior. The use of video as an outreach medium is very effective in conveying messages to targets so that they are easier to understand and understand (Notoatmodjo, 2012). Specific Research Objective: to analyze changes in knowledge before and after being given counseling using video media to prolanis patients, in the working area of the Mangkubumi Health Center, Tasikmalaya City in 2023. Urgency of the research: this research is important to carry out considering that there is not much exposure to knowledge about dental and oral health in prolanis patients , in the working area of the Mangkubumi Health Center, Tasikmalaya City, and due to increasingly sophisticated technology in increasing health literacy, especially dental and oral health, it is hoped that dental health promotion using videos can increase the knowledge and attitudes of prolanis patients and can increase motivation to maintain healthy dental and oral.

METHOD

The type of research carried out was quasi-experimental research with a two group pre test and post test design, namely measurements before and after intervention with 2 different groups. The first intervention was given counseling using video media and the second intervention was given counseling using print media, namely flipcharts. Research data collection was carried out on September 6 2023 on Prolanis patients in the Mangkubumi Community Health Center working area, Tasikmalaya City. The sampling technique used the purposive sampling method, this study was 40 respondents.

The instruments used in data collection were video media made by researchers and questionnaires to measure knowledge. Data analysis used the nonparametric statistical test or the Wilcoxon test and Mann-Whitney.

RESULT

Table 1. Distribution of Intervention Gender Categories in Prolanis Patients

Gender	N	%
Man	9	45
Woman	11	55
Total	20	100

Based on the results from table 1, the distribution of experimental gender categories in prolanis patients showed that there were 9 male respondents with an average of 45 and 11 female respondents with an average of 55%.

Table 2. Distribution of Control Gender Categories in Prolanis Patients

Gender	N	%
Man	8	40
Woman	12	60
Total	20	100

Based on the results from table 2, the distribution of control gender categories in prolanis patients showed that there were 8 male respondents with an average of 40% and 12 female respondents with an average of 60%.

Table 3. Distribution of Intervention Age Categories in Prolanis Patients

Age	N	%
Pre Elderly	9	45
Elderly	6	30
High Risk Elderly	5	25
Total	20	100

Based on the results from table 3, the distribution of experimental age categories in prolanis patients showed that Pre-Elderly respondents were 9 people with an average of 45%, Elderly respondents were 6 people with an average of 30% and high risk elderly respondents were 5 people with average 25%.

Table 4. Distribution of Control Age Categories in Prolanis Patients

Age	N	%
Pre Elderly	13	65
Elderly	3	15
High Risk Elderly	4	20
Total	20	100

Based on the results from table 4, the distribution of control age categories in prolanis patients showed that Pre-Elderly respondents were 13 people with an average of 65%, Elderly respondents were 3 people with an average of 15% and high risk elderly respondents were 4 people with average 20%.

Table 5. Frequency Distribution of Dental and Oral Health Knowledge in Prolanis Patients Before and After Intervention in the Intervention Group

Category	Knowledge			
	Before	%	After	%
Good	10	50	16	80
Moderate	10	50	4	20
Enough	0	0	0	0
Total	20	100	20	100

Based on the results from table 5, the frequency distribution of knowledge of dental and oral health experiments in prolanis patients before the intervention showed that there were the same number of respondents, namely 10 people in the good category with an average of 50% and 10 people in the moderate category with an average of 50%. There was an increase in experimental knowledge after being given the intervention, there were 16 people in the good category with an average of 80% and 4 people in the medium category with an average of 20%.

Table 6. Frequency Distribution of Dental and Oral Health Knowledge in Prolanis Patients Before and After Intervention in the Control Group

Category	Knowledge			
	Before	%	After	%
Good	9	45	16	80
Moderate	11	55	4	20
Enough	0	0	0	0
Total	20	100	20	100

Based on the results from table 6, the frequency distribution of knowledge of dental and oral health control in prolanis patients before the intervention showed that there were 9 respondents in the good category with an average of 45% and 11 people in the moderate category with an average of 55%. There was an increase in knowledge of control after being given the intervention, with 16 people in the good category with an average of 80% and 4 people in the medium category with an average of 20%.

Table 7. Wilcoxon Statistical Test Results for Dental and Oral Health Knowledge in the Intervention Group of Prolanis Patients

Experimental Knowledge Posttest- Experimental Knowledge Pretest	N	Mean Rank	p-value
Negative Rank	0[a]	0.00	0.014
Positive Rank	6[b]	3.50	
Ties	14[c]		
Total	20		

Based on table 7, the knowledge results in the experimental group showed that there were 6 people who experienced an increase in knowledge before and after being given intervention using video media with an average of 3.5. However, there are similarities in scores before and after being given knowledge using video media with 14 people. Meanwhile, based on the results of statistical tests, it is known that the significance value is 0.014, meaning that because 0.014 is smaller than 0.05, there is a difference in the results of dental and oral health knowledge before and after being given intervention using video media.

Table 8. Wilcoxon Statistical Test Results for Dental and Oral Health Knowledge in the Control Group of Prolanis Patients

Experimental Knowledge Posttest- Experimental Knowledge Pretest	N	Mean Rank	p-value
Negative Rank	0[a]	0.00	0.008
Positive Rank	7[b]	4.00	
Ties	13[c]		
Total	20		

Based on table 8, the knowledge results in the control group showed that there were 7 people who experienced an increase in knowledge before and after being given intervention using video media with an average of 4.00. However, there are similarities in scores before and after being given knowledge using video media for 13 people. Meanwhile, based on the results of statistical tests, it is known that the significance value is 0.08, meaning that because 0.08 is greater than 0.05, there is no difference in the results of dental and oral health knowledge before and after being given intervention using video media.

Table 10. Mann-Whitney Test Results for Dental and Oral Health Knowledge in Prolanis Patients

Knowledge	N	Mean	p-value
Intervention Group	20	20.30	0.910
Control Group	20	20.70	
Total	40		

Based on the results of the Mann-Whitney Knowledge test for the experimental group, it was found that the mean was 20.30 and the control group had a mean of 20.70. p=value of 0.910 is greater than the significance level of 0.05. This means that H0 is accepted, meaning there is no significant difference between the results of dental and oral health knowledge using video and non-video.

DISCUSSION

Prolanis is an integrated proactive health service system that involves participants, Health Facilities and BPJS Health in the context of maintaining health for BPJS Health participants who suffer from chronic diseases including type 2 diabetes to achieve optimal quality of life (Wicaksono & Fajriyah, 2018). In addition to improving patients' quality of life, these programs should also reduce the risk of complications and allow for cost-effective and rational use. Prolanis includes activities from 6 activities, namely health consultations, education, door to door SMS, home visits, group activities and health status monitoring (Raraswati et al., 2018). According to the World Health Organization (WHO), elderly people are individuals who have reached the age of 60 years or the equivalent of retirement (Dwi et al., 2017).

According to Tandra (2018), knowledge is a factor that shapes human behavior. The narrower meaning of knowledge is something that only humans can possess (Darsini et al., 2019). Based on the results of research conducted using quasi-experiments regarding the influence of prolanis behavior on knowledge of dental and oral health by providing education using video media, results showed a significant increase in the level of knowledge of dental and oral health.

The results obtained before the intervention of knowledge about dental and oral health were a total of good (47.5%), moderate (52.5%), poor (0.00%). This means that the highest level of knowledge of Prolanis regarding dental and oral health is moderate. Meanwhile, after the intervention, knowledge of dental and oral health using videos was good (80%), moderate (20%), poor (0.00%). This means that target knowledge has increased from initially being average to good.

Based on the research results of the prolanis targets who were given education about dental and oral health, 2 samples were obtained, namely control and experimental. The experimental group was the group that was given video education, while the control group was the group that was given education using non-video media, namely flipcharts. If we look at the gender frequency distribution of prolanis patients, there are more women in both the experimental group and the control group. This shows that female Prolanis patients participate more in providing education using videos or flipcharts than men.

According to information from the Ministry of Health, elderly people are people aged 45-59 years, elderly people are 60-69 years old, while high-risk elderly people are people aged more than 69 years (Evilistianingsih et al., 2021). Meanwhile, if we look at the age distribution categories in Prolanis, the results are higher for pre-elderly people compared to the elderly and high-risk elderly. The results in the experimental group were 45%, while in the control group it was 65%, this shows that the elderly have more motivation to maintain oral health and actively participate in dental and oral health education using video and non-video.

This research is in line with research conducted by Wahyuni et al., (2016) in the journal Public Health Sciences with the title "Analysis of Elderly Participation in Elderly Health Development Activities in the Sekar Jaya Health Center Working Area, Ogan Komering Ulu Regency" In this study, the frequency of age groups respondents aged 45-59 years (pre-elderly) was higher than the elderly group (> 60 years), namely 57.3% (55 respondents). 64 people (66.7%) of respondents were female.

The first analysis of results carried out was using the Wilcoxon method, which is a method used to determine the differences between the results before the intervention and after the intervention. Based on the table, the results of dental and oral health knowledge in the experimental group of prolanis patients showed that there were 6 people who experienced an increase in knowledge before and after being given intervention using video media with an average of 3.5. There were similarities in scores before and after being given knowledge using video media for 14 people. Meanwhile, based on the results of statistical tests, it is known that the significance value is 0.014, meaning that there is a difference in the results of dental and oral health knowledge before and after being given intervention using video media because p < 0.05.

Meanwhile, for the control group, the results showed that 7 people experienced an increase in knowledge before and after being given intervention using video media with an average of 4.00. There were similarities in scores before and after being given knowledge using video media for 13 people. Meanwhile, based on the results of statistical tests, it is known that the significance value is 0.08, meaning p > 0.05, so there is no difference in the results of dental and oral health knowledge before and after being given intervention using video media.

The second stage of analysis uses the Mann Whitney statistical test, namely to test the extent of the influence of video and non-video media on knowledge. Based on the results of the Mann Whitney statistical test for the knowledge of the experimental group, it was found that the average was 20.30 and the control group had an average of 20.70. The asymp.sig (2-tailed) value of 0.9 is greater than the significance level of $p > 0.05$. This means that there is no significant difference between the results of dental and oral health knowledge using video and non-video.

Based on the results of the Wilcoxon and Mann Whitney statistical tests, it was found that the use of flipchart media in the control group was more effective than the use of video media in the experimental group in increasing dental and oral health knowledge in prolanis patients with a difference of 0.5 more effective in increasing flipchart media.

This research is not in line with research conducted by Munadirah, (2017) in the dental health media journal with the results obtained that the use of video media was more effective than the use of flipchart media in increasing children's dental and oral health knowledge with a difference of 0.23 more effective in increasing video media.

This research is in line with research conducted by Ramadhan, (2022) with the title The Effect of Health Education with the Help of Video Media on the Practice of Controlling Blood Sugar Levels in Diabetes Mellitus Patients at the Cibereum Health Center, Tasikmalaya City with the results of statistical tests, there is no effect of health education with the help of video media on the practice of controlling blood sugar levels in terms of physical activity with a value of $p = 0.063$ ($p > 0.05$). It is hoped that people will always watch videos so they can lower blood sugar levels by controlling blood sugar levels in terms of physical activity.

This research is in line with research conducted by Imamah et al., (2023) in the Journal of Public Health Profession with the title "The Influence of Animation Media on Students' Knowledge of Dental and Oral Hygiene in State Elementary Schools" there is no influence of video media on knowledge of dental and oral health in Getas 03 State Elementary School students, possibly because the students have never seen or listened to it. education about teeth and mouth in the media, both electronic and print.

This research is in line with research conducted by Yuanta et al., (2023), in the Nurses Journal with the title "The Influence of Flipchart Media on the Level of Knowledge and Diet in Hypertension Patients at the Kaliwates Health Center, Jember Regency". The results obtained showed that there was an influence between flipchart media on the level of knowledge of respondents.

CONCLUSION

Conclusions that can be drawn from research conducted in Mangkubumi, Tasikmalaya City in 2023, include:
1. Based on the frequency distribution table of experimental and control knowledge before and after being given the intervention, the results both increased with an average increase of 80% with good criteria.
2. Based on the results of the Wilcoxon test, it was found that the use of flipchart media was more effective than the use of video media in increasing dental and oral health knowledge in prolanis patients with a difference of 0.5 more effective in increasing flipchart media.
3. Based on the results of the Mann Whitney test, it was found that the use of flipchart media was more effective than the use of video media in increasing dental and oral health knowledge in prolanis patients with a difference of 0.40 being more effective in increasing flipchart media.

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