

## Advantages and disadvantages of endodontic management

Running title : Advantages and disadvantages in before and after root canal treatment

### ABSTRACT

#### INTRODUCTION:

Root canal treatment is a sequence of treating infected pulp of the tooth which is intended to result in elimination of infection and protecting and restoring the tooth from future microbial invasion.

#### AIM:

The aim of the present study is to create awareness among outpatients on the advantages and disadvantages in before and after root canal treatment.

#### MATERIALS AND METHODS:

The questionnaire based survey was conducted among 101 patients in Saveetha Dental College and Hospitals. The participants range from 20-56 years above Main objective of performing root canal treatment is to eliminate bacteria from the infected root canal system/ remove the inflamed pulp tissue and close it with biological material. Root canal treatment done well then regardless of the number of visits, will create a favorable environment for healing.

#### RESULT:

The observed results in the present study were depicted in pie charts and results were analysed using SPSS.

#### CONCLUSION:

The recent advances in endodontics technology attract dental material a lot as they complete the root canal treatment in a couple of days periapical tissue undergoes a lot of changes.

Key words: root canal treatment, endodontics, biological material, create awareness, novel method

#### INTRODUCTION

Root canal treatment is a treatment sequence for the infected pulp of the tooth which is intended to result in elimination of infection and protection of the decontaminated tooth from future microbial invasion. Endodontics is a branch of dentistry that deals with diseases of the tooth root and tooth pulp. The process involves an interaction of knowledge and experience of various outcomes and balancing risk benefits that occur due to root canal treatment (1) .

41 Root canal treatment has more methods and techniques, different types of anesthesia (1,2) . It  
42 is very important to note the fact that providing and informing the patients about the advantages  
43 of root canal for to retaining it (2) and when coming to tooth problems, stress plays a major role  
44 (3). In some cases it has been proven that income , dental cost and insurance status dental cost  
45 and insurance status have become dental ear factors why patients have become resistant to see  
46 the dentist (4) .

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48 Anxiety is more common in women (5) . The positive impact and outpact of root canal treatment  
49 was to be shown regardless of the cultural background of the patients or the measure used to  
50 differ them (6) (7–14). In a study, there was an extensive has extensive knowledge and research  
51 experience that has translate into high quality publications (15–29) hence, the aim of this study  
52 was to evaluate the knowledge and awareness of patients in the samples of Saveetha Dental  
53 College patients to assess the reason they choose root canal treatment and to assess their  
54 problems (30).

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56 MATERIALS AND METHODS  
57 The questionnaire based survey was conducted among 101 patients in Saveetha Dental College.  
58 The participants range from 20-56 years above. After explaining the experimental procedure and  
59 making the participant fully aware of the role they play in the project. The institutional analysis  
60 was done to analyse knowledge, attitude, awareness of the patients exposed to root anal  
61 treatment. The survey was online through online based google forms. The questionnaire  
62 contained questions on demographic details also. Method of sampling was simple random  
63 sampling. The responses were collected and tabulated in the excel sheet and analyzed. The data  
64 was entered in spss version 23 and the results are present in the bar graph and pie chart. The chi  
65 square test “monte carlo "was used to analyze and compare the knowledge and awareness of root  
66 canal treatment. The following questionnaire were used

## 67 Questionnaire

Serial number	Questions	Options
1	Did you pain after root canal treatment	Yes , no ,maybe
2	Why did you choose root canal treatment over tooth extraction	Less painful, for no gap between teeth
3	Did you know root canal treatment could result in a weaker tooth after treatment	Yes , no ,maybe
4	Did you know root canal treatment could prevent gap in the mouth	Yes , no ,maybe
5	How to maintain hygienic way in root canal treatment	Eating healthy, drinking water, use chewing gum
6	Did you sleep before day of the treatment	Yes , no ,maybe
7	Did you feel stress out before day of the treatment	Yes , no ,maybe
8	Did you get expected outcome after treatment	Yes , no ,maybe
9	Did you consume antibiotics after treatment	Yes , no
10	Did you have any swelling and tenderness in nearby gums before treatment	Yes , no
11	We're you aware of tooth filling	Yes , no

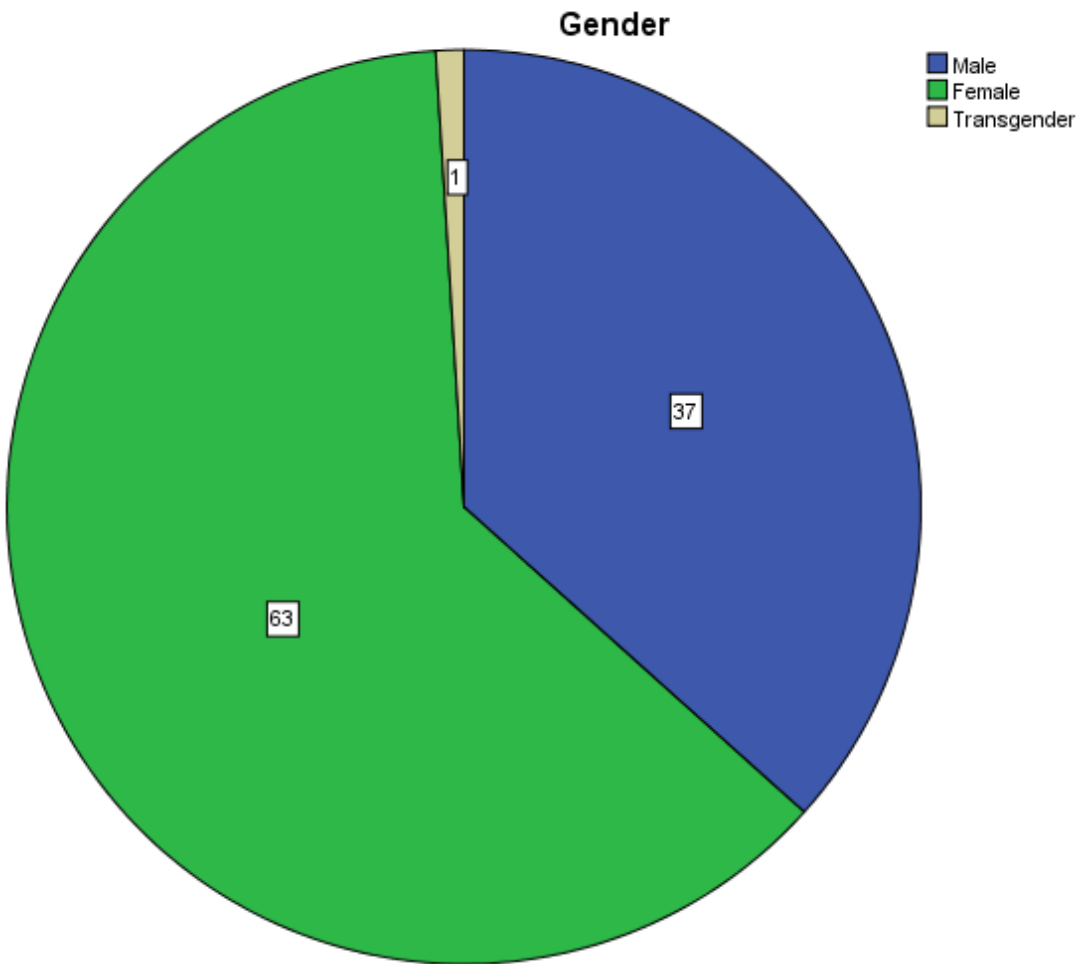
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## 70 RESULT

71 The present study has observed 32% are aged 22-35 years, 22% are aged 36-45 years  
72 14% are aged 20 -22 , 16% are aged 46- 55 years , 9 % are aged 5 and 8% are aged 55 above .  
73 Fig 1. The present study observed that in Fig 2 did you expect outcome out of the treatment 78%  
74 yes 22 said no and 1% said maybe pearson chi square test shows p value is 0.269 ( $p > 0.05$ ) hence  
75 it is statistically not significant .Fig 3 shows a bar graph representing the association between  
76 gender and did you get a hygienic way for root canal treatment responses. The majority of the  
77 females are maintaining hygienic ways for cooperating with root canal treatment. It was  
78 supported by Pearson chi square test shows p value is 0.029 ( $p > 0.05$ ) which is significant (Fig 4)  
79 shows a bar graph representing the association between gender and did you get a root canal  
80 treatment that could result in weaker teeth after treatment responses. Pearson chi square test  
81 shows p value is 0.032 ( $p \text{ value} > 0.05$ ) hence it is statistically significant Fig 5 shows a bar graph  
82 representing the association between gender and did you get a root canal treatment that could

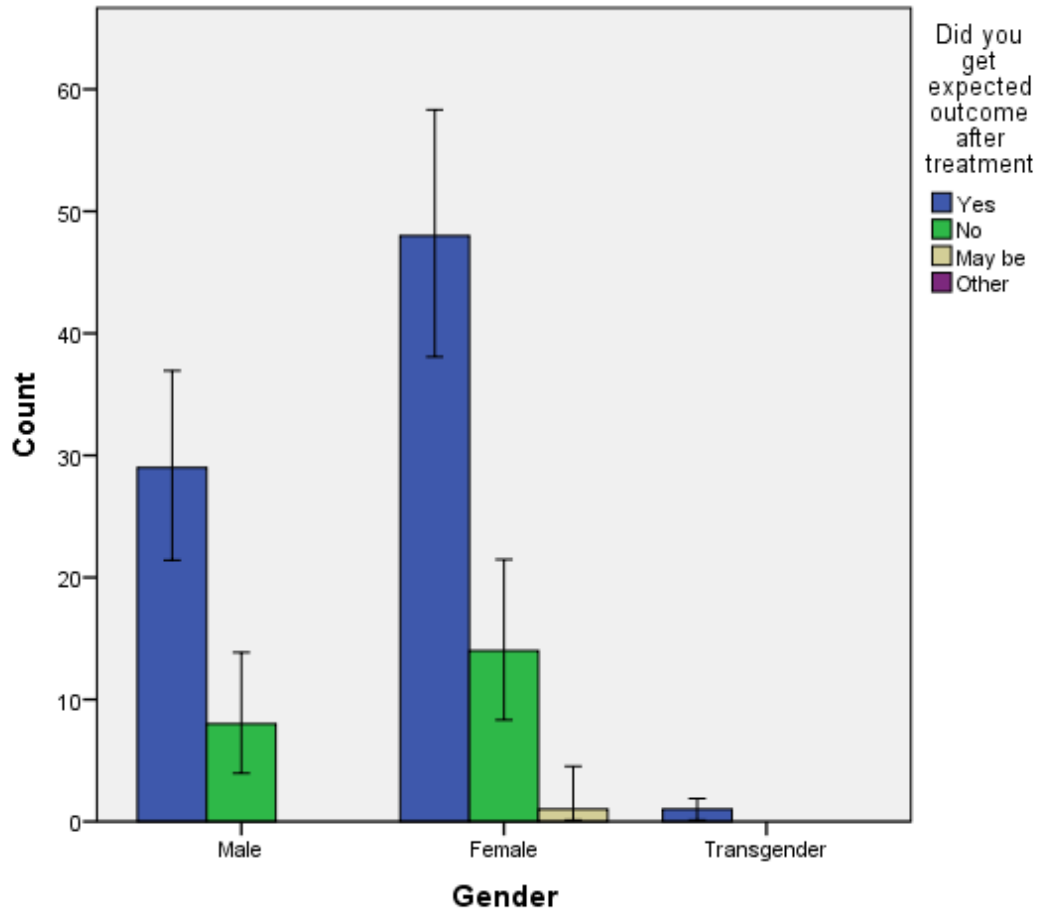
83 result in weaker teeth after treatment responses Pearson chi square test shows p value is 0.048(p  
84 value> 0.05) hence it is statistically significant.

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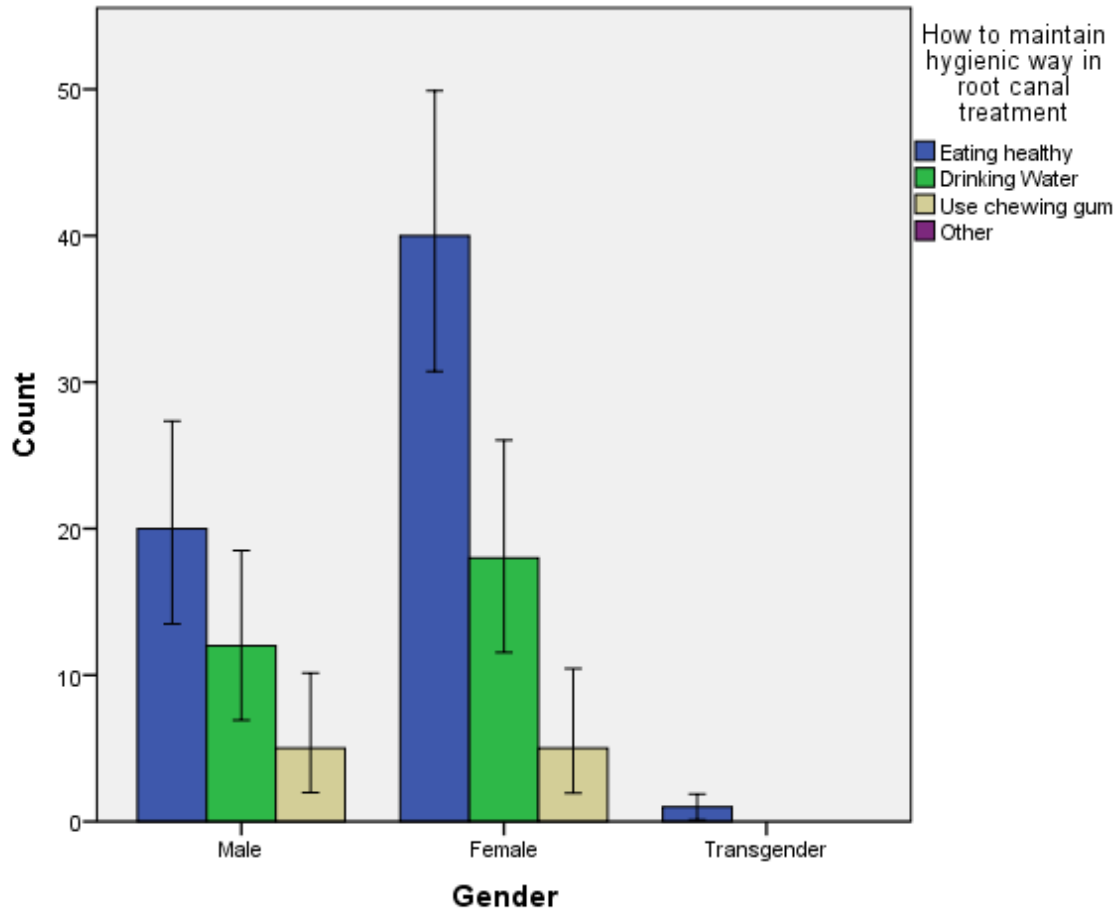
Fig 1 shows the responses to the gender male is 37 %, female is 63%and transgender is 1% . male is blue colour , female is green and yellow is transgender



Error Bars: 95% CI

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Fig 2 shows a bar graph representing the association between genders and did you get expected treatment responses. x axis represents gender and the y axis represents the number of responses for the amount of overall activity . Blue represents yes, green represents no and yellow represents may be. Majority of the participants are females in which Pearson chi square test shows p value is 0.029 (p value> 0.05) which is significant



Error Bars: 95% CI

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105 Fig 3 shows a bar graph representing the association between genders and did you get a hygienic

106 way for root canal treatment responses. x axis represents gender and the y axis represents the

107 number of responses for the amount of overall activity . Blue represents eating healthy, green

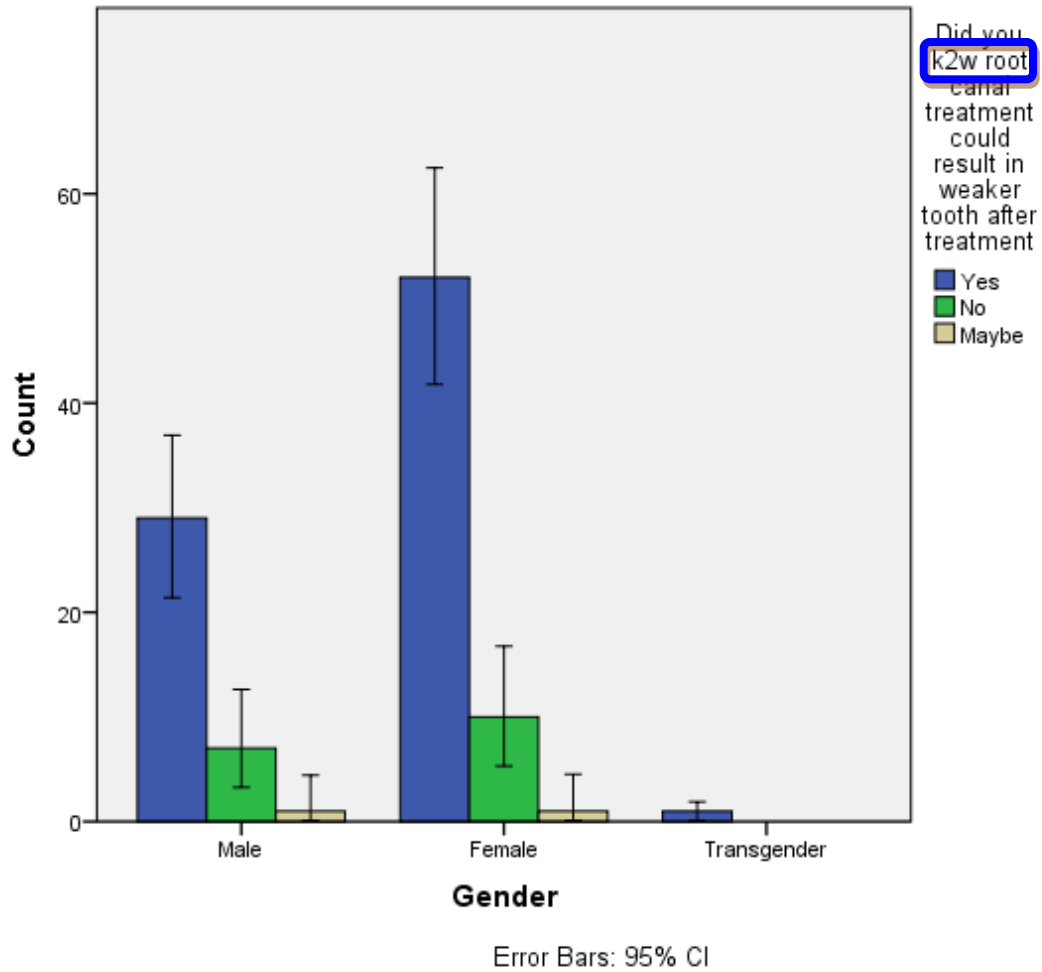
108 represents drinking water , and yellow represents chewing gum . The majority of the females

109 are into maintaining hygienic ways to root canal treatment. Pearson chi square test shows p value

110 is 0.269 (p value > 0.05) hence it is statistically not significant

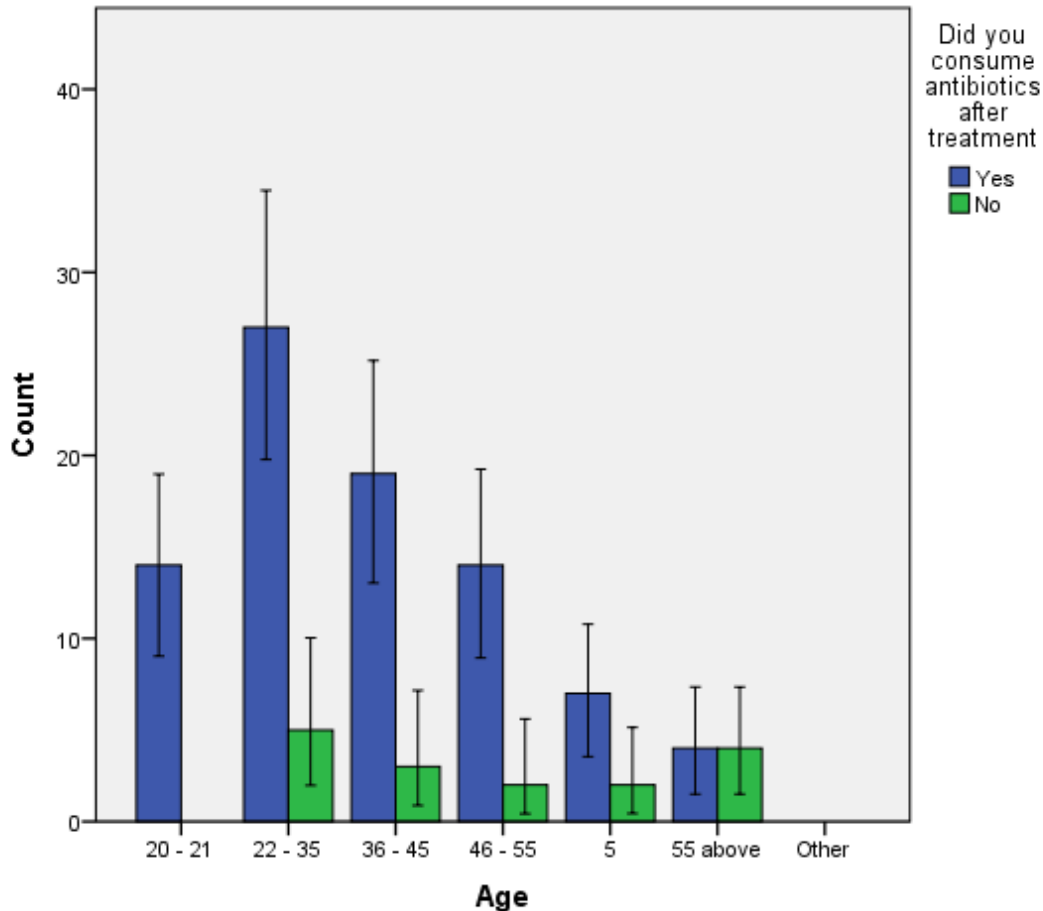
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Fig 4 shows a bar graph representing the association between gender and did you get a root canal treatment that could result in weaker teeth after treatment responses. x axis represents gender and the y axis represents the number of responses for the amount of overall activity . Blue represents yes, green represents no, and yellow represents maybe. The majority of the females are into did you root canal treatment could result in weaker teeth. Pearson chi square test shows p value is 0.032 (p value > 0.05) hence it is statistically significant



Error Bars: 95% CI

124  
 125 Fig 5 shows a bar graph representing the association between gender and did you get a root canal  
 126 treatment that could result in weaker teeth after treatment responses. x axis represents gender  
 127 and the y axis represents the number of responses for the amount of overall activity . blue  
 128 represents yes , green represents no , and yellow represents maybe .in the age group 22 - 35  
 129 years are into did u consume antibiotics after the treatment pearson chi square test shows p  
 130 value is 0.048(p value> 0.05) hence it is statistically significant

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134 **DISCUSSION :**

135 The branch of endodontics is a fast growing specialty with the availability of recent advances  
 136 including various tools used to treat infected teeth effectively and recent advances reducing the  
 137 time of treatment. The most common cause of seeking dental treatment is pain, for the alleviation  
 138 of which a root canal treatment might be carried out. People with high dental fear have more  
 139 probability to delay or avoid dental visiting, and a number of fearful people regularly cancel or  
 140 fail to show for appointment.

141 It has been noted that trying to manage patients with dental fear is a source of considerable  
142 stress for many dentists (31–34). In current study we found that the pain was the most important  
143 patients' concerns associated with root canal treatment (Figure 1-5).

144 The knowledge about endodontic treatment came from various sources including visit to the  
145 dental clinic, print and online media, friends and relatives. In addition, patients can benefit from  
146 many forms of local anesthesia, and the use of nitrous oxide, which according to recent reports,  
147 enhances the effect of their actions. Costs associated with endodontic treatment are still  
148 debatable. Patients often stress that they are too high but adequate to the complexity of the  
149 treatment. Nevertheless, more than half of respondents are willing to pay a higher amount to  
150 avoid tooth loss, similarly as in the previous study (31–33). The limitation of the study is having  
151 small sample size, hence the study further extend for large sample size and interpret, further  
152 scope of this study by having more data the proper assessment on advantages and disadvantages  
153 in before and after root canal treatment can be taken .

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## 155 **CONCLUSION**

156 From this study, it is concluded that patients underwent root canal treatment were aware about  
157 advantages and disadvantages of before and after the root canal treatment. So the present study  
158 might be helpful for people for better understanding the procedures of endodontic treatments.

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160 Ethical issue:

161 The study approved by Institutional Review Board, Saveetha Dental College and Hospitals, Saveetha  
162 Institute of Technical Medical Sciences.

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