

Evaluation of Knowledge and Practice of Root Canal Treatment in Kashmir Province

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Abstract

Original Research Article

Aim: To determine the knowledge about practice of root canal treatment among university students of Kashmir province. **Materials and Methods:** A self-administered questionnaire prepared in Urdu and English was circulated among 400 participants who consented to participate in the survey. Participants were divided into two groups – Group 1 (Age 18-22yrs) and Group 2 (22-26yrs) students. Pearson Chi-square test was used to analyze the data. **Results:** Data sheets were received from 300 participants only. Most participants, irrespective of the group, visit dentists only on the appearance of pain (80% and 82.8%, respectively). Substantial number of participants had a history of RCT (27.7% and 32.2%, respectively). However, majority of the participants (68.7% from either group) mentioned that they would opt for RCT in the future despite the slightly negative experience of the past. **Conclusion:** University students are reasonably well informed about RCT.

Keywords: university students, knowledge, root canal treatment.

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INTRODUCTION

Science of endodontics has become very predictable and successful as evident from the prognosis that is often quoted as high as 95% [1]. Once the pulp becomes inflamed or infected, root canal treatment (RCT) or extraction is necessary to remove the affected tissue and restore the area back to health. Hence, as long as the tooth is restorable, RCT should be the first choice to save a bad tooth, but unfortunately that is often not the case. Endodontics is largely evidence based as it should be but several nonclinical factors influence patient's treatment decision. Some of the factors examined in the past studies include patient's socioeconomic status, level of education, perspective about quality of life and health, expectations, and objective or subjective past dental experiences [2]. Some of these factors as well as misconceptions about the procedure are often cited as reasons for people opting out of RCT. Thus, these factors dictate the opportunities availed by the patients and also the challenges faced by the clinician as he works hard at convincing patients about the benefits of the treatment. Today, most patients are expected to be well informed and aware of the opportunity provided by endodontics so that they take treatment decisions considering the risk-benefit ratio [3]. There have been several studies in the past surveying the knowledge and

practice of root canal among different populations [3-5]. Hence, the prime objective is to determine the knowledge and practice of RCT among University students of Kashmir province India.

MATERIALS AND METHODS

University students from various colleges studying in different colleges of Kashmir province were selected. The students were provided with a detailed questionnaire regarding the knowledge of RCT. A total of 300 participants submitted the completed questionnaire. Participants were divided into two groups corresponding to age. Group 1 (age 22-26 yrs) and group 2 (age 18-22). Data was collected and this data collected was then fed into Excel sheets and statistically analyzed using Pearson Chi-square test using SPSS Statistics Version 20.0 with confidence level set at 5% to test for any significance. $P < 0.05$ was considered as statistically significant.

RESULTS

Of the 300 students who completed the survey, 40% were in Group 1 and 60% were in Group 2. A vast majority, 80% of Group 1 and 78.8% of Group 2 revealed that they visit dentist only after the appearance of pain. 11% and 12.9%, respectively, sought the dentist's help to improve their appearance.

Only 7% and 7.3% from the respective groups went for regular periodic checkup [Figure 1]. Nearly 58.7% of Group 1 and 49.5% of Group 2 knew about RCT. Significant difference was found between the two groups ($P < 0.01$). The main source of information about RCT across the groups was internet, especially social media and the second best source of information was friends and relatives ($P < 0.001$) [Figure 2]. Nearly 45% of Group 1 and 44% of Group 2 knew that their

tooth could be saved by RCT [Figure 3]. Significantly, 15% and 11.5%, respectively, thought RCT may be needed sometimes even when tooth is asymptomatic ($P < 0.01$) [Figure 4]. About 51.3% and 50.3%, respectively, preferred RCT and 56% and 62% believed that they may have to visit the dentist 2–5 times to complete RCT 42.7% Group 1 and 24.2% from Group 2 had at least 1 root canal treated tooth ($P < 0.01$).

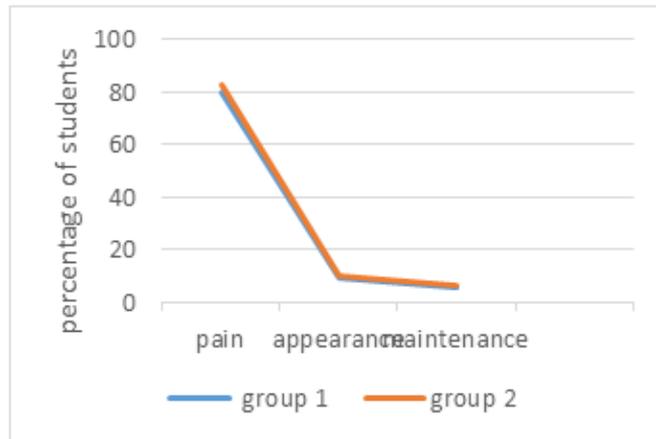


Fig-1: Reasons for visiting the dentist across the two groups

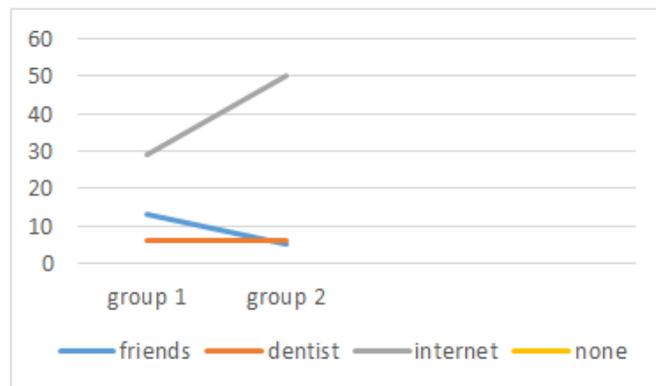


Fig-2: Source of first information about root canal treatment in the Two groups

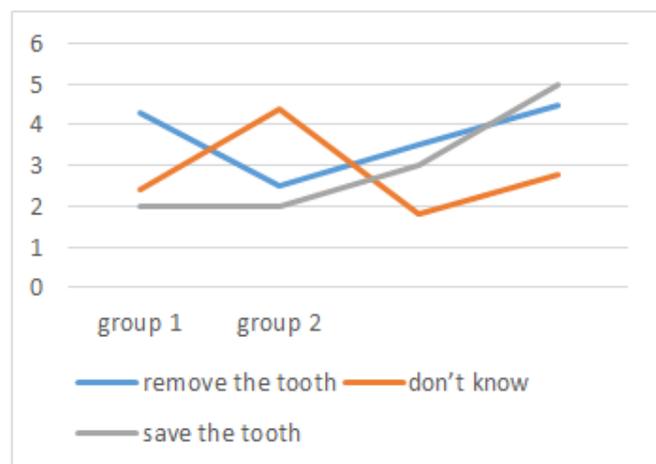


Fig-3: Level of basic knowledge of root canal treatment in the Surveyed groups

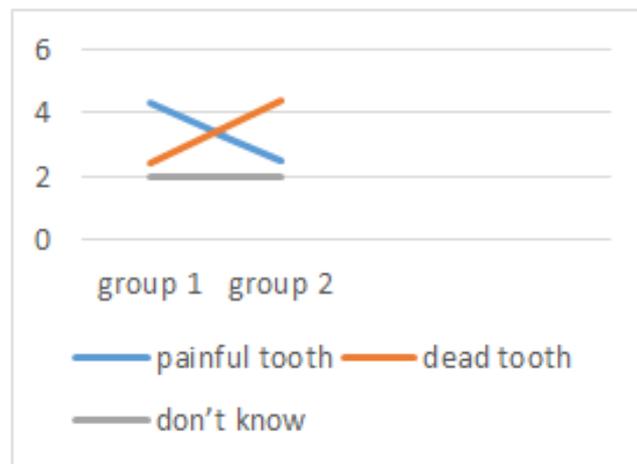


Fig-4: Representation of when the participants think root canal Treatment is done

DISCUSSION

World health organization has declared health services as a basic human right [6]. Providing it, overcoming all sociocultural and behavioral barriers is considered to be the duty of all the governments [7]. Paucity of funds can be a dampener for most of the third world countries, forcing the governments to seek active collaboration with the private sector. RCT saves teeth and unquestionably improves the quality of life [8]. Patient's treatment decisions are strongly influenced by his social, psychological, and behavioral factors such as education, financial status, attitudes, beliefs, and preferences [9]. Studies in the past had highlighted the need to provide more information about the advantages of retaining natural teeth [4]. Our study being the first to be undertaken in the Kashmir Province was an earnest attempt at gathering information on the prevalent situation in the area. University students were selected for the survey due to their accessibility. Several studies in the past. Armfield and Heaton, 2013 stated that people with higher education levels are highly motivated in life and pursue healthy lifestyles and are more likely to take positive health decisions. These people are more adept at handling the anxiety factor too [10]. In our study, irrespective of the education status, both age group students approached dentist only on the appearance of pain. Across the groups, we also found that regular maintenance visit was barely practiced. Participants from both groups knew about RCT, It was subsequently revealed that most of the participants got their first information about RCT from the media (39.3% and 51.6%), especially the internet. This was also true in the case of two studies, Sisodia *et al.* [4] and Doumani *et al.* [5]. The second most common source of information is friends and relatives, followed by dentists. This is also in agreement with the findings of the past study [6]. As stated earlier, most of the participants approached the dentist for RCT on appearance of pain. After appearance of pain treatment options available is root canal and preservation of tooth,

extraction without replacement and extraction with subsequent replacement. Often patients opt for the extraction only option because of the lowest initial cost factor. However, tooth loss is often associated with significant issues, the most serious being its psychosocial impact. Physiologic impact may be relatively minor, but surgical complications, complicated healing, and its sequelae are imminent. Vigorous well-planned awareness campaigns highlighting the advantages of retaining natural teeth could be organized by dental associations.

CONCLUSION

Students of the age group 22–26 years are reasonably informed about RCT. However, they need to be made aware of the benefits of regular, periodic dental checkup in saving their teeth. Comparatively, more students of the age group 18–21 years are aware of the treatment modalities in endodontics

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