Advantages and Disadvantages of Endodontic Management

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Authors’ contributions
This work was carried out in collaboration between both authors. Author FFA did the study designing, data collection, analysis interpretation and manuscript preparation. Author DP did the data verification, interpretation, correcting manuscript. Both authors read and approved the final manuscript.

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.
Results: The observed results in the present study were depicted in pie charts and results were analysed using SPSS.
Conclusion: The recent advances in endodontology 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.

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1. 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].

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

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

2. MATERIALS AND METHODS

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

Chart 1. 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, 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                          |
3. RESULTS

The present study has observed 32% are aged 22-35 years, 22% are aged 36-45 years, 14% are aged 20-22, 16% are aged 46-55 years, 9% are aged 5 and 8% are aged 55 above. Fig. 1. The present study observed that in Fig 2, did you expect outcome out of the treatment 78% yes 22 said no and 1% said maybe. Pearson chi square test shows p value is 0.269 (p>0.05) hence it is statistically not significant. Fig 3 shows a bar graph representing the association between gender and did you get a hygienic way for root canal treatment responses. The majority of the females are maintaining hygienic ways for cooperating with root canal treatment. It was supported by Pearson chi square test shows p value is 0.029 (p>0.05) which is significant (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. Pearson chi square test shows p value is 0.032 (p value> 0.05) hence it is statistically significant. Fig 5 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 Pearson chi square test shows p value is 0.048 (p value> 0.05) hence it is statistically significant.

4. DISCUSSION

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

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

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
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.

Fig. 3. Shows a bar graph representing the association between genders and did you get a hygienic way for root canal treatment responses. x axis represents gender and the y axis represents the number of responses for the amount of overall activity. Blue represents eating healthy, green represents drinking water, and yellow represents chewing gum. The majority of the females are into maintaining hygienic ways to root canal treatment. Pearson chi square test shows p value is 0.269 (p value>0.05) hence it is statistically not significant.
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.

Fig. 5. 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. In the age group 22-35 years are into did you consume antibiotics after the treatment. Pearson chi square test shows p value is 0.048 (p value > 0.05) hence it is statistically significant.
The knowledge about endodontic treatment came from various sources including visit to the dental clinic, print and online media, friends and relatives. In addition, patients can benefit from many forms of local anesthesia, and the use of nitrous oxide, which according to recent reports, enhances the effect of their actions. Costs associated with endodontic treatment are still debatable. Patients often stress that they are too high but adequate to the complexity of the treatment. Nevertheless, more than half of respondents are willing to pay a higher amount to avoid tooth loss, similarly as in the previous study (31–33). The limitation of the study is having small sample size, hence the study further extend for large sample size and interpret, further scope of this study by having more data the proper assessment on advantages and disadvantages in before and after root canal treatment can be taken.

5. CONCLUSION

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

CONSENT

As per international standard or university standard, respondents’ written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

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

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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