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An exploration of patients perception towards endodontic root canal treatment

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Abstract

Introduction: The fact that most patients are unaware of root canal therapy (RCT) adequately is a major drawback. To effectively address the problem, it is important to comprehend and pinpoint the elements that prevent or deter patients from undergoing RCT. The aim of present study is to evaluate the patient perception toward RCT.

Material and Methods: 260 patients who completed the pre and post treatment survey were included in the study. Patient perception, pain and anxiety were recorded pre and post RCT. The data was analyzed using SPSS software version 21.0

Results: The most common pretreatment concerns were future maintenance (41%) and pain (23%). Forty three percent of patients said they had anticipation of pain, whereas 6% said they had pain throughout therapy.

Conclusion: The results of this study indicate that endodontic therapy typically causes less pain than anticipated. When it comes to root canal therapy, most patients were worried about future maintenance.

Keywords: Anxiety, fear, pain, perception, RCT

Introduction

Endodontic therapy, often known as root canal therapy (RCT), is the process of removing diseased pulpal tissue from a tooth in order to prevent and intercept pulpal/periradicular pathosis [1] and to safeguard the disinfected tooth against further microbial entrapment. Infected teeth that may have been extracted are saved by RCT because the procedure prevents the severing of periodontal fibres that aid in proprioception for occlusal feedback [2] and efficient chewing. If root canal therapy (RCT) is recommended, a filling or antibiotics will not be enough to treat the tooth infection.

Prosthetic appliances, such as implants, are required for tooth replacement if it is determined that aesthetic and functional rehabilitation are necessary. Because of its many benefits, including a greater likelihood of preserving the patient's natural teeth and better clinical outcomes, RCT should be given serious consideration whenever it is warranted [3].

The fear that the doctor is to blame for the patient's suffering can be alleviated by providing effective pain relief during RCT. Despite developments in modern endodontic procedure and local analgesics, patients may still endure intraoperative pain [4].

Many studies have shown that dental anxiety can significantly heighten a patient's experience of pain during dental procedures [5]. It has also been suggested that preoperative pain raises patient anxiety, which has further consequences for experienced pain [6].

Extreme fear of and aversion to visiting the dentist characterises those who suffer from dental phobia. Many people, a recent study suggests, put off visits to the dentist due to anxiety. Both generalised anxiety disorder and dental phobia have a significant impact on patients' willingness to seek dental care [7].

Dental anxiety is a major barrier to early diagnosis and treatment of oral and dental problems. It's common knowledge that people put off going to the dentist until it's absolutely essential. Anxious patients, as a result, suffer from a diminished quality of life or are prevented from achieving their full potential, in comparison to their less worried counterparts [8]. Hence the present study is conducted to evaluate the patients perception towards root canal treatment.

Material and Methods

The research was done at a dental clinic for a period of one year. The pre tested and validated questionnaire [9] was given to patients before and after commencement of root canal treatment.

All those patients who had completed the pre & post treatment survey with age above 18 years and willing to participate were included in the study. Those who did not complete the forms and survey and unwilling to participate were excluded. The total sample size obtained was of 260 patients.

Demographic data comprises of age, gender and education level. Patient worries regarding RCT were analyzed using a visual analog scale. Data was categorized and analyzed using SPSS version 21.

Results

Males made up 129 of the responders (49.6%), while females made up 131 (50.3%). The participants ranged in age from 19 to 60 years old. Out of all the patients, there were 62% with education till or below high school, 31% completed their graduation and rest 7% did Post-graduation.

Information on patients' worries about RCT is shown in Table 1. 6% of patients had no concerns about RCT prior to therapy. The majority of respondents stated that their top worries before to treatment included future maintenance (41%), time (28%), and discomfort associated with the therapy (23%). Patients' postoperative concerns include time (43%), future maintenance (44%) and future care. Remarkably, just 6% of patients complained that their discomfort made them unhappy. The RCT results were generally well-liked by all of the respondents.

Table 1: Shows patients concern towards RCT pre and post treatment

Concern towards RCT	Pre-treatment (%)	Post-treatment (%)
No concern	6	0
Pain associated with treatment	23	13
Time	28	43
Future treatment maintenance	41	44
Other	2	-

Table 2 shows the anxiety and pain scores reported by patients before and after treatment. The mean anxiety among patients before RCT was 36% and after treatment was 42% having significant results with p value less than 0.05. The anticipated pain before starting of treatment was 43% and the pain experienced was 37%. Overall, all of the responders were pleased with the RCT results.

Table 2: Shows pre and post treatment anxiety and pain score of patients

Variable		Percentage	P value
Anxiety	Pre treatment	36	0.0037
	Post treatment	42	
Pain	Anticipated	43	0.0025
	Experienced	37	

Discussion

The current study was conducted at a dental clinic with a sample size of 260 in the termship of 1 year. Only those patients who completed both pre and post treatment survey were included and patient concern towards RCT with pain and anxiety factor was noted.

According to one study, which found no connection between predicted and real pain regardless of prior experience, patients may perceive each therapy as a unique experience [10]. According to additional studies, patients who have previously experienced pain had reduced pain expectations and anxiety [11]. These results were similar to our study.

6% of patients reported pain while receiving therapy. This was less than the percentages, which varied from 12 to 60% in other studies, that were reported. Despite reports of more severe pain, the level of pain recorded during RCT is often low, ranging from 4 to 8%. In the current investigation, 43% of patients reported pretreatment discomfort. Pretreatment anxiety has been shown to be associated with both anticipated and actual pain. These studies show that patients who are afraid are more likely to feel and remember more pain [11]. The reported frequency of postoperative pain ranges from 1.5 to 53% and more than 50% of patients experience severe postoperative pain in a study done by Gotler M *et al.* [12].

Patients in this study expressed dissatisfaction with some aspects of their post-RCT care. All patients who replied to the posttreatment survey said they would undergo RCT once more if necessary, despite some patients' misgivings. According to the literature, RCT has a high degree of patient satisfaction, with the vast majority of patients (80-85%) choosing to receive additional treatment if required [10].

There were some limitation to the study because of sample size the results had some restricted validity.

Conclusion

The results of this study indicate that endodontic therapy typically causes less pain than anticipated. Despite the fact that women are more likely than men to anticipate pain, they do not experience higher levels of suffering. When it comes to root canal therapy, most patients were worried about future maintenance.

Conflict of Interest

Not available

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Not available

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