

A Survey of Endodontic Practice among the Dental Practitioners in Kashmir

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ABSTRACT

Background: To investigate and access the pattern of routine endodontic practice among the Dental practitioners in the Kashmir province. **Methods:** A survey was conducted in the form of a questionnaire and circulated among 334 dental practitioners through email. The response was collected, accumulated and analysed statistically. **Results:** A total of 178 (53%) dentists responded to the questionnaire that was emailed to them. 63% practitioners were males and only 37% were females. Only 10% of dental practitioners used isolation method as rubber dam. 56% of the dental practitioners were skilled in rotary endodontics. 70% of the practitioners used conventional ZOE sealer for obturation. **Conclusion:** Current qualitative endodontic guidelines in the established countries differ a lot as compared to the dental practise in this region. There is a shortage of endodontic equipments and materials in Government hospitals or public dental offices. Private dental offices are at much better positions. More of the innovations, latest concepts and techniques need to be incorporated into the dental practice of the dentists in Kashmir.

Keywords: Dental Practitioners, Endodontic.

INTRODUCTION

The basic objective of an endodontic treatment is to establish the functional status of the teeth in the arch. The endodontic triad consisting of the biomechanical preparation, microbial control and complete obturation of the canal space remains the basis of the endodontic therapy. However, unless access to the canal orifices and apical foramina are not done properly, achieving the goals of the triad will be difficult and time consuming. The ultimate goal to endodontic treatment is to create an environment in which the body can heal itself. It is achieved by effective cleaning and shaping of the root canal system thus ascertaining the disinfection and an impermeable fluid tight seal apically and coronally.

Technically what confronts a clinician is the complex Root Canal System as in; identification and enlargement of all canals without procedural

errors, maintaining precise working length, determining the correct preparation size for adequate irrigation and adequate obturation. Several new instruments, materials and techniques have been developed in order to deal with these endodontic procedural issues.^[1] Furthermore, the concepts and treatment protocols has been changing with these innovations.^[2] The past 10-15 years have altered the way of endodontic practice. Contemporary endodontics specially encompasses rubber dams, flex nickel-titanium files with rotary engines and apex locators. These innovations have made it straight forward for the practitioner to override the the challenges,^[1] thus saving time and providing qualitative and comfortable treatment to the patient as compared to a decade ago.

Existing literatures reveal variability in the compliance with the standard endodontic guidelines among the dental practitioners around the globe.

With increasing number of dentists in and around the province of Kashmir. We decided to carry out the study to know how much innovative endodontic practice is actually being practiced in this region.

MATERIALS AND METHODS

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This study was a questionnaire based survey, with the survey sample of 334 dental practitioners mostly from the region of Srinagar and other parts of Kashmir province. The questionnaire was closely related to endodontics and was sent through the email to the dentists. Out of 334 emails sent, only 178 practitioners responded back to the questionnaire. This study was conducted between the months of January - March.

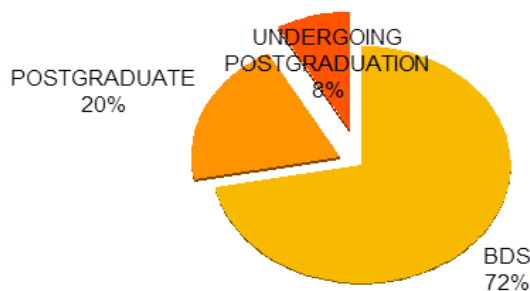
The questionnaire was divided into two sections. -Sections 1 asked about the personnel details of the practitioners i.e. gender, graduation year, undergraduate or postgraduate.

-Section 2 asked practitioners about the clinical procedure and methods they employed in their dental practice.

The data was collected, accumulated and well calculated in the forms of percentage, graphs, pie charts etc using statistics.

RESULTS

A total of 178 (53%) dentists responded to the questionnaire that was emailed to them. 63% practitioners were males and only 37% were females. Majority of the respondents (72%) were possessing the highest qualification of B.D.S and rest 28% were either postgraduate dentists or were undergoing their post graduation programme yet to be completed. 56% of dentists had less than 3 years of experience and 15% of dentists had less than 5 years of experience and rest 29% of the respondents had more than 5 years of experience. Only 14% of the respondents were endodontists. Rest were general practitioners.



Management of Emergency

Out of 53% respondents, 49% stated that they preferred pulpectomy and medications. 30% preferred antibiotic therapy. 8% preferred only pulpectomy and 13% preferred extraction.

Instruments

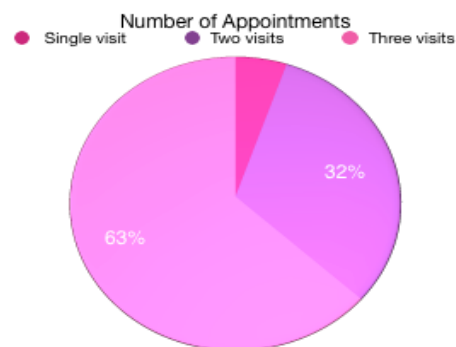
39% respondents used reamers and files. 28% used files. 15% used reamers alone. 7.5% used Hedstrom. 5.5% Used reamers, files and Herstrom. Only 5% used endodontic handpiece.

Management of Lesions Larger Than 10mm

5% of respondents choose only RCT. 5% for opt for only apical surgery. Mostly 64% prefer RCT and apical surgery both. 10% refer the cases. Remainder prefer extraction.

Rotary Endodontic Skill

56% of the dentists with highest qualification B.D.S responded that they were skilled enough to practice rotary endodontics, out of which 68% had participated in hands-on courses to become skilled and rest stated that they graduated with adequate knowledge. Rest 44% practiced conventional methods. 95% of the endodontists practiced rotary endodontics.



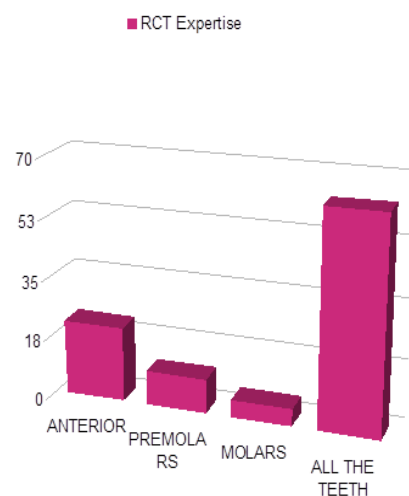
Methods of isolation

90% of the respondents do not used rubber dam for isolation. When asked why? 50% responded its expensive. 44% responded its technique sensitive. Rest stated its time consuming.

Only 40% of the endodontists used rubber dam. When asked about the preferences of isolation method 90% preferred cotton rolls isolation and rest preferred saliva ejectors.

RCT Expertise

22% of the practitioners were well skilled in RCT of anterior teeth. 10% in premolars and 5% in molars. 63% were skilled in all the teeth.



Choice of sealers

70% of the general practitioners used conventional ZOE sealer. Remainder used resin based sealer.

Obturation Method	
Lateral condensation	76%
Vertical condensation	4%
Single cones	17%
Other	3%

Advice RCT

70% of the general practitioners advice RCT self. 23% respondents consulted endodontists. 7% advised on the basis of referral cases.

DISCUSSION

The 53% respondents in this study were the dentists who were able to provide the valuable answers to the questionnaire. However the questionnaire prepared could not be specific to a particular issue, but still did provide us the information regarding the kind of endodontic practice going on, in the region of Kashmir. The dentists involved in the survey were mostly working in the government hospitals or working in the private dental offices. Mostly the response of the dentists working in the Government Hospitals was that there is a dearth of pre requisites equipments and materials for good contemporary endodontic practice. This study had a very low survey sample, indeed we had even sent remainder email also for positive response. Overall our study was closely related to the endodontic practice being carried out by the practitioners in Kashmir.

About the isolation method according to the European Society of Endodontology (ESE), endodontic treatment should be carried out only when the tooth is isolated by rubber dam.^[3] Rubber dam minimizes the risk of aspiration or inhale of instruments and also reduces flooding of irrigants to the oral cavity. Besides these, it improves visibility of operating field and protects dentist from contaminated aerosols.^[4] In our study not more than than 10% dental practitioners used Rubber dam. In our study most of the practitioners were general dentists, only 14% were endodontists. 28% in total respondents were postgraduate(8% undergoing postgraduation).

Mostly root canal treatment was found to be done in multiple appointments. Single and multiple visit endodontic treatment has been a debate topic in recent years.^[5] The healing rate of single and multiple visit root canal treatment were similar for infected teeth in a published systematic review.^[6] Also that study revealed , pain was lower in single visit treatment as compared to multiple visit root canal treatment.^[7]

CONCLUSION

There is a lot of difference between the laid down contemporary quality guidelines of endodontics established in any other country and what is being practised in this region. More emphasis needs to be given to the latest approaches of endodontic procedures and techniques, thus more perfusion of modern innovations into practice. The need to improve on innovative endodontics seemed to be a common opinion among all the dentists.

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