
Knowledge and Patient Compliance in Root Canal Treatment

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ABSTRACT

One factor of unfinished root canal treatment is a factor of knowledge, motivation and ability about root canal treatment that affects a person compliance to overcome the problems which they experience. There are many patients who are not come to complete their root canal treatment. The purpose of this study is to analyze patient compliance, motivation and ability towards the compliance of root canal treatment. The type of research used was cross sectional. The subjects of this study were all root canal treatment patients who came to dental polyclinics from July to October. In this study data collection methods used were questionnaires and observations. Data analysis were analyzed using Fisher exact test. The results of this study showed that there was no relationship between knowledge, motivation and ability towards the compliance of root canal treatment.

Keywords: Root canal treatment, Knowledge, Motivation, Ability, Compliance

INTRODUCTION

Root canal treatment is the act of taking the entire infected pulp tissue from the entire whole root of tooth and removing the contents of the canal and filling it with the material after root canal is sterilized. Various types of root canal treatments are pulpectomy, apexification, periapex care. Indication for pulpectomy treatment specifically a teeth with infection pass through the pulp chamber with condition of teeth (vital, non vital, necrosis). Root canals can be inserted instruments, periapical tissue abnormalities.

Indications for apexification treatment, that is nonvital pulp with no periapex abnormalities. Indications for periapex treatment are cases of periapex abnormalities. The main purpose of root canal treatment is to eliminate residual necrotic tissue, micro-organisms and other products so as to create favorable conditions for the healing of periapical tissues. The root canal treatments consist of several step. The first step is preparation, second is sterilization, third is root canal filling and permanent buildup which must be done sequentially and may not be completed in one visit.

Root canal treatment is urgently require obedience to the patient in undergoing repeated treatments, the patient's own disobedience results in root canal treatment sometimes being incomplete. Root canal treatment is dire need of adherence to patients undergoing repeated treatments, the results of patient disobedience themselves in root canal treatment are sometimes incomplete.⁽¹⁾

From the data can be seen that in 2013 patients with root canal treatment who did not continue the visit to completed by 89%. In 2014 patients with root canal treatment who did not continue the visit were completed by 91%. Based on the data can be stated that the problem of this research is the number of patients who do not adhere to the root canal treatment visits completely. According to Pratiwi⁽²⁾ one of the factors of incomplete root canal treatment is a factor of knowledge about root canal treatment that affects one's awareness and actions in overcoming the problems they experience. Most people are reluctant to do a routine check at the dentist. Facts in the field also show that many dental and oral diseases are handled in severe conditions. Patients who do not know of a treatment that is being treated tend to stop treatment after the patient feels that the treatment is sufficient and the complaint has gone away before continuing all stages of treatment until completed. adherence Patient is the positive behavior that the patient shows when pointing to treatment goals.⁽³⁾ In addition to knowledge, factors that influence patient compliance in root canal care are motivation and ability.⁽⁴⁾ Motivation is an encouragement that comes from inside and outside the individual. Patients who feel less important maintain oral health and neglect it, have a risk of poor care. Discomfort that may arise during treatment will give rise to them for choose to be extracted.⁽⁴⁾

Ability is a person's talent to perform physical or mental tasks. People who suffer from certain diseases or people who are too old have a lack of physical energy to perform self-care including oral dental care. The purpose of this research was to analyze the relationship between knowledge, motivation, the ability of patients with adherence to dental root canal treatment visits.

METHODS

The type of research used was cross sectional analytical research. Cross sectional research was a study in which the dependent variable and independent variables were observed at the same time, so in this study the variables of root canal treatment and compliance variables during treatment were examined at the same time. The sample was patients who was undergoing of root canal treatment from April to July 2016. The independent variables of this research were patient knowledge, motivation, patient ability and the dependent variables were the compliance with root canal treatment. The research instruments were questionnaire sheet and observation sheet. The data analysis used in this research was Fisher’s exact test.

RESULTS

Table 1. Distribution of Knowledge about Root Canal Treatment

No	Statement	Respondents' Answers				Assessment criteria	
		True		False			
		f	%	f	%		
1.	Understanding of root canal treatment	6	27.3%	16	72.7%	Good knowledge if value >14	
2.	Teeth with deep holes can be treated with root canal treatment.	14	63.6%	8	36.4%		
3.	Teeth in swollen gums can be treated	20	90.9%	2	9.1%		
4.	Knowing the state of the teeth that are carried out by root canal treatment.	18	81.8%	4	18.2%		
5.	Know the benefits of root canal treatment.	19	86.3%	3	13.7%		
6.	Knowing why root canal treatment is done	17	77.3%	5	22.7%		
7.	Knowing the purpose of root canal treatment	19	86.4%	3	13.6%		
8.	Knowing the condition of the teeth that is carried out root canal treatment	15	68.2%	7	31.8%		Poor knowledge if value <14
9.	Knowing the condition of the teeth that should not be carried out root canal treatment.	13	59.1%	9	40.9%		
10.	Know how many times root canal treatment visit.	16	72.7%	6	27.3%		
11.	Root canal treatment Need Multivisit	18	81.8%	4	18.2%		
12.	Know the time distance Visit care root canal	4	18.2%	18	81.8%		
13.	Knowing control time after channel treatment root is complete	16	72.7%	6	27.3%		
14.	Theact of contacting doctor if unable to attend for a visit root canal treatment next.	17	77.3%	5	22.7%		
15.	There are three stages in root canal treatment.	12	54.5%	10	45.5%		
16.	Knowing the consequences of not having root canal treatment.	19	86.4%	3	13.6%		
17.	Knowing the impact of channel treatment the root is not complete	20	90.9%	2	9.1%		
18.	There is pus, pain when held is a sign of failure of incomplete root canal treatment.	18	81.8%	4	18.2%		
19.	Temporary fillings used during root canal treatment visits	20	90.9	2	9.1%		
20.	The type of permanent fillings used for the final restoration of root canal treatment	14	63.6%	8	36.4%		
	Total	315	1431.7	125	568.3		
	Range	15.7	71.6	6.2	28.4		

Based on table shows that 72.7% of respondents know how many times the root canal treatment visits. As many as 86.4% of respondents knew the purpose and consequences of root canal treatment, but many respondents did not know the distance of root treatment treatment visits by 81.8%. And as many as 72.7% of respondents did not know the meaning of root canal treatment. Based on the table obtained scores of knowledge about most root canal treatments Patients undergoing root canal treatment at GP Dental Clinic were included in the good category.

Table 2. The Distribution of Patient Compliance

No	Compliance of Patient Visits	Frequency	Percentage
1.	Obedient	3	13,64
2.	Disobedient	19	86.36
	Total	22	100%

Based on the table, it was found that most of the visits of patients undergoing root canal treatment at GP Dental Clinic were included in the non-compliant category.

Table 2. Relationship between Knowledge of Root Canal Treatment and Patient Compliance

Knowledge of root canal treatment	Compliance category				Total		p-value
	Obedient		Disobedient		f	%	
	f	%	f	%			
Good	2	14.3	12	85.7	14	100	0.709
Poor	1	12.5	7	87.5	8	100	
Total	3	14	19	86	22	100	

Table 2 shows that the distribution of adherence from groups of patients with good and insufficient knowledge was the same, ie the majority had low or non-compliant adherence to treatment. Fisher's exact test results showed p-value = 0.709 so that it could be concluded that the level of knowledge is not related to patient compliance in root canal treatment.

DISCUSSION

Knowledge of Root Canal Treatment in GP Dental Clinic Surabaya Patients, based on the results of the research, questionnaires that asked about the content of the material (root canal treatment) showed that many respondents knew how many visits, the purpose and consequences of root canal treatment, but many respondents did not know the length of treatment visit and did not know the meaning of root canal treatment. It is known that most of the respondents who underwent root canal treatment had good categories of knowledge.

According to⁽⁵⁾, knowledge is a cognitive domain that is very important for the formation of one's actions and one's knowledge of objects has different intensity or level. Broadly speaking, knowledge is divided into 6 levels consisting of know, comprehension, application, analysis, synthesis and evaluation. The knowledge of respondents has been measured by completing questionnaires that ask the contents of the material (root canal treatment). And respondents still fulfill 2 levels of knowledge in broad outline, namely knowing and understanding. The level of tofu is interpreted as a reminder of the material of the root canal treatment message after the visit. By using the knowledge that has been obtained, then obtain information about the consequences of incomplete root canal treatment.

After the respondent knows further the level of understanding, which is interpreted as an ability to interpret the information correctly. Compliance of Patient Visits During Root Canal Treatment at GP Dental Clinic Surabaya. Based on observations at GP Dental Clinic Surabaya patients, showed that most of the respondents did not complete the root canal treatment visit. So that the respondent belongs to the non compliance category, where in this situation someone does not do the recommended one. There is one factor in non-compliance, namely knowledge in good category but adherence to root canal treatment visits in the non-compliant category.

This is not in accordance with the theory according to⁽⁶⁾ because the factors that influence non-compliance are good knowledge that can affect a person's compliance. Besides knowledge, several factors influence compliance, namely: internal factors (attitude, ability, motivation) and external factors (organizational characteristics, group characteristics, job characteristics, environmental characteristics). Job characteristic factors that can affect visit compliance because work affects a person's economic status. Knowledge Relationship to Root Canal Treatment with Compliance with Patient Visits at GP Dental Clinic Surabaya. The results showed that there was no correlation between knowledge about root canal treatment and compliance with patient visits at GP Dental Clinic Surabaya in 2015. This is because knowledge of root canal treatment is not applied in compliance with root canal treatment visits. One of the reasons for not applying knowledge in visit compliance is economic factors. These factors are consistent with the background of patients at GP Dental Clinic Surabaya, most of whom have daily jobs as private employees and entrepreneurs (traders).

The results of this study are in line with⁽⁴⁾ theory that the degree of non-compliance is determined by several factors, namely: The complexity of treatment procedures, the degree of lifestyle change determined, the length of time in which the patient must adhere to the program, whether the disease really hurts, whether the treatment has the potential to save lives, the severity of the disease being perceived by the patient and not the health worker. One of the factors that influence the compliance of patient visits is the economic status of the patient because of one of the factors of non-compliance above. The length of time in which the patient must adhere to

the program, can be seen from the data of visit compliance that many respondents are not compliant and do not know the length of the next treatment visit. this causes root canal treatment not to completed.

CONCLUSION

According to this study, we can conclude that the patient knowledge about root canal treatment is good and patient compliance towards the visit of root canal treatment is in disobedient category. There is no relationship between knowledge about root canal treatment with compliance of patient visits at GP Dental Clinic Surabaya.

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