

<p><b>Research Report</b></p>
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## The relationship between patient's dental and oral health attitude towards patient's obedience during multivisit treatment

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### ABSTRACT

**Background:** Caries is the world's number one chronic disease and the prevalence increases in modern times. However, most people ignore it and choose dental care when it feels pain only. It will worsen the condition of the tooth until require multivisit treatments. The number of visits required for multivisit treatments results incomplete treatment due to patient's non-obedience. One of the factors that affect obedience is attitude. One's attitude towards something will determine someone's behavior towards the same thing. **Purpose:** To determine the relationship between patient's dental and oral health attitude towards patient's obedience during multivisit treatment. **Methods:** Analytical observational study with cross-sectional study conducted on 30 patients who came to RSGMP UPF Conservative Dentistry FKG UNAIR Surabaya period September-November 2011. The data about the attitude was obtained from questionnaire, while collecting cards of patient's status and direct interviews of the operators conducted to obtain data about patient's obedience. **Results:** Based on the results of Spearman Correlation with  $\alpha=0,05$  obtained  $p\text{-value}=0,364$  ( $p>0,05$ ). It suggests that there was no significant relationship between patient's dental and oral health attitude towards patient's obedience during multivisit treatment. In addition, test results of the relationship between unexamined variables with obedience obtained  $p\text{-value}=0,010$  (motivation),  $p=0,017$  (desire),  $p=0,004$  (perception), and  $p=0,009$  (financing). This suggests that there was a significant relationship between motivation, desires, perceptions, and financing with obedience. **Conclusion:** There is no relationship between patient's dental and oral health attitude towards patient's obedience during multivisit treatment. However, other factors found associated, namely motivation, desires, perceptions, and financing.

**Keywords:** attitude; obedience; multivisit treatment

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### INTRODUCTION

Dental and oral health is a part of the health of the body that cannot be separated from one another because oral health can affect one's overall body health. One way that can be performed to maintain one's physical health is to maintain the cleanliness and health of the oral cavity<sup>1</sup>. The results of the Household Health Survey or SKRT (2001) showed that only 9.3% of the population brushed their teeth according to their recommendations, such as the morning after breakfast and night before going to sleep<sup>2</sup>. This shows the lack of knowledge and attitudes (concern) a person towards oral health. Therefore, there are still many Indonesian people who have dental caries. According to the latest data released by the Ministry of Health of the Republic of Indonesia from Riskedas in 2007, it showed that 72.1% of Indonesia's population had cavities experience and 46.5% of them were active caries that had not been treated<sup>3,4</sup>

Caries is the number one chronic disease in the world and its prevalence is increasing in modern times.<sup>3</sup> In a survey conducted by the National Health Survey in 2001 showed that Dental and Mouth Disease was ranked first, which was 59.9%, while dental caries (cavities) ) is the Dental and Oral Disease with the greatest prevalence, but most people ignore their overall oral health and choose to take care of their teeth only when they feel sick<sup>4</sup>. For some people, dental care is considered unnecessary and not very important because it is far from the risk of losing lives and wasting time. This will aggravate the condition of the tooth so that it requires repeated treatment<sup>5</sup>. Repeated treatment really requires patient compliance. The number of visits required for repeated treatment results in incomplete treatment due to patient's own non-compliance<sup>6,7</sup>

The emergence of dental and oral health problems in the community, such as patient disobedience in undergoing treatment and the prevalence of dental caries in Indonesia

which is still relatively high, according to Notoatmodjo cit Fankari (2007) and Dhendi (2009), one of them due to the patient's own attitude factor<sup>8,9</sup>. Most people have an attitude to ignore the cleanliness and health of their teeth and mouth. One of the factors that influence compliance is attitude. Attitude plays an important role in influencing a person's dental and oral health status because a person's attitude towards something will determine the person's behavior towards the same thing<sup>2,8</sup>. Based on the background of the problems mentioned above, study problems can be formulated namely whether there is a relationship between health attitudes teeth and mouth sufferers from adherence in undergoing repeated treatments. This study aims to determine the relationship of dental and oral health attitudes of patients with adherence in undergoing repeated treatments.

## MATERIALS AND METHODS

The tools and materials used in this study were questionnaire papers containing statements to determine the level of patient attitudes, patient status cards, stationery, and computers / notebooks. This study was an observational analytic study with a cross-sectional study design, sampling technique using random sampling, and a total sample of 30 patients who came to the Dental and Oral Hospital of UPF Dental Conservation Faculty of Dentistry, Universitas Airlangga, Surabaya in the September-period November 2011 with sample criteria: undergoing repeated treatment (multivisit), willing to be a research sample and fill out a questionnaire, and aged 12-50 years.

The initial stage made statements - to be used as a questionnaire based on a predetermined operational definition with a choice of answers strongly agree (SS), agree (S), disagree (TS), and strongly disagree (STS), then do trial. The trial was conducted to test the validity of the questionnaire that had been made.

Trial and data collection was conducted with a visit to the Dental and Oral Hospital of UPF Dental Conservation Faculty of Dentistry, Universitas Airlangga, Surabaya. Data collection for attitude measurement was performed by giving and filling out questionnaires by sufferers as respondents. Data retrieval to measure and determine the level of patient compliance can be determined from the patient status card data and direct interviews with operators who treat patients. All results in the questionnaire from the respondents were collected and corrected, then an assessment and calculation of the score of the answers that have been filled by the patient in the existing questionnaire in accordance with the provisions that have been made, also assessed and calculated scores from the results of the patient status card data and direct interviews with operator who treats sufferers.

Attitude measurement was measured by giving a score on the answer to the questionnaire that has been filled out by the respondent. Scoring of the statement depends on whether the statement is favorable or unfavorable. If the statement

was favorable (preferred) then the scoring is: SS = 4; S = 3; TS = 2; STS = 1. If the statement was unfavorable, then the scoring was: SS = 1; S = 2; TS = 3; STS = 4. Standard assessment to determine the level of attitude: Positive if the total value of the questionnaire = 121-160, Less if the total value of the questionnaire = 81-120, and Negative if the total value of the questionnaire = 40-180.

Measurement of adherence was performed by assessing the timeliness and number of arrivals of patients undergoing treatment, the suitability of the stages of care with the treatment plan, and the patient co-operative level, then given an assessment: Non-compliance = 0 and Compliance = 1 for the four indicators. To determine the level of compliance, the values obtained were summed up and given the following categories: Compliant if total value = 4, Less compliant if total value = 1-3, and Non-compliant if total value = 0.

The next step was testing the validity and reliability of the questionnaire against the results of the trial using the Reliability Analysis statistical test. From this trial, we can determine the minimum number of samples for this study in accordance with predetermined sample criteria which were 23 people and valid and reliable statements to be used in the questionnaire which were as many as 40 questions. After that the results of the assessment of patient attitudes and the results of the assessment of patient compliance were compared and data analysis was performed, namely the correlation test / relationship using the Spearman Correlation statistical test to determine the relationship between the two variables and the different test using the Pearson Chi-Square statistical test to find out the differences between both variables.

## RESULTS

Based on the results of the study obtained a general description of respondents as shown in Table 1. The number of samples studied obtained distribution of respondents by age, level of education, and income per month were summarized in the Table 1.

In addition to data on the respondent's age, education level, and monthly income, respondents also obtained distribution of respondents based on arrival motivation, desires, perceptions, care funding, and whether there was a kinship between the patient and the operator summarized in Table 2 or not.

Besides that, a description of patient attitudes was also shown in Table 3 and a description of patient compliance as shown in Table 4. The results of the questionnaire validity and reliability test can be seen in Table 5.

From the table of patient attitudes and adherence data then the mean and standard deviation were calculated whose results are shown in Table 6. According to the description of patient attitudes and compliance levels obtained respondents distribution based on the attitude and adherence of patients in undergoing repeated treatments on Table 7.

It can be seen that as many as 40% of respondents with a positive attitude level were in fact compliant in undergoing

**Table 1.** Distribution of respondents by age, level of education, and monthly income at UPG RSGMP Dental Conservation Faculty of Dental Medicine UNAIR Surabaya for the September-November 2011 period

	Age			Educational level		Income (per month)		
	12-25 years old	26-38 years old	39-50 years old	≤ jhs	> jhs	≤ 1 million	1 - 3 million	> 3 million
Number of respondent	19	5	6	5	25	20	8	2
Percentage (%)	63.33	16.67	20	16.67	83.33	66.67	26.67	6.66

**Table 2.** Distribution of respondents based on patient motivation, patient wishes, patient perceptions, care funding, and the presence or absence of kinship between the patient and the operator at UPG Dental Conservation Center Faculty of Dental Medicine UNAIR Surabaya period September-November 2011

		Number of respondent	Percentage (%)
Patients' motivation	by their selves	9	30
	operator invitation	21	70
Patients' willingness	treatment to relieve pain	18	60
	totally treatment till getting better	12	40
Patients' perception	sick and need treatment	22	73.33
	sick but do not necessary to get treatment	6	20
	nothing complaint	2	6.67
Treatment cost	by their selves	8	26.67
	50 : 50	7	23.33
	operator paid	15	50
Relationship	yes	9	30
	no	21	70

**Table 3.** Distribution of respondents based on the level of dental and oral health attitudes in UPG RSGMP Dental Conservation FKG UNAIR Surabaya in the September-November 2011 period.

Patients' attitude	Total (n)	Percentage (%)
Positive (121 – 160)	19	63.33
Less (81 – 120)	11	36.67
Negative (40 – 80)	0	0
Total	30	100

**Table 4.** Distribution of respondents based on obedience level in UPG RSGMP Dental Conservation FKG UNAIR Surabaya in the September-November 2011 period.

Patients' obedience	Total (n)	Percentage (%)
Obey (4)	20	66.67
Less (1–3)	10	33.33
Do not obey (0)	0	0
Total	30	100

**Table 6.** Mean and standard deviations of patient attitudes and adherence variables.

		Attitude	Obedience
N	Valid	30	30
	Missing	0	0
Mean		126.9000	3.5667
Std. Deviation		15.18472	.67891

**Table 7.** Distribution of respondents based on the level of attitude and obedience in UPG RSGMP Dental Conservation FKG UNAIR Surabaya in the September-November 2011 period.

Obedience Attitude	Obey		Less		Do not obey	
	n	%	n	%	n	%
Positive	12	40	7	23.33	0	0
Less	8	26.67	3	10	0	0
Negative	0	0	0	0	0	0

**Table 8.** Result of Statistical Analysis *Spearman Correlation*.

		Attitude	Obedience
Attitude	Correlation coefficient	1.000	-.172
	Sig. (2-tailed)	.	.364
	N	30	30
Obedience	Correlation coefficient	-.172	1.000
	Sig. (2-tailed)	.364	.
	N	30	30

**Table 5.** Result of validity and reliability using *Reliability Analysis*.

<b>Item-total statistics</b>				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
no_1	123.9000	218.714	.515	.941
no_2	123.8333	218.626	.521	.941
no_3	123.7333	220.133	.394	.942
no_4	124.2667	217.306	.563	.941
no_5	123.7667	222.323	.465	.941
no_6	123.6000	218.179	.534	.941
no_7	123.8000	220.717	.386	.942
no_8	123.2000	224.166	.444	.941
no_9	123.6333	219.275	.528	.941
no_10	123.7333	221.306	.459	.941
no_11	123.4667	221.430	.398	.942
no_12	123.8333	219.799	.547	.941
no_13	123.2333	222.530	.546	.941
no_14	124.1000	218.093	.375	.943
no_15	124.0333	213.137	.701	.939
no_16	123.9333	212.892	.684	.939
no_17	123.3333	222.644	.449	.941
no_18	123.7667	217.151	.599	.940
no_19	123.9667	212.447	.626	.940
no_20	124.0000	208.966	.746	.939
no_21	123.8333	223.937	.478	.941
no_22	123.9667	217.757	.497	.941
no_23	123.4000	220.869	.625	.940
no_24	123.7000	220.700	.478	.941
no_25	123.3000	223.114	.485	.941
no_26	123.7000	223.734	.397	.942
no_27	123.4000	222.317	.528	.941
no_28	123.8333	211.454	.664	.940
no_29	123.4667	222.740	.504	.941
no_30	123.6667	219.333	.649	.940
no_31	123.4667	221.499	.588	.941
no_32	123.6667	222.920	.582	.941
no_33	124.1667	221.247	.430	.942
no_34	123.7000	218.631	.715	.940
no_35	123.5000	217.569	.688	.940
no_36	123.8000	222.579	.421	.942
no_37	123.8333	224.764	.416	.942
no_38	123.9000	219.059	.583	.940
no_39	124.0000	218.828	.534	.941
no_40	123.6667	217.747	.617	.940

**Reliability statistics**

Cronbach's Alpha	N of Items
.942	40

**Table 9.** Results of Spearman Correlation statistical analysis for uncontrolled variables

Variable 1	Variable 2	p	p < 0.05	Notes
Education	Obedience	0.177	p > 0.05	No significant relationship
Motivation	Obedience	0.010	p < 0.05	Significant relationship
Desire	Obedience	0.017	p < 0.05	Significant relationship
Perception	Obedience	0.004	p < 0.05	Significant relationship
Cost	Obedience	0.009	p < 0.05	Significant relationship
Relationship	Obedience	0.599	p > 0.05	No significant relationship

**Table 10.** Pearson Chi-Square different test results for uncontrolled variables

Variable 1	Variable 2	p	p < 0.05	Notes
Motivation	Obedience	0.011	p < 0.05	Significant difference
Desire	Obedience	0.018	p < 0.05	Significant difference
Perception	Obedience	0.010	p < 0.05	Significant difference
Cost	Obedience	0.034	p < 0.05	Significant difference

repetitive care and as many as 10% of respondents with a less attitude level were indeed less obedient, but as many as 23.33% of respondents with a positive attitude level turned out less obedient and as much as 26.67% of respondents with a level of attitude that turned out to be obedient during repeated treatments. To determine the relationship between attitude and compliance, the Spearman Correlation statistical test was used with the results shown in Table 8.

Spearman Correlation statistical analysis results with  $\alpha = 0.05$  obtained p value = 0.364 ( $p > 0.05$ ). This showed that there was no significant relationship between dental and oral health attitudes of patients with patient compliance in undergoing repeated treatments at UPF RSGMP Dental Conservation Faculty of Dental Medicine UNAIR Surabaya period September-November 2011.

Besides that, to determine the possibility of a relationship between uncontrolled variables with the level of respondent compliance, a statistical test was performed with the results as shown in Table 9.

The test results of the relationship between education and compliance obtained  $p = 0.177$  ( $p > 0.05$ ). This showed that there was no significant relationship between the level of education of patients and patient compliance. Besides that, the test results of the relationship between motivation, desires, perceptions, and financing with compliance obtained  $p = 0.010$  (motivation),  $p = 0.017$  (desire),  $p = 0.004$  (perception), and  $p = 0.009$  (cost). The four factors not examined have p values  $< 0.05$ . While the test results of the relationship between the patient's kinship and compliance obtained p value = 0.599 ( $p > 0.05$ ). Factors that have a p value  $< 0.05$  and indicate a significant relationship between the two may be the cause of patient compliance in undergoing repeated treatments at UPF RSGMP Dental Conservation Faculty of Dental Medicine UNAIR Surabaya period from September to November 2011.

Different test results using the Pearson Chi-Square statistical analysis as shown in Table 10 between motivation,

desire, perception, and cost with compliance obtained  $p = 0.011$  (motivation),  $p = 0.018$  (desire),  $p = 0.010$  (perception), and  $p = 0.034$  (financing). The four factors not examined have p values  $< 0.05$ . This shows that there were significant differences between motivation, desire, perception, and financing and patient compliance.

## DISCUSSION

Based on the results of study that has been conducted, it is known that the majority of respondents, as many as 63.33% of respondents have a level of positive attitude (Table 3). The level of compliance of respondents in this study showed that the majority of respondents, as many as 66.67% of respondents obeyed during repeated treatments (Table 4).

Compliance is one example of health behavior. The formation of health behavior is influenced by factors of knowledge, attitudes, and actions. According to Notoatmodjo (2010), initially knowledge will be processed through several stages in a person, giving rise to a perception. The perception will then determine a person's attitude whether like / dislike the object. After the attitude is formed, a person will realize what he believes in the form of action thus it can be seen by others. These three processes that overall shape health behavior, in this case adherence in undergoing repeated treatments.<sup>10</sup> Compliance is not only influenced by these three factors. According to Niven (2000), other factors that also affect compliance behavior include individual motivation, individual desires / needs, perceptions, beliefs in controlling and preventing disease, environmental variables, quality of health instructions, and the ability of individuals to access existing resources (affordability of cost and place).<sup>11</sup>

The results showed that there was no significant relationship between dental and oral health attitudes of patients and patient compliance in undergoing repeated

treatments. This can be seen in Table 6. There were respondents with positive attitude levels who were indeed adherent in undergoing repeated treatments (as many as 40%) and there were respondents with less attitude levels who were indeed less adherent during undergoing repeated treatments (as much as 10%), but there were also respondents with a level of positive attitude who were less compliant during repeated treatments (as much as 23.33%) as well as respondents with a level of attitude that were less apparently obedient during repeated treatments (as much as 26.67%).

The results of this study were also based on the results of the Spearman Correlation statistical test with  $\alpha = 0.05$ , the value of  $p = 0.364$  ( $p > 0.05$ ) indicated that there was no significant relationship between the dental and oral health attitudes of patients and patient compliance in undergoing repeated treatments at UPG RSGMP Dental Conservation Faculty of Dental Medicine UNAIR Surabaya period September-November 2011. The results of this study were not in line with various theories, including the theory of behavior change stated by Notoatmodjo (2007) which stated that a person's attitude will determine the person's behavior towards something, what is meant by behavior here is compliance in undergoing repeated treatment.<sup>8</sup> Besides that, according to Sri Utami (2008), attitude is how someone likes or dislikes something then in the end the attitude will determine the person's behavior. If someone likes something, then the behavior that is shown is to approach, find out, and join the likes. If someone does not like something, then the behavior that is shown is avoiding and staying away from what they dislike. Attitudes make someone approach or away from other people or other objects

Budiharto (2009) and Notoatmodjo (2010) stated that new behavior especially in adults begins in the cognitive domain which means the subject knows in advance of stimuli in the form of objects outside. This will then cause an inner response in the form of attitude. Furthermore stimulation, namely the object that has been known and fully realized, will lead to a further response in the form of action on the stimulus or object. Thus, attitude is the second step after a person's knowledge to determine the behavior.<sup>10,13</sup>

The results of this study were also not in accordance with the results of research conducted by Maimunah and Eko (2008) which showed there was a significant relationship between attitude and compliance. According to Smeet in the study of Maimunah and Eko (2008), one of the factors that influence one's compliance is attitude. A good attitude will affect one's compliance.

Study conducted by Hikmah (2005) also shows a relationship between attitude and compliance. One of the supporting factors that can affect compliance is due to an awareness of someone or a positive attitude, this awareness starts with good knowledge about something. According to Kurt Lewin (1951) quoted by Hikmah (2005) outlines that attitudes can influence behavior through a careful and reasonable decision making process. This theory explains that someone will do an act (obedient) if he sees the act positively and believes that someone else wants him to do it.<sup>15</sup>

The results of this study are in line with the results of the study of Jing Jin, et al. (2008) which stated that there is no strong relationship between knowledge and attitude and patient compliance in conducting therapy. Jing Jin, et al. (2008) stated that patients' knowledge and attitudes about illness and care being undertaken do not always affect adherence. The amount of information received by a person will cause different perceptions so as to cause different attitudes. These differences in attitudes cause differences / discrepancies between behavior with what it knows and what it reacts to. This is supported by the results of research conducted by Doni (2007) which also shows that there is no relationship between the level of a person's attitude and compliance.<sup>16,17</sup>

Heriyanto, et al. (2005) stated that there is no guarantee that someone with good knowledge of dental health will have good behavior in maintaining dental health. Knowledge will influence attitudes, but this cannot predict the behavior of the individual with high accuracy. Attitude is a tendency to act, but individuals who have positive attitudes cannot be expected to always have positive behaviors.<sup>18</sup>

According to Mann (1969) and WHO (1984), as quoted by Azwar (2011) that attitudes will manifest in behavior depending on the situation at that time, referring to the experience of others, based on the lot and the least of one's experience, and values in society. Attitude is seen as a predisposition to behave which will appear actual only if the opportunity to express it is wide open. According to Breckler and Wiggins (1989) as quoted by Azwar (2011), what conditions, what time, and how the situation when the individual must express his attitude is determinant which greatly influences the consistency between the statement of attitude and behavior. Thus, a person's attitude will not always determine the person's behavior towards something, but it is conditional or dependent on a particular environment

The results of study that do not show a relationship between patient attitudes and adherence in undergoing repeated treatments can be caused by various factors. According to the behavioral model proposed by Lawrence Green (1980) cited by Notoatmodjo (2007) the formation of healthy behavior in a person, in this case patient compliance, is determined by 3 main factors, namely predisposing / triggering factors, supporting factors, and driving factors. Triggering factors include knowledge, attitudes, beliefs, beliefs, and so on. Supporting factors such as the presence of facilities and infrastructure, and driving factors are the attitudes and behavior of people in the surrounding environment.<sup>8</sup> Hence, obedience is not only influenced by attitude, but is also shaped and influenced by various factors as mentioned above .

Vermeire (2001) mentioned that the higher age, level of education, socioeconomic status, perceived satisfaction of patients, easy treatment procedures, easy payments, and good relations between doctors and patients can increase patient compliance in care. In addition, Jing Jin et al. (2008) also share several factors that affect adherence, such as patient factors, ongoing care, socioeconomic conditions,

perceived satisfaction of patients, easy treatment procedures, illness, and available health systems.<sup>16,20</sup>

Factors that might affect patient compliance in UPG RSGMP Dental Conservation faculty of Dental Medicine UNAIR Surabaya in the September-November 2011 period include the patient's motivation, patient's desires / needs, patient's perceptions / beliefs, funding for care, and whether there is a kinship between the sufferer with the operator. Motivation is an encouragement from within a person that causes that person to carry out a certain activity to achieve the desired goal.<sup>8</sup> In this case, the motivation in question is the motivation of patients who come to RSGMP to do treatment, whether patients come with their own wishes or by invitation of people other. This motivational factor has a strong influence on patient adherence in undergoing care.<sup>21</sup> It was found that as many as 70% of patients came not of their own volition, but rather were the invitation of the operator in this study. This can be a cause of as many as 23.33% of respondents with a level of positive attitude turned out to be less obedient during repeated treatments. These respondents became less obedient because of lack of motivation and awareness to do dental care on themselves. This can also be the cause of as many as 26.67% of respondents with less attitudes level turned out to be obedient during repeated treatments. The respondent became obedient because of the bad feeling towards the operator who cared for him. This uneasy feeling is because a person tends not to want to hurt others because of his actions and does not want to refuse.<sup>20</sup>

Moreover, based on study data that has been conducted, it was found that as many as 74.28% of patients realized the need for treatment of their diseased teeth. This can be a trigger for their adherence in undergoing repeated treatments. While the other 20% thought that their teeth were not needed to be treated sickness and the remaining 6.67% claimed no complaints even though the operator found a disease in their teeth. This patient's desire factor can be an indicator of how much they need to be treated or not necessary to care for their teeth and can affect the level of their compliance. Patients who feel the need and need to be obedient in undergoing treatment, while patients who feel they do not want treatment for their teeth tend to be disobedient in undergoing treatment.<sup>22</sup> Sudarma (2008) stated that the main impetus for someone willing to take medication is the need for health / needs. The high urge to be healthy in him causes a person to ignore socio-economic problems or other problems.<sup>23</sup>

The third factor that plays a role is the patient's perception / belief. Perception is giving meaning to a stimulus by concluding various information and interpreting it.<sup>13</sup> Patients' perceptions are different from one another, for example, patients with the same disease, one patient perceives what patient feels as a disease while others perceive what patient feels is not a disease. From this perception, it will lead to a belief or belief in a person towards an illness. This is in line with the Health Belief Model theory. Patients must believe that if their illness is not treated immediately, it will cause more serious

complications, so patients must follow the treatment that has been planned by the health worker.<sup>8,20</sup>

Another factor that could be the cause of the incompatibility of this study with the existing hypothesis is the financing of care. The cost of care will determine the patient's compliance, especially in the treatment of chronic diseases as well as in treatments that require a long time and repetitive, such as the treatment in UPF Conservation Teeth. The relatively high cost of care causes patients to choose not to undergo treatment until completion.<sup>16</sup> As many as 50% of respondents claimed that their treatment costs were fully borne by the operator, while as many as 23.33% of respondents halved the total cost of their care with the operator (50:50) . This can be an incentive for someone to be obedient in undergoing treatment because of the more benefits they get. Apart from their teeth being healed and not sick anymore, they do not need to pay for these benefits. According to Niven (2000), the degree of change in attitude and behavior also depends on the rewards received for being bound to do something that is even contrary to one's attitude.<sup>11</sup> This can be the cause of as many as 26.67% of respondents with less levels of attitude turned out to be compliant during treatment over and over.

The relationship between the patient and the operator / doctor who cared for the patient did not affect the level of patient compliance. This is based on the results of statistical tests that show the value of  $p = 0.921$  ( $p > 0.05$ ) and means there is no meaningful relationship between the two variables. According to Vermeire (2001), a relationship built with good communication between doctors and patients will cause a feeling of comfort and trust in the doctor thus patients will be more obedient to undergo planned treatment.<sup>20</sup> It turns out that 30% of sufferers have a kinship with the operator and the remaining 70% do not have kinship with operators in this study. The number of respondents who do not have a kinship with the operator is indeed greater. The problem of financing which is more often 100% funded by the operator is a major factor why many patients remain obedient undergoing repeated treatment even though they do not have a kinship with the operator and have poor dental and oral health attitudes.

Based on the description above, there are other factors outside the attitude of respondents who have a relationship with respondent compliance. These factors are the patient's motivation in undergoing treatment, the desires / needs of the patient, the patient's perception, as well as funding during dental care.

Hence, it can be concluded that there is no relationship between dental and oral health attitudes of patients with adherence in undergoing repeated treatments. This is due to other factors that are more influential on patient compliance, namely motivation, desire, perception, and cost.

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