

**Original Article****Awareness and Knowledge of Root Canal Treatment: A Survey**

Authors

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**Abstract**

**Introduction:** Root canal treatment (RCT) is one of the most common endodontic procedures for which patient visit the dentist. It is very important to know about the knowledge of RCT.

**Methods:** Multiple choice questionnaires regarding knowledge of root canal treatment was distributed to 65 patients in the community. Among them 35 males and 30 female were participated. The data were collected and analysis was performed using SPSS using descriptive statistics.

**Results:** Among 65 patients, 31 were female and 34 were male. Various knowledge and practice based questions where male of the respondents 70.6% had the known about RCT and 64.5% of female know about it. 50.5% of male came to know about it through nearby clinic and secondly from relatives and friends. 22.6% female and 20.6% of male immediately seek for treatment. Most of the male respondents chose RCT over extraction.

**Conclusion:** Knowledge and awareness about the RCT can conserve the teeth from extraction.

**Keywords:** Endodontic pain, Knowledge, Root canal Treatment.

**Introduction**

Endodontics is the branch of dentistry that deals with diseases of the tooth root, dental pulp, and surrounding tissue in human. As oral health-care negligence leads to progression of dental caries to reach the pulpal space, indicating root canal treatment (RCT).<sup>1</sup> It is a profession based on the work with other people, so several factors should be considered during clinical decision-making process. RCT is deferred by the patient due to pain and duration of treatment that may affect the decision making when it comes to treatment planning, these include the patient's socioeconomic status,

patient's commitment to treatment, attitude and behaviour, and the patient's own preference.<sup>2</sup>

Dental pain is the commonest reason observed among patients for the relief of which they pursue necessary treatment, which primarily includes root canal treatment (RCT) and extraction of the diseased.<sup>3</sup> Extraction of the tooth may lead to a chain of events such as causing the adjacent or opposing teeth to shift, affect the masticating ability and harm the natural smile and aesthetics of the patient.

Awareness and understanding of patients regarding the endodontic treatment are relatively

few. Patients' awareness and knowledge of the endodontic treatment is a very important issue in everyday dental practice. It influences significantly the course and effects of treatment.<sup>4</sup> so the main aim of this study is to evaluate the knowledge of root canal treatment among the community of Kathmandu.

### Materials and Methods

Questionnaire surveys were conducted in a group of 65 patients in the community of Thamel area. The inclusion criterion for the study was patients over the age of eighteen years, who agreed to participate in the survey. Among them 35 males and 30 female were participated The questionnaire

comprised multiple-choice questions ranged from questions relating to knowledge and awareness of patients about endodontic treatment, their impression and experience regarding root canal treatment, pain history, choice of treatment, home remedies, the criteria for selection of dental persons and office, and patients concerns to the endodontic therapy. The data were collected and analysis was performed using SPSS using descriptive statistics.

### Results

Total of 65 individual in the community where 34 were male and 31 were female above the age of 18 years.

**Table 1:** Do you know about Root canal treatment?

Regarding the question if they know what RCT is? 64.5% female and 70.6% male had an idea about root canal treatment.

Question 1	Female	Percentage (%)	Male	Percentage (%)	p-value
Yes	20	64.5%	24	70.6%	0.601
No	11	35.5%	10	29.4%	
Total	31	100.0%	34	100.0%	

**Table 2:** Where did you come to know about RCT?

Q2	Female	Percentage (%)	Male	Percentage (%)	p-value
Internet	7	22.6%	9	26.5%	0.273
Dental clinic	11	35.5%	17	50.0%	
Relatives/friends	13	41.9%	8	23.5%	
Total	31	100.0%	34	100.0%	

Most of the participants came to know about RCT from nearest dental clinic of the area.

**Table 3:** After what duration of pain have you reported for treatment?

Q3	Female	Percentage (%)	Male	Percentage (%)	p-value
Immediately	7	22.6%	7	20.6%	0.935
within 1-3 weeks	10	32.3%	9	26.5%	
1 month	6	19.4%	8	23.5%	
Not experienced RCT	8	25.8%	10	29.4%	
Total	31	100.0%	34	100.0%	

**Table 4:** Have you used home remedies for relieving pain?

Q4	Female	Percentage (%)	Male	Percentage (%)	p-value
Yes	17	54.8%	13	38.2%	0.403
No	7	22.6%	10	29.4%	
Not experienced RCT	7	22.6%	11	32.4%	
Total	31	100.0%	34	100.0%	

This showed that most of the people first prefer to go with home remedies before visiting the dentist.

**Table 5:** Do you prefer RCT over extraction?

Q5	Female	Percentage (%)	Male	Percentage (%)	p-value
RCT	13	41.9%	20	58.8%	0.174
Extraction	18	58.1%	14	41.2%	
Total	31	100.0%	34	100.0%	

Most of the female respondents 58.1% prefer extraction over RCT whereas 58.8% of male prefer RCT.

**Table 6:** Do you prefer general practitioner or specialist to perform RCT?

Q6	Female	Percentage (%)	Male	Percentage (%)	p-value
Specialist	8	25.8%	11	32.4%	0.562
General Practitioner	23	74.2%	23	67.6%	
Total	31	100.0%	34	100.0%	

Many respondents prefer general practitioner over the specialist to perform their RCT.

## Discussion

In modern era of endodontics, there have been many new technology and concept developed in this field. The level of patients' knowledge and awareness regarding root canal treatment may influence their decision-making and choice; it may be obstacle to get the treatment.

It has been investigated that race/ethnicity is a marker for oral health status, and underlying cultural beliefs and practices influence the condition of the teeth and mouth, through diet, care seeking behaviours, use of home remedies or attitudes towards and patterns of use of health services,<sup>5</sup> so another survey-based research in a sample of Saudi population aims to assess the awareness, behaviour and attitude of patients regarding endodontic treatment.<sup>6</sup>

It has been investigated that race/ethnicity is a marker for oral health status, and underlying cultural beliefs.

In this study, 44 respondents out of 65 know about the root canal treatment whereas rest of the patient had no idea about the treatment. Sisodia et al reported that 52% of the patients were familiar with the term root canal treatment (Sisodia N et al, 2015), while Habib et al stated that 25.3% of the respondents had no knowledge about the treatment, whereas, 21.7% of the respondents knew a lot. In the present study, teenagers (85.9%) followed by middle aged individuals (85.59%) knew about root canal procedure. The knowledge about endodontic treatment came from various sources including visit to the dental clinic, media,

friends and relatives. It was demonstrated by Doumani et al that only 7% of the respondents gained knowledge from the media (Parikosh M et al, 2015). According to the survey conducted by Sisodia et al, 52% patients gained knowledge about the treatment through their relatives and friends.<sup>1</sup>

This study showed that most of the patients came to know about the root canal treatment through nearby dental clinic and secondly by friends and family. Similarly Doumani et al had the result of 7% of the respondents gained knowledge from the media.<sup>7</sup> According to the survey conducted by Sisodia et al, 52% patients gained knowledge about the treatment through their relatives and friends.<sup>1</sup>

54.8% of female and 38.2% of male in this study opted for home remedies alternative to treatment. Similarly another one study shows that the subjects who were unaware of the specialized treatment reported the use of home remedies for relieving pain which comprised of use of clove oil, balm application, self-medications and heat pack application.<sup>8</sup>

Here, in this study most of the female 58.1% prefer extraction over RCT whereas many male respondents prefer RCT. In another study, the female of the population deferred from dental treatment as the result of socio economic condition and education.<sup>9</sup>

Present study showed that most of the population preferred general practitioner over the specialist for their RCT which could be the result of less

knowledge and awareness about the dental treatment. In contrary to this, Iqbal et al in their cross sectional study concluded that patients choose the dental service provider based on professional experience, staff courtesy and friendly environment.<sup>10</sup>

### Conclusion

Knowledge and awareness of patients regarding root canal treatment in the community about root canal treatments are different among male and female respondent. This type of survey can be undertaken with large number of population and different places of Nepal which can provide the large volume of data and results.

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