

# Analysis Of The Effect Of Health Promotion With Poster Media About Tooth Loos On Importsnt Knowledge Of Using Dentures In People Aged 40-60 Years In Sumurgung Village, Tuban

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## ABSTRACT

Changes that occur due to tooth loss have an impact on a decrease in masticatory efficiency which indirectly affects a person's general health. Loss of teeth can also have an emotional and functional impact and can affect aesthetics. Another consequence is that it can affect the appearance and emotions of most people. Treatment with the use of dentures as a replacement for areas that have lost teeth is very important, but not everyone who has lost teeth uses dentures. This study is a quantitative study using a quasi-experimental design with a pre-test post-test control group. implemented as a measure of intervention. The subject of this research is the Sumurgung village community with 30 respondents, the data analysis uses the Wilcoxon test and the Mann Whitney test. The results of the analysis obtained a significant difference from the test results between the experimental group and the control group against the Sumurgung Tuban village community group regarding tooth loss on the importance of using cellphones at the age of 40-60 years which in the group p value  $0.002 < (0.05)$  and dirty group with p value  $0.257 > (0.05)$ . And the statistic of Mann test-significance p  $0.000 < 0.05$ . This shows that there is a significant difference between the intervention group and the control group. The difference between the control group and the intervention group has an important meaning, namely the promotion of dental health using the Effective Poster media to increase knowledge about the importance of using early 40-60 year olds in Sumurgung Village, Tuban.

**Keywords:** Knowledge, Media Poster, Tooth Loss

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## INTRODUCTION

Health is a state of complete physical, mental and social well-being and not only being free from disease and disability, but also socially and economically productive (Soekidjo Notoatmodjo, 2005). According to the Ministry of Health of the Republic of Indonesia (Depkes), in order to realize optimal health status for the community, health efforts are carried out with approaches to maintenance, health improvement (promotive), disease prevention (preventive), disease healing (curative), and health recovery (rehabilitative) which carried out in a comprehensive, integrated, and sustainable manner (Ministry of Health, 1992:5)

Data from the WHO in 2012 on oral health showed that 30% of the world's population at the age of 65-74 years experienced the loss of all teeth. The percentage of tooth loss in Indonesia at the age of 35-44 years is 0.4%, increasing at the age of 45 years and over, which is 17.6%. (Ministry of Health, 1992:5)

According to the 2013 Basic Health Research, the national prevalence of dental and oral problems is 25.9%. There were 31.1% who received care and treatment from dental medical personnel, such as dental nurses, dentists or dental specialists, while the other 68.9%

did not receive treatment.

In adulthood, teeth can experience various problems, one of which is tooth loss and tooth loss. Moreover, in adulthood, lost teeth cannot grow back.

In the age range of 35-44 years, as many as 17.5% of Indonesians experience tooth loss, while in the age range of 45-54 as many as 23.6% of Indonesians lose their teeth because they are dated and extracted. In the age range of 55-64 as many as 29.0% of Indonesian people experience tooth loss or have their teeth removed. From these results, it can be seen that, the older a person is, the higher the number of teeth lost because they fall out and are extracted (Riskesdas, 2018).

Of course this is a big problem, because teeth are an important part of the digestive process. Changes that occur due to tooth loss have an impact on reducing the efficiency of mastication which indirectly affects a person's general health (Micni J, 2011). Loss of teeth can also have emotional and functional impacts and can affect aesthetics. Another consequence is that it can affect the discomfort and emotions of most people (Jubhari, 2007). As early as possible, there are still many cases of tooth loss. Treatment with the use of dentures as a substitute for areas that have lost teeth is very important, but not everyone who has lost teeth wears dentures.

In overcoming this problem, the use of dentures or dentures is one of the right ways. Teeth that have fallen out, especially at an advanced age, it is better to take action by replacing the teeth that have fallen out with dentures or dentures. The use of dentures or dentures in Indonesia is still relatively small, namely as much as 1.4% in Indonesia and in North Sumatra (Riskesdas, 2018).

Of course this percentage is still relatively small compared to people who experience tooth loss or even the small prevalence of denture users is influenced by several factors, such as the high cost of making dentures, the length of time it takes to make dentures, the lack of public knowledge about the benefits of using dentures, as well as individual perceptions of dental health status (Hermina, 2013).

Age and educational background greatly affect the quality of one's knowledge, which is one of the characteristics of physical maturity and psychological maturity related to giving responses to objects around them. The more mature age will be better in conveying responses or responses obtained both through education and experience. In terms of wearing dentures or dentures, one study showed that older people felt that dentures were more necessary than younger people. Knowledge is closely related to education, where it is hoped that someone with higher education will have a wider knowledge. However, this statement is not always a guarantee that people with college graduates have better knowledge than those who are not college graduates, one of which is knowledge about dental and oral health. Someone with low education is not absolutely knowledgeable. Increased knowledge is not only obtained through formal education, but can also be obtained from non-formal education. Lack of education about the importance of oral health, is important for oral health.

Based on the results of a survey conducted by researchers in people aged 40-60 years, people aged 40-60 years in Sumurgung Tuban Village found 6 out of 10 people using dentures. In these conditions, on average, those who do not want to use dentures because they feel that dentures are very annoying, expensive and think that dentures are only a beauty enhancer and some think that missing teeth do not need to be replaced with dentures.

Based on these results motivated researchers to conduct research by analyzing the effect of health promotion using poster media about tooth loss on the knowledge of the importance of using dentures in people aged 40-60 in Sumurgung Village, Tuban.

## METHODS

The type of research used in this study was quantitative research using a quasi-experimental design with a whit control group pre-test post-test, the post-test was carried out as a measure and intervention. Those given on the same day were given a pre-test. The effectiveness of the treatment is done by comparing the results of the pre-test post-test values.

The sample is the object under study and is considered to represent the entire population. The samples in this study were the people of Sumurgung Tuban Village aged 40-60 years as many as 30 people where the sample was divided into 2 groups, namely 15 respondents in the experimental group and 15 respondents in the control group.

Researchers came to prospective respondents. The researcher then introduced himself and explained the research objectives to prospective respondents and explained to the research that this did not pose a risk to the individuals who were respondents. Confidentiality of records regarding respondent data is maintained by not writing the respondent's name on the questionnaire, and the data obtained from the respondent will only be used for research purposes.

After giving an explanation, the researcher asked the community's willingness to become respondents. If the respondent agrees, then they can sign an informed consent letter containing the consent to be the research sample. Do a pre-test before health promotion is carried out. Providing health promotion with media posters. Make observations by measuring knowledge before and after being given health education. Observation results of pre-test and post-test knowledge are recorded on the observation sheet and stored to be processed in SPSS form and analyzed. After all the data has been collected and researched, it is completed. Furthermore, the researchers reported back to the field of research and development to get information that they had finished conducting research from Sumurgung Tuban Village.

## RESULTS

**Table 4.1 Frequency Distribution of Respondents by Age in the intervention group data**

Age	N	%
40-45	<b>10</b>	<b>80.2</b>
46-60	<b>5</b>	<b>19.8</b>
Total	<b>15</b>	<b>100</b>

The results of the study regarding the analysis of the influence of dental health promotion using poster media about tooth loss on the importance of using dentures in people aged 40-60 years in Sumurgung Tuban village which were obtained by filling out this questionnaire were carried out on September 2, 2022. During the implementation of this health promotion 30 people from the community have been collected and divided into 2 groups, namely 15 people (intervention group) and 15 people (control group). Presentation of research data includes respondents aged 40-60 years, both men and women.

**Table 4.2 Frequency Distribution of Respondents by Age in the control group data**

Age	N	%
40-45	<b>4</b>	<b>17.8</b>
46-60	<b>11</b>	<b>82.2</b>
Total	<b>15</b>	<b>100</b>

Based on tables 4.1 and 4.2 above, it can be seen that the majority of respondents in the intervention group were aged 40-45 with 10 people (80.2%) while the majority of respondents in the control group were aged 46-60 with 11 people (82.2%) .

**Table 4.3 Frequency Distribution of Respondents based on gender**

Gender	N	%
Male	14	44.7
Female	16	55.3
Total	30	100

Based on table 4.3, it can be seen that there were 16 female respondents (55.3%).

**Table 4.4 Frequency Distribution of Respondents by Education**

Education	N	%
Low	<b>9</b>	<b>30.3</b>
Medium	<b>17</b>	<b>58.5</b>
High	<b>4</b>	<b>11.2</b>
Total	<b>30</b>	<b>100</b>

Based on table 4.4, it can be seen that the education of the most respondents, namely 17 people (58.5), is in secondary education. Bivariate analysis was used to analyze the relationship between the knowledge of the Sumurgung Tuban village community before and after health promotion.

**Table 4.5 Statistical results of knowledge frequency in the intervention group**

No	Knowledge	Not Enough	Enough	Good	<i>P Value</i>	
		F	%	F	%	
1	<i>Pre-Test</i>	15	100	0	0	0.002
2	<i>Post-Tes</i>	0	0	2	13.4	
	Total	15	100	2	13.4	

Based on the table above, it is known that the overall pre-test knowledge of the respondents was lacking (100%) as many as 15 respondents, after being given health promotion using poster media and carrying out the post-test there was an increase in the knowledge of respondents who had sufficient knowledge (13.4%) as many as 2 respondents and respondents who have good knowledge become (86.7%) as many as 13 respondents.

**Table 4.6 Statistical results of knowledge frequency in the control group**

No	Knowledge	Not Enough	Enough	Good	<i>P Value</i>	
		F	%	F	%	
1	<i>Pre-Test</i>	15	100	0	0	0,257
2	<i>Post-Tes</i>	14	73,4	1	6.7	
	Total	29	193,4	1	6,7	

Based on table 4.6, it is known that the pre-test knowledge of all respondents had less knowledge (100%) as many as 15 respondents, and the post-test was carried out to increase the knowledge of respondents who had sufficient knowledge (6.7%) as many as 1 respondent.

**Table 4.7 Statistical results of differences in knowledge in the intervention group and the control group**

No	Treatment	N	Mean Rank	Sum of Rank	Mann - Whitney	<i>P Value</i>
1	<i>Intervention Group</i>	15	18.50	222.00		
2	<i>Control Group</i>	15	6.50	78.00	0,000	0.000
	Total	30				

Based on table 4.7 above, it can be seen that the results of the statistical analysis of the Mann-Whittney-test in the intervention and control groups showed a significance value of  $p = 0.000 < 0.05$ . This shows that there is a significant difference between the intervention and control groups in the knowledge of the Sumurgung Tuban village community regarding the importance of using dentures using poster media as a tool to increase knowledge in the Sumurgung Tuban village community.

## CONCLUSION

From the results of research that has been conducted by researchers, it can be concluded that:

1. The results of this study prove that there is an increase in knowledge before and after the provision of health education using poster media.
2. The characteristics of the respondents in this study were people aged 40-60 years with sex characteristics of 14 men (44.75%) and 16 women (55.3%) and the educational characteristics of the most respondents were 17 people (58.5%) are in secondary education (SMA/STM)
3. There was a significant difference between the control group and the intervention group, which means health promotion using Effective Poster media to increase knowledge about the importance of using dentures in people aged 40-60 years in Sumurgung Tuban Village.

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