

A Comparison of Fear Levels of Endodontic Treatment in Kashmiri Population.

Ajmal Mir¹, Mohd Sajad², Salman Khursheed³, Salman Murtaza⁴

¹Registrar, Department of Conservative Dentistry and Endodontics, Govt. Dental College and hospital, Shireen bagh, Kashmir, J&K, India.

²Tutor, Department of Conservative Dentistry and Endodontics, Govt. Dental College and hospital, Shireen bagh, Kashmir, J&K, India.

³Dento Vision Dental Centre, Private practice, Kashmir, J&K, India.

⁴Private practice, Anantnag, Kashmir, J&K, India.

Received: April 2019

Accepted: April 2019

Copyright: © the author(s), publisher. It is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Dental fear is defined as the patient's specific reaction towards stress related to dental treatment in which the stimulus is unknown. Aim of the study: To analyze the causative factor of fear during endodontic treatment. **Methods:** A simple random sampling technique was used for the study and a sample size of 141 patients with an age group of 12-65 years, attending outpatient the Department of Operative Dentistry. The survey done was based on 5 questionnaires before and during endodontic treatment. **Results:** The percentage of the females was 55% while the males were 45% of the patients attending dental office, 57% of the patients were found not afraid of attending dental office, 62% of the patients were found afraid of seeing the anesthetic needle, 59% of the patients were feeling pain during removal of pulp, 55% of the patients were found not afraid of sensation of file introduced in the canal, and 57% of the patients experienced unpleasant taste of endodontic materials. **Conclusion:** The present study concluded that seeing the anesthetic needle, feeling pain during removing the pulp and experiencing the unpleasant taste of endodontic materials were the most causative factors respectively for the fear of endodontic treatment.

Keywords: Dental Fear, Endodontic.

INTRODUCTION

Dental fear and anxiety are defined as a patient's specific reaction towards stress related to dental treatment in which the stimulus is unknown.^[1,2] It is a widespread problem that persists despite scientific advances that made dentistry less painful. Recognition of a patient's dental anxiety helps in provision of the vital information for a dental surgeon in shaping up a patient-dentist relationship. Dental phobia is the most intense form of pain.^[3,4] Dental pain among other things related to the emotional state of the patients. Other factors that influence the experience of pain are age, gender, oral health, the frequency of dental visits, socio-economic status and the dentist's way of dealing with the patients.^[5] Despite the progress in the way of conducting dental procedures and methods of pain control, most patients described a visit to the dentist as a painful and unpleasant experience.^[6,7] Dental fear appears to vary

according to the type of treatment. Periodontal or endodontic treatment has been shown to cause a higher level of fear than restorative or prophylactic treatment.^[8,9] Anticipation and experience of root canal associated pain is a major source of fear for the patient and a very important concern of dentists. Pretreatment, treatment and post-treatment pain is anticipated, experienced, remembered and shared by patients. The pain of endodontic origin is widely feared by the public.^[10,11]

Root canal procedures are commonly believed to be the most painful dental treatment but only 17% of subjects experiencing root canal treatment described it as their most painful dental experience.^[12,13] Accurate knowledge of pain prevalence and severity associated with pulpal or peri-radicular disease and its diminution by root canal treatment has the potential to change the attitudes of the public, dentists and other healthcare professionals thus, allowing more natural teeth to be retained. Dentists could be better guided by the best evidence in making anesthesia and pain management treatment decisions.^[14,15]

MATERIALS AND METHODS

A simple random sampling technique was used for the study and a sample size of 141 patients aged 12-65 years attending outpatients the Department

Name & Address of Corresponding Author

Dr. Mohd Sajad,
Tutor, Room no 600,
Department of Conservative Dentistry and
Endodontics, Govt. Dental College and hospital,
Shireen bagh, Kashmir, J&K, India. Pin code: 190010.

of Operative Dentistry, Govt Dental College Srinagar. The percentage of females was 55% while the percentage of males was 45%. The survey done was based on 5 questionnaires. The first questionnaire was “are you having fear of attending dental office?” The second questionnaire was “are you having fear of seeing the anesthetic needle?” The third questionnaire was “are you having fear of feeling pain during removing the pulp?” The fourth questionnaire was “are you having fear of sensation of files introduced into or worked in a root canal?” The fifth questionnaire was “are you having fear of the unpleasant taste of endodontic materials?” Data were presented using descriptive statistic.

RESULTS

Total 57% of the patients were found not afraid of attending the dental office while 43% of the patients were afraid. Around 62% of the patients were found to be afraid of seeing the anesthetic needle while 38% of the patients were not. Total 59% of the patients were found to be afraid of feeling pain during removal of the pulp while 41% of the patients were not. About 55% of the patients were found not afraid of the sensation of file introduced in the canal while 45% of the patients were found afraid. Total 57% of the patients were found to be afraid of the unpleasant taste of endodontic materials while 43% of the patients were not afraid [Table 1].

Table 1

The percentage of fear of endodontic treatment Variables	Yes	No
Are you having fear of attending dental office?	43%	57%
Are you having fear of seeing the anesthetic needle?	62%	38%
Are you having fear of feeling pain during the removal of the pulp?	59%	41%
Are you having fear of sensation of file introduced into or worked in a root canal?	45%	55%
Are having fear of unpleasant taste of endodontic materials?	57%	43%

DISCUSSION

As dental professionals, we know how people feel about root canals, most of these feelings are based on an unfounded preconception about the procedure. Even though root canal therapy can usually be performed with a minimum of discomfort, many patients express apprehension

concerning therapy before the start of treatment.^[16] Our patients often tell us that they are afraid of getting a root canal because of the pain they expect to experience and they also believe that recovery times for a root canal are lengthy, neither of these is true: today, a root canal is about as ‘intense’ as filling a cavity. Furthermore, your root canal recovery time is relatively short and is characterized by tenderness around the tooth that was treated (this can be treated with over the counter pain relievers). Psychological stress peaks early in an RCT appointment around the time of local anesthesia delivery and initial instrumentation.^[17,18] In our study, 62% of the patients were afraid of seeing the anesthetic needle and agrees with Ali, et al.^[19] Dental patients have become increasingly less tolerant of any dentist or dental procedure that causes pain. In our study, 59% of the patients were afraid of pain during removal of the pulp so offering adequate local anesthesia is essential for successful patient management and represents a practice-building strategy that increases both patient loyalty and treatment acceptance. Endodontic pain management must encompass all aspects of treatment preoperative pain control includes accurate diagnosis and anxiety reduction; intra-operative pain control revolves around effective local anesthetic and operative techniques and post-operative pain management can involve a variety of pharmacological agents.^[18] The root canal treatment in teeth with irreversible pulpitis was more painful than that in teeth with normal or necrotic pulp.^[20] In our study, 57% of the patients are afraid of the unpleasant taste of endodontic treatment to decrease that feeling we can use the rubber dam. Rubber dam protects the patient’s oropharynx from the possible aspiration or swallowing of the instruments, medicaments, irrigating solution and tooth material debris.^[21] So that rubber dam reducing flooding of the oral cavity with fluid especially those with unpleasant taste ‘i.e sodium hypochlorite (NaOCl)’.^[21] Irrigation with sodium hypochlorite should be accompanied by isolation of the operating field with a well-fitting rubber dam.

CONCLUSION

In order to minimize patient’s fear from endodontic treatment, the management must encompass all aspects of treatment preoperative pain control which includes accurate diagnosis and anxiety reduction. Using sufficient anesthetic solution to control the pain. And always use rubber dam during endodontic treatment to minimize the unpleasant taste because rubber dam ensures that it maintains a tight seal against the tooth and gingiva and endodontic medicament.

REFERENCES

1. Jaakkola, S., et al. "Dental fear: one single clinical question for measurement." *The Open Dentistry Journal*, Vol. 3, 2009, p. 161.
2. Humphris, Gerry M., Tom A. Dyer, and Peter G. Robinson. "The modified dental anxiety scale: UK general public population norms in 2008 with further psychometrics and effects of age." *BMC Oral Health*, Vol. 9, No. 1, 2009, p. 20.
3. Van Wijk, A. J., and J. Hoogstraten. "Experience with dental pain and fear of dental pain." *Journal of Dental Research*, Vol. 84, No. 10, 2005, pp. 947-50.
4. Maggiri, J., and David Locker. "Psychological factors and perceptions of pain associated with dental treatment." *Community Dentistry and Oral Epidemiology*, Vol. 30, No. 2, 2002, pp. 151-59.
5. Hagglin, Catharina, et al. "Factors associated with dental anxiety and attendance in middle-aged and elderly women." *Community Dentistry and Oral Epidemiology*, Vol. 28, No. 6, 2000, pp. 451-60.
6. Donaldson, D. "Anxiety: its management during the treatment of the adolescent dental patient." *International Dental Journal*, Vol. 32, No. 1, 1982, pp. 44-55.
7. Stabholz, Ayala, and Benjamin Peretz. "Dental anxiety among patients prior to different dental treatments." *International Dental Journal*, Vol. 49, No. 2, 1999, pp. 90-94.
8. Wong, Marston, and W. Reed Lytle. "A comparison of anxiety levels associated with root canal therapy and oral surgery treatment." *Journal of Endodontics*, Vol. 17, No. 9, 1991, pp. 461-65.
9. Georgelin-Gurgel, Marie, et al. "Surgical and nonsurgical endodontic treatment-induced stress." *Journal of Endodontics*, Vol. 35, No. 1, 2009, pp. 19-22.
10. Watkins, Catherine A., Henrietta L. Logan, and H. Lester Kirchner. "Anticipated and experienced pain associated with endodontic therapy." *The Journal of the American Dental Association*, Vol. 133, No. 1, 2002, pp. 45-54.
11. Wong, Marston, and W. Reed Lytle. "A comparison of anxiety levels associated with root canal therapy and oral surgery treatment." *Journal of Endodontics*, Vol. 17, No. 9, 1991, pp. 461-65.
12. Phillips, B, Ball, C, Sackett, D, et al. "Levels of evidence." Oxford Centre for Evidence-Based Medicine, 2010.
13. Stroup, Donna F., et al. "Meta-analysis of observational studies in epidemiology: a proposal for reporting." *JAMA*, Vol. 283, No. 15, 2000, pp. 2008-12.
14. Hargreaves, Kenneth M., and Karl Keiser. "New advances in the management of endodontic pain emergencies." *Journal of the California Dental Association*, Vol. 32, No. 6, 2004, pp. 469-73.
15. Dummer, P. M. H., R. Hicks, and D. Huws. "Clinical signs and symptoms in pulp disease." *International Endodontic Journal*, Vol. 13, No. 1, 1980, pp. 27-35.
16. LeClaire AJ, Skidmore AE, Griffin JA, Balaban FS. Endodontic fear survey. *J Endod*. 1988;14(11):560-564.
17. Morse, D. R., and E. Chow. "The effect of the Relaxodont brain wave synchronizer on endodontic anxiety: evaluation by galvanic skin resistance, pulse rate, physical reactions, and questionnaire responses." *International Journal of Psychosomatics: Official Publication of the International Psychosomatics Institute*, Vol. 40, No. 1-4, 1993, pp. 68-76.
18. Ali, Saqib, et al. "Self-reported anxiety of dental procedures among dental students and its relation to gender and level of education." *Journal of Taibah University Medical Sciences*, Vol. 10, No. 4, 2015, pp. 449-53.
19. Gorduysus, M. Ömer, and Melahat Görduysus. "Endodontic patient profile of Hacettepe University, Faculty of Dentistry in Ankara, Turkey." *International Dental Journal*, Vol. 50, No. 5, 2000, pp. 274-78.
20. Ingle, JI, Walton, RE, Malamed, SF, et al. "Preparation for endodontic treatment." Hamilton: BC Decker Inc, 2002, pp. 394-403.
21. Saunders, W. P., I. G. Chestnutt, and E. M. Saunders. "Endodontics: factors influencing the diagnosis and management of teeth with pulpal and periradicular disease by general dental practitioners. Part 2." *British Dental Journal*, Vol. 187, No. 10, 1999, p. 548.

How to cite this article: Mir A, Sajad M, Khursheed S, Murtaza S. A Comparison of Fear Levels of Endodontic Treatment in Kashmiri Population. *Ann. Int. Med. Den. Res.* 2019; 5(3):DE31-DE33.

Source of Support: Nil, **Conflict of Interest:** None declared