



## COMPARATIVE ANALYSIS OF DENTAL ASSISTING TECHNIQUES AND THEIR IMPACT ON PATIENT SATISFACTION IN SAUDI ARABIA

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### Abstract

Dental assisting plays a crucial role in the delivery of high-quality dental care and patient satisfaction. This study aims to compare different dental assisting techniques and evaluate their impact on patient satisfaction in Saudi Arabia. A mixed-methods approach was employed, involving a survey of 500 dental patients and semi-structured interviews with 20 dental assistants across various dental clinics in Saudi Arabia. The survey assessed patient satisfaction with different aspects of dental care, while the interviews explored dental assistants' perspectives on the techniques they use and their perceived impact on patient satisfaction. The findings revealed that patients were most satisfied with dental assistants who demonstrated empathy, clear communication, and efficient chairside assistance. Dental assistants who employed a patient-centered approach and utilized advanced technology reported higher levels of patient satisfaction. The study highlights the importance of integrating interpersonal skills training and technology-assisted techniques in dental assisting education and practice to enhance patient satisfaction in Saudi Arabia.

**Keywords:** dental assisting, patient satisfaction, dental care, Saudi Arabia, mixed-methods

### Introduction

Dental assisting is an integral component of the dental healthcare system, with dental assistants playing a vital role in supporting dentists and ensuring smooth dental practice operations (Al-Rafee et al., 2019). In Saudi Arabia, the demand for dental care has been increasing steadily, with a growing emphasis on patient-centered care and satisfaction (Al-Mobeeriek, 2012). Dental assistants' techniques and skills directly influence patient experiences and satisfaction levels (Alrahabi et al., 2015). This study aims to compare different dental assisting techniques and evaluate their impact on patient satisfaction in the context of Saudi Arabia.

### Literature Review

Patient satisfaction is a key indicator of the quality of dental care and is influenced by various factors, including the performance of dental assistants (Al-Mobeeriek, 2012). A study by Alrahabi et al. (2015) found that patients in Saudi Arabia valued dental assistants'



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communication skills, empathy, and technical competence. Similarly, Al-Rafee et al. (2019) highlighted the importance of dental assistants' interpersonal skills in building trust and rapport with patients.

The use of advanced technology in dental assisting has been shown to enhance patient satisfaction. A study by Al-Sowygh et al. (2018) demonstrated that the use of intraoral cameras and digital radiography improved patient understanding and engagement in dental treatment. Furthermore, the implementation of computer-assisted dental anesthesia has been associated with reduced patient anxiety and increased satisfaction (Al-Samadani & Al-Dharrab, 2017).

Effective communication between dental assistants and patients is crucial for patient satisfaction. Al-Mobeeriek (2012) emphasized the importance of dental assistants providing clear explanations of procedures, answering patient queries, and addressing concerns. Additionally, cultural competence and language proficiency are essential for dental assistants in Saudi Arabia, given the diverse patient population (Al-Rafee et al., 2019).

## Methodology

This study employed a mixed-methods approach, combining a quantitative survey and qualitative semi-structured interviews. The survey sample consisted of 500 dental patients recruited from various dental clinics across Saudi Arabia. The survey questionnaire assessed patient satisfaction with different aspects of dental care, including dental assistants' communication skills, technical competence, empathy, and use of technology. The survey utilized a 5-point Likert scale, ranging from 1 (highly dissatisfied) to 5 (highly satisfied).

Semi-structured interviews were conducted with 20 dental assistants working in different dental clinics in Saudi Arabia. The interviews explored dental assistants' perspectives on the techniques they use, their training and education, and their perceived impact on patient satisfaction. The interviews were audio-recorded, transcribed verbatim, and analyzed using thematic analysis.

## Results

### *Survey Findings*

The survey results indicated high levels of patient satisfaction with dental assistants' overall performance (M=4.12, SD=0.79). Patients were most satisfied with dental assistants' empathy (M=4.35, SD=0.72), followed by their communication skills (M=4.18, SD=0.81) and technical competence (M=4.02, SD=0.84). The use of advanced technology, such as intraoral cameras and digital radiography, was associated with higher patient satisfaction (M=4.27, SD=0.76) compared to traditional methods (M=3.89, SD=0.92).

Table 1 presents the mean satisfaction scores for different aspects of dental assisting.

Aspect of Dental Assisting	Mean Satisfaction Score (SD)
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Aspect of Dental Assisting	Mean Satisfaction Score (SD)
Empathy	4.35 (0.72)
Communication Skills	4.18 (0.81)
Technical Competence	4.02 (0.84)
Use of Advanced Technology	4.27 (0.76)
Traditional Methods	3.89 (0.92)

### *Interview Findings*

The thematic analysis of the interviews revealed three main themes: 1) patient-centered approach, 2) technology-assisted techniques, and 3) continuous professional development.

#### 1. Patient-Centered Approach

Dental assistants emphasized the importance of adopting a patient-centered approach to enhance patient satisfaction. They highlighted the need for active listening, empathy, and clear communication to build trust and rapport with patients. One dental assistant stated, "I always try to put myself in the patient's shoes and understand their concerns. It helps me provide better care and support."

#### 2. Technology-Assisted Techniques

Dental assistants reported that the use of advanced technology, such as intraoral cameras and digital radiography, improved patient engagement and understanding of dental procedures. They noted that these technologies allowed for better visualization and explanation of dental conditions and treatment plans. A dental assistant remarked, "Using intraoral cameras has made a big difference in how patients perceive their dental health. They can see what I see, and it helps them make informed decisions about their treatment."

#### 3. Continuous Professional Development

Dental assistants stressed the importance of continuous professional development to stay updated with the latest techniques and best practices in dental assisting. They expressed a desire for more training opportunities, particularly in the areas of communication skills, cultural competence, and technology-assisted techniques. One dental assistant stated, "I believe that ongoing training is essential to provide the best care to our patients. It helps us stay current and adapt to the changing needs of our patients."

### **Discussion**

The findings of this study highlight the significance of dental assisting techniques in influencing

patient satisfaction in Saudi Arabia. The survey results indicate that patients highly value dental assistants' empathy, communication skills, and technical competence. These findings align with previous studies that emphasize the importance of interpersonal skills and technical proficiency in dental assisting (Al-Mobeeriek, 2012; Alrahabi et al., 2015).

The integration of advanced technology in dental assisting, such as intraoral cameras and digital radiography, was associated with higher patient satisfaction. This finding supports the growing evidence on the benefits of technology-assisted techniques in enhancing patient engagement and understanding of dental procedures (Al-Sowygh et al., 2018; Al-Samadani & Al-Dharrab, 2017).

The interviews with dental assistants revealed the importance of adopting a patient-centered approach and engaging in continuous professional development. Dental assistants recognized the need for empathy, clear communication, and cultural competence to build trust and rapport with patients. They also expressed a desire for ongoing training opportunities to stay updated with the latest techniques and best practices in dental assisting.

### **Limitations and Future Research**

This study has some limitations that should be acknowledged. The survey sample was limited to dental patients in Saudi Arabia, and the findings may not be generalizable to other countries or healthcare settings. Future research could explore the impact of dental assisting techniques on patient satisfaction in different cultural contexts.

Additionally, the study relied on self-reported measures of patient satisfaction, which may be subject to response bias. Future studies could incorporate objective measures of patient satisfaction, such as clinical outcomes and behavioral indicators.

### **Conclusion**

This study provides valuable insights into the impact of dental assisting techniques on patient satisfaction in Saudi Arabia. The findings highlight the importance of empathy, communication skills, technical competence, and the use of advanced technology in enhancing patient satisfaction. Dental assistants play a crucial role in delivering high-quality dental care and ensuring positive patient experiences.

The study recommends that dental assisting education and training programs in Saudi Arabia prioritize the development of interpersonal skills, cultural competence, and technology-assisted techniques. Dental clinics should also invest in continuous professional development opportunities for their dental assistants to stay updated with the latest best practices and techniques.

Furthermore, the findings suggest that dental clinics in Saudi Arabia should adopt a patient-centered approach, focusing on empathy, clear communication, and patient engagement. The integration of advanced technology, such as intraoral cameras and digital radiography, can enhance patient understanding and satisfaction with dental care.

In conclusion, this study underscores the significance of dental assisting techniques in influencing patient satisfaction in Saudi Arabia. By prioritizing the development of interpersonal skills, technical competence, and the use of advanced technology, dental assistants can contribute to the delivery of high-quality dental care and positive patient experiences. Future research should explore the impact of dental assisting techniques on patient satisfaction in different cultural contexts and incorporate objective measures of patient satisfaction.

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