



ASSESSING PATIENT SATISFACTION LEVELS WITH VARIOUS ASPECTS OF ENDODONTIC TREATMENT, INCLUDING PAIN MANAGEMENT, TREATMENT OUTCOMES, COMMUNICATION WITH THE ENDODONTIST, AND OVERALL EXPERIENCE

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Abstract

Objective: This study aimed to assess patient satisfaction levels with various aspects of endodontic treatment, including pain management, treatment outcomes, communication with the endodontist, and overall experience.

Methods: A total of 300 patients who had undergone endodontic treatment participated in the study, with a sample consisting of 54% females and 46% males, ranging in age from 18 to 70 years (mean age = 42.6 years). The prevalence of pre-treatment pain was evaluated, with the majority of participants (68%) reporting moderate to severe pain and 32% reporting mild or no pain. Pain management, treatment outcomes, communication with the endodontist, and overall experience were assessed using self-report measures. Demographic factors, including age and gender, were analyzed for their impact on satisfaction levels.

Results: The study findings revealed that 82% of participants reported effective pain management during the endodontic treatment. Of these, 67% experienced minimal to no pain, while 15% reported mild discomfort that was easily manageable. However, 18% of participants still experienced moderate to severe pain, suggesting the need for improvement in pain management strategies. Overall, 86% of participants expressed satisfaction with the outcomes of their endodontic treatment, with 72% reporting a significant reduction in pain. Additionally, 88% of participants were satisfied with the appearance of their treated tooth, indicating positive aesthetic outcomes. Effective communication with the endodontist was reported by 92% of participants, who felt that the treatment plan, procedures, and potential risks were adequately communicated.

Conclusion: The study demonstrates the importance of effective pain management, positive treatment outcomes, and communication between patients and endodontists in achieving high levels of patient satisfaction with endodontic treatment. The findings highlight the need for continued improvements in pain management strategies and emphasize the significance of clear communication and comprehensive explanations by the endodontist. Overall, the study suggests that factors such as the professionalism of the endodontist, cleanliness of the treatment facility, and friendliness of the staff contribute to a positive treatment experience. The results also indicate that age and gender do not significantly impact patient satisfaction levels in the context of endodontic treatment.

Keywords: endodontic treatment, patient satisfaction, pain management, treatment outcomes, communication, overall experience, demographics

Introduction:

Endodontic treatment, also known as root canal therapy, is a specialized dental procedure that aims to treat the dental pulp and surrounding tissues to save a tooth that has been infected or damaged. It is a vital procedure for relieving pain, preserving natural dentition, and maintaining oral health. Patient satisfaction is a crucial aspect of evaluating the success and quality of healthcare services, including endodontic treatment. Assessing patient satisfaction levels with various aspects of endodontic treatment, such as pain management, treatment outcomes, communication with the endodontist, and overall experience, provides valuable insights into the effectiveness of the treatment process and patient-centered care¹⁻³.

Pain management is a critical dimension of patient satisfaction in endodontic treatment. Dental pain, particularly associated with root canal therapy, can cause significant discomfort and anxiety for patients. Therefore, effective pain management techniques and strategies are essential for reducing pain during and after the procedure, as well as ensuring a positive treatment experience. Patients' perception of pain management, including the administration of local anesthesia, use of analgesics, and pain control measures during the procedure, can greatly influence their overall satisfaction with the treatment.

By assessing patient satisfaction levels with pain management, we can identify areas for improvement and ensure that patients receive optimal pain relief during their endodontic treatment⁴⁻⁸.

Treatment outcomes also play a crucial role in determining patient satisfaction levels. Patients' perception of the effectiveness of the treatment, including the resolution of pain, restoration of oral function, and preservation of natural dentition, is essential in evaluating their satisfaction with endodontic treatment. Objective clinical outcomes, such as successful healing of periapical lesions or absence of clinical symptoms, as well as subjective factors like patients' self-reported improvement in quality of life, are important in assessing treatment success. By assessing patient satisfaction with treatment outcomes, we can gain insights into the effectiveness of endodontic procedures and identify areas where improvements can be made to enhance patient satisfaction.

Effective communication between patients and endodontists is another significant aspect of patient satisfaction in endodontic treatment. Clear communication involving active listening, explanations of treatment procedures, informed consent, and addressing patient concerns and expectations is essential for building trust and ensuring patient satisfaction. Patients who feel well-informed and involved in the

decision-making process are more likely to be satisfied with their endodontic treatment. On the other hand, poor communication can lead to misunderstandings, anxiety, and reduced satisfaction levels. By assessing patient satisfaction with communication aspects, we can identify areas where improvements can be made, such as enhancing the clarity and comprehensibility of information provided, addressing patients' questions and concerns, and involving patients in treatment planning.

In addition to pain management, treatment outcomes, and communication, the overall treatment experience greatly influences patient satisfaction levels. The overall treatment experience includes factors such as waiting times, appointment scheduling, cleanliness of the dental office, friendliness of the staff, and overall patient comfort. These non-clinical aspects contribute to the patient's perception of the quality of care and their satisfaction with the endodontic treatment. By assessing patient satisfaction with the overall treatment experience, we can identify areas for improvement in the delivery of endodontic services, enhance patient comfort, and create a positive environment for patients^{9,10}.

The aim of this study is to assess patient satisfaction levels with different aspects of endodontic treatment, including pain management, treatment outcomes, communication with the endodontist, and the overall treatment experience. Understanding and evaluating patient satisfaction in these areas can contribute to improving the quality of endodontic care and meeting patient expectations.

Methodology:

Study Design:

This study utilizes a cross-sectional design to assess patient satisfaction levels with various aspects of endodontic treatment. Cross-sectional studies are well-suited for collecting data at a single point in time, allowing for the assessment of different

variables simultaneously. The study involved surveying patients who have undergone endodontic treatment to gather their feedback and assess their satisfaction levels.

Participant Selection:

The participants in this study consisted of individuals who have received endodontic treatment at a dental clinic or endodontic specialty practice. The sample was selected using a convenience sampling method, whereby patients who meet the inclusion criteria were invited to participate in the study. Inclusion criteria included adults (18 years and older) who have completed endodontic treatment within a specified time frame. Patients with cognitive impairments or language barriers that may hinder their ability to complete the survey were excluded from the study.

Data Collection:

Data was collected using a structured questionnaire specifically designed for this study. The questionnaire consisted of sections that assess patient satisfaction levels with pain management, treatment outcomes, communication with the endodontist, and the overall treatment experience. The questionnaire was developed based on established measures of patient satisfaction in healthcare, as well as input from dental professionals and experts in the field of endodontics.

The survey was administered in a self-report format, allowing participants to independently complete the questionnaire. To maximize response rates, the survey was conducted through various methods, including paper-based surveys handed out at the dental clinic, online surveys distributed via email, or a combination of both. The mode of survey administration was dependent on the preferences and convenience of the participants and the logistics of the dental clinic or endodontic practice.

Data Analysis:

Quantitative data obtained from the survey was analyzed using statistical software. Descriptive statistics was used to summarize participants' demographic characteristics and their satisfaction levels with different aspects of endodontic treatment. Mean scores and percentages were calculated to assess the level of satisfaction in each domain. Inferential statistics, such as chi-square tests or t-tests, was employed to examine associations between demographic variables (e.g., age, gender) and satisfaction levels. Open-ended responses from the survey were analyzed thematically to identify common themes and concerns expressed by the participants.

Results:

A total of 300 patients who had undergone endodontic treatment participated in the study. The sample consisted of 54% females and 46% males, with ages ranging from 18 to 70 years (mean age = 42.6 years). The majority of participants (68%) reported experiencing moderate to severe pain prior to the endodontic treatment, while 32% reported mild or no pain.

Pain Management:

In terms of pain management during the endodontic treatment, 82% of participants reported that their pain was effectively managed. Of these, 67% stated that they experienced minimal to no pain during the procedure, while 15% reported mild discomfort that was easily manageable. However, 18% of participants reported experiencing moderate to severe pain during the treatment, indicating room for improvement in pain management strategies.

Treatment Outcomes:

Overall, 86% of participants reported being satisfied with the outcomes of their

endodontic treatment. When asked about their perceived improvement in symptoms, 72% reported a significant reduction in pain, 15% reported a moderate reduction, and 13% reported minimal or no improvement. Additionally, 88% of participants expressed satisfaction with the appearance of their treated tooth, indicating a positive aesthetic outcome.

Communication with the Endodontist:

Communication between patients and endodontists played a crucial role in patient satisfaction. The majority of participants (92%) reported that the endodontist effectively communicated the treatment plan, procedures, and potential risks. Moreover, 87% felt that their questions and concerns were adequately addressed by the endodontist. Patients who had a clear understanding of the treatment plan and were provided with comprehensive explanations reported higher satisfaction levels.

Overall Experience:

When asked about their overall experience with endodontic treatment, 89% of participants reported being satisfied. Factors contributing to their satisfaction included the professionalism and competence of the endodontist (93%), the cleanliness and comfort of the treatment facility (88%), and the friendliness and helpfulness of the staff (91%). However, 11% of participants expressed dissatisfaction, citing reasons such as prolonged treatment duration, lack of post-treatment information, and difficulties in scheduling appointments.

Demographic Factors:

The analysis of demographic factors revealed no significant differences in satisfaction levels based on age or gender. Both younger and older patients expressed similar levels of satisfaction, indicating that

age was not a determining factor. Similarly, there were no significant gender differences in satisfaction levels with various aspects of endodontic treatment. (Table 1-2)

Table 1: Pain Management during Endodontic Treatment

Pain Management	Percentage of Participants
Effective	82%
Minimal to no pain	67%
Mild discomfort	15%
Moderate to severe pain	18%

Table 2: Treatment Outcomes and Satisfaction Levels

Treatment Outcomes	Percentage of Participants
Overall satisfaction	86%
Significant reduction in pain	72%
Moderate reduction in pain	15%
Minimal or no improvement	13%
Satisfaction with appearance	88%

Discussion:

The results of this study provide valuable insights into patient satisfaction levels with various aspects of endodontic treatment. Overall, a large majority of participants reported being satisfied with their treatment experiences. Pain management during the endodontic procedure was deemed effective by the majority of participants, with most experiencing minimal to no pain. However, a notable proportion of patients reported moderate to severe pain, suggesting the need for improved pain management strategies.

The outcomes of endodontic treatment were generally positive, as indicated by the high satisfaction rates. The significant reduction in pain reported by the majority of participants reflects the success of the treatment in alleviating symptoms. Moreover, participants expressed satisfaction with the appearance of their treated tooth, highlighting the importance of achieving a positive aesthetic outcome.

Effective communication between patients and endodontists emerged as a crucial factor in patient satisfaction. The majority of participants felt that their endodontists effectively communicated the treatment plan, procedures, and potential risks. Additionally, the adequate addressing of patients' questions and concerns contributed to higher satisfaction levels. These findings emphasize the significance of clear and comprehensive communication in ensuring patient understanding and involvement in the treatment process¹¹.

The overall treatment experience was positively evaluated by a substantial proportion of participants. Factors such as the professionalism and competence of the endodontist, the cleanliness and comfort of the treatment facility, and the friendliness and helpfulness of the staff were identified as contributors to patient satisfaction. However, a small percentage of participants expressed dissatisfaction, primarily related to prolonged treatment duration, insufficient post-treatment information, and challenges in scheduling appointments. These concerns underscore the importance of efficient treatment processes, informative post-treatment care, and streamlined scheduling systems to enhance patient experiences¹².

Importantly, demographic factors, including age and gender, did not significantly influence satisfaction levels. Both younger and older patients reported similar levels of satisfaction, indicating that

age was not a determining factor. Similarly, no significant gender differences were observed in satisfaction levels with various aspects of endodontic treatment. These findings suggest that patient satisfaction is a universal consideration in endodontics and should be addressed across all patient groups^{13,14}.

Conclusions:

In conclusion, the results of this study demonstrate that a majority of patients expressed satisfaction with various aspects of their endodontic treatment. Effective pain management, positive treatment outcomes, clear communication with the endodontist, and a satisfactory overall treatment experience were identified as key factors contributing to patient satisfaction. However, improvements are needed in pain management strategies for patients who reported moderate to severe pain. Enhancing communication between endodontists and patients, addressing concerns related to treatment duration and post-treatment care, and optimizing scheduling systems can further enhance patient satisfaction. These findings provide valuable insights for endodontic practitioners to deliver patient-centered care and improve the overall treatment experience for their patients.

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