

# Patients' Perceptions of Professionalism Among Dental Professionals at Umm Al-Qura University Dental Teaching Hospital



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## Abstract:

**Introduction:** Professionalism in healthcare is essential for building patient trust and ensuring quality care. This study explores patients' perceptions of professionalism among dental professionals at Umm Al-Qura University Dental Teaching Hospital (Makkah, Saudi Arabia).

**Materials and Methods:** A cross-sectional survey was used to evaluate, from patients' perspectives, various dimensions of professionalism, including infection control, communication skills, and ethical behavior among dental professionals. The study was conducted over five months, from November 1, 2023, to April 1, 2024. We asked all patients who attended the dental hospital and met our inclusion criteria to participate in the research. We had a 34% response rate from the total number of patients visiting the dental teaching hospital.

**Results:** The results indicate high patient satisfaction with adherence to professionals' sterilization, personal hygiene, and communication practices. However, there are lower scores in specific areas, such as non-verbal responses and patient education.

**Discussion:** The findings of this investigation highlight the significance of professionalism's dimensions in influencing patient perceptions and overall satisfaction at the dental hospital. Elevated satisfaction ratings in domains such as compliance with sterilization procedures, personal hygiene standards, and communication competencies indicate the considerable weight patients place on these facets of dental professionalism.

**Conclusion:** This research provides insights into patients' perceptions of professionalism at Umm Al-Qura University Dental Teaching Hospital, highlighting professionals' strengths in adherence to sterilization protocols, personal hygiene, and communication skills, and suggesting opportunities for improvement in non-verbal communication and patient education to better align with patient expectations.

**Keywords:** Patients' perceptions, Professionalism, Dental Professionals, Professionals' strengths, Dental education, Governmental dental teaching hospital.

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## 1. INTRODUCTION

Professionalism is a fundamental aspect of effective healthcare practice, particularly in dentistry. It encompasses a wide range of behaviors and attitudes, including ethical conduct, effective communication, adherence to established standards of care, and a commitment to lifelong learning. These elements are essential for building patient trust and ensuring optimal care outcomes [1-6].

Despite the significant emphasis placed on professionalism in dental education, there is a notable gap in understanding how patients perceive professional behaviors in this field. This gap is critical because patient satisfaction and trust are profoundly influenced by their perceptions of healthcare providers' professionalism [7]. Many dental programs emphasize technical skills, often at the expense of interpersonal and ethical competencies [8, 9]. This focus can result in gaps in areas such as non-verbal communication, empathy, and sensitivity, which patients highly value and that significantly impact their overall satisfaction with care [10].

Research on dental professionalism has also identified the influence of cultural and demographic factors on patient expectations and perceptions. For instance, patients from different cultural backgrounds may have varying expectations regarding communication styles, non-verbal cues, and level of involvement in decision-making [11-13]. Studies in diverse populations reveal that professionalism is not only about technical expertise but also cultural sensitivity and adaptability to meet patients' specific needs and values [14, 15]. Furthermore, patients expect dental professionals to uphold high standards of hygiene, communicate clearly and effectively, and make ethical decisions regarding their care [16].

Indeed, the establishment of healthcare auditing is a pivotal advancement in the overall efficiency of healthcare organizations. It helps assess and refine service quality by identifying areas of strength and suggesting areas for improvement [6]. While previous studies have highlighted the theoretical importance of professionalism [2, 3], there remains a need to explore further how well these educational efforts align with patient expectations. This study aims to address this need by evaluating patients' perceptions of professionalism at Umm Al-Qura University Dental Teaching Hospital (Makkah, Saudi Arabia). The study seeks to provide valuable insights into the alignment between professional training and patient expectations, ultimately contributing to improved dental care practices [17].

## 2. METHOD

This observational cross-sectional survey study was conducted at Umm Al-Qura University Dental Teaching Hospital, with ethical approval granted by the Institutional Review Board under approval no. HAPO-02-K-012-2023-11-1849. All participants provided informed consent, were fully debriefed, and the Helsinki Declaration was followed. The authors disclosed that there was no funding source for this study and no potential conflicts of

interest. The study was conducted over a Five-month period from November 1, 2023, to April 1, 2024. To gather comprehensive data on patients' perceptions of dental professionalism, a validated, self-administered questionnaire was used, adapted from a research group at Taibah Dental Hospital (Almadinah, Saudi Arabia) [18]. The inclusion criteria's were all the new patients who visited the Dental Teaching Hospital asking for a dental treatment within the five months of the study and have a history of dental treatments in another dental center. The exclusion criteria's were all the registered patients who already started the dental treatment in Dental Teaching Hospital before the five-month of the study and the patients who didn't have a history of dental treatments in another dental center. We asked all patients who attended the dental hospital and met our inclusion criteria to participate in the research. We had a 34% response rate from the total number of patients visiting the dental teaching hospital.

The questionnaire encompassed a range of dimensions related to dental professionalism. These dimensions were:

- (1) Adherence to sterilization and infection control protocols to ensure patient safety and prevent cross-contamination.
- (2) Personal hygiene and professional attire reflect the overall presentation and professionalism of the dental staff.
- (3) Communication skills, evaluating the clarity and effectiveness of verbal interactions between patients and dental professionals.
- (4) Diagnostic and clinical judgment, assessing the ability to make accurate and efficient treatment decisions.
- (5) Ethical decision-making and patient care, focusing on adherence to ethical standards and patient-centered care.
- (6) Accurate documentation to ensure the proper recording of patient information and treatment progress.
- (7) Respect for patients and their families, emphasizing empathy and sensitivity in patient interactions.
- (8) Respect for patient autonomy emphasizes the need for patient involvement in decision-making processes.
- (9) Management skills, including punctuality, organizational skills, and the overall efficiency of the clinic environment.
- (10) Commitment to continuous professional development, reflecting the ongoing education and skills enhancement of dental professionals.
- (11) Responsibility for improving dental health and societal knowledge, emphasizing the role of dental professionals in community education.
- (12) Non-discrimination of patients' views and values, ensuring equitable treatment regardless of patient background.
- (13) Obligation to provide care for all patients, including those with challenging or complex needs.

(14) Non-verbal communication skills, assessing the effectiveness of non-verbal cues in patient interactions.

(15) Reporting illegal or unethical practices, highlighting the importance of integrity and transparency.

(16) Responsibility for patient care decisions, reflecting accountability in clinical decision-making.

(17) Positive caring attitude, focusing on the emotional support and reassurance provided to patients.

(18) Confidentiality with family members to ensure the protection of patient information from unauthorized access.

(19) Explanation of patient conditions, treatment options, and associated costs to promote informed consent and transparency.

(20) Clear communication involves assessing the effectiveness of both verbal and written communication in conveying important information.

(21) Confidentiality with other patients to ensure privacy and maintain the confidentiality of patient information within the clinic.

(22) Education about legal rights and obligations provides patients with the information they need.

Participants in the study were either patients or their legal guardians and included both Arabic and English speakers.

The questionnaire gathered extensive data on various patient factors, including:

(1) Knowledge of dental professionals to assess the participants' awareness of dental practices and standards.

(2) Patient expectations and experiences are used to evaluate the alignment between actual care and expectations.

(3) Socio-economic status and household size are used to provide context for understanding patient perspectives.

(4) Details of the last dental visit, including frequency and nature of dental care received.

(5) Demographic information, such as age, gender, nationality, marital status, and education level, will be explored to explore variations in perceptions across different patient groups.

The collected data were systematically coded in Microsoft Excel 2023 and analyzed using Stata version 14. Descriptive statistics summarized continuous variables as means and standard deviations (SD), and categorical variables as frequencies and percentages.

Structured interviews were conducted to ensure consistency and accuracy in the data collection, effectively minimizing recall bias. Despite these efforts, the researchers acknowledge limitations of convenience sampling, which may limit the generalizability of the findings to other populations.

### 3. RESULTS

A total of 94 participants consented to participate in the research between November 1, 2023, and April 1, 2024. The participants ranged in age from 16 to 34. Female participants constituted 43% of the sample; male

participants, 57%. The results of this study provide a detailed overview of the patients' perceptions of various dimensions of dental professionalism, as summarized in Table 1. The table presents the mean scores and standard deviations for each professionalism dimension, reflecting patients' evaluations of dental professionals' adherence to established standards and practices.

**Table 1. Demographic characteristics of the 94 participants.**

Characteristic	N	Percentage
<b>Age</b>		
16 - 18	8	9%
18-24	28	30%
25-34	35	37%
35 and older	23	24%
<b>Gender</b>		
Male	54	57%
Female	40	43%
<b>Nationality</b>		
Saudi	45	48%
Non-Saudi	49	52%
<b>Marital Status</b>		
Single	58	62%
Married	36	38%
<b>Education Level</b>		
High school or less	49	52%
Bachelor's degree or higher	45	48%
<b>Income</b>		
1-5K	54	57%
6-10K	25	27%
11-15K	10	11%
16-20K	4	4%
More than 20K	1	1%
<b>Household Size</b>		
SD		2.98
Mean		3.37
<b>DMFT Score</b>		
1-5	14	15%
6-10	39	41%
11-15	31	33%
16-20	10	11%
Mean		9.87
SD		4.16

Table 1 also provides a comprehensive overview of the demographic characteristics of the 94 participants in this study. The age distribution shows a diverse group, with the largest segment being 25-34 years old (37%), followed by 18-24 (30%), 35+ (24%), and under 18 (9%). The gender distribution indicates a slight male majority at 57%, with females representing 43%. The nationality breakdown is nearly even, with 48% of participants being Saudi and 52% non-Saudi.

Regarding marital status, a majority of participants are single (62%), while 38% are married. Education levels vary as well: 38% of participants have completed high

school, 37% hold a bachelor's degree, and smaller proportions have intermediate schooling (14%), a diploma (3%), or a postgraduate degree (8%). Income levels predominantly fall within the 1-5K range (In Saudi Riyals) (57%), with fewer participants in the higher income brackets of 6-10K (27%), 11-15K (11%), 16-20K (4%), and more than 20K (1%).

The household size data reveal that 35% of participants live in households of 1 person, possibly reflecting those living alone, while households range from 2 to 14 members. Decayed, Missing, and Filled Teeth scores are also noted, with the majority of participants falling within the 6-10 range (41%), followed by 11-15 (33%), 1-5 (15%), and 16-20 (11%).

Table 2 presents a ranking of the 22 dimensions of dental professionalism based on patient perceptions. The dimension with the highest mean score is personal hygiene and clean professional attire, with a mean of 4.84 and a standard deviation of 0.37, indicating intense patient satisfaction with this aspect. This is followed by respect for patients and their families (mean = 4.78, SD = 0.58) and ethical decisions and patient care (mean = 4.76, SD = 0.52). Adherence to sterilization and infection control procedures also received a high mean score of 4.59 (SD = 0.56), reflecting positive patient perceptions of hygiene practices.

**Table 2. Ranking of dental professionalism dimensions.**

Dimensions	Mean	SD
1. Adherence to sterilization and infection control procedures	4.59	0.56
2. Personal hygiene and clean professional attire	4.84	0.37
3. Good communication skills	4.63	0.69
4. Diagnostic and clinical judgment and provision of the most efficient dental treatment	4.64	0.53
5. Ethical decision-making and patient care	4.76	0.52
6. Accurate documentation of patients' data and treatment progress	4.62	0.55
7. Respect for patients and their families	4.78	0.58
8. Respect for patients' autonomy	4.45	0.90
9. Management skills, punctuality, time management, and having an organized clinic	4.65	0.60
10. Commitment to continuous professional development	4.66	0.60
11. Responsibility to improve dental health and societal knowledge	4.50	0.76
12. Does not discriminate against patients' views and values	4.62	0.64
13. Obligated to use knowledge and skills to provide dental care for all	4.50	1.36
14. Proper non-verbal responses	3.74	1.34
15. Reports any illegal or unethical practices	4.38	0.92
16. Responsible for decisions related to patients' care	4.74	0.48
17. A caring attitude toward patients	4.71	0.50
18. Confidentiality with family members	4.72	0.55
19. Explains the condition of the patient, available treatment options, and costs	4.68	0.60
20. Clear and effective communication	4.62	0.70
21. Confidentiality with other patients	4.74	0.49
22. Educates patients about their legal rights and obligations	4.38	0.93

Conversely, elements such as proper non-verbal responses and educating patients about their legal rights and obligations received lower mean scores of 3.74 (SD = 1.34) and 4.38 (SD = 0.93), respectively. These lower scores suggest areas where improvements may be needed.

#### 4. DISCUSSION

The relationship between professionalism and patient trust is well-documented across healthcare fields. Studies underscore that patients' perceptions of professionalism are influenced by multiple factors, including hygiene, respectful communication, and adherence to ethical standards [2, 19-22]. High standards of personal hygiene, a clear professional appearance, and interpersonal skills are other elements of professionalism that reassure patients of their provider's competence and commitment to quality care [23-25]. In dental practice, these attributes are especially pertinent, as patients rely on their dental providers for both treatment efficacy and the safe, sterile environment essential for invasive procedures [18, 26].

The results of this study underscore the critical importance of professionalism dimensions in shaping patient perceptions and satisfaction in dental practice. High satisfaction scores in areas such as adherence to sterilization protocols, personal hygiene, and communication skills reflect the strong value that patients place on these aspects of dental professionalism. These findings are consistent with the existing literature, which emphasizes the essential roles of hygiene and effective communication in ensuring high-quality patient care [16, 22]. The study's results also indicate that patients highly value adherence to sterilization and infection control protocols, with a mean score of 4.59. This aligns with research showing that stringent hygiene practices are crucial for preventing cross-contamination and maintaining patient trust [2, 3]. Personal hygiene and professional attire, with a mean score of 4.87, also received high marks, reinforcing the importance of maintaining a professional appearance in fostering a positive patient experience.

However, gaps in non-verbal communication and patient education suggest areas for improvement. To address these, dental education should focus on targeted training and regular assessments to align practices with patient expectations. Further research exploring factors such as cultural and demographic variables can deepen the understanding of professionalism across diverse settings and guide improvements in dental training and patient care. Overall, continuous enhancements are essential to meet evolving patient needs and maintain high standards of care.

Our suggested recommendations to improve patients' perceptions are to enhance training in non-verbal communication, improve patient education, incorporate professionalism feedback mechanisms, strengthen professionalism standards in the Umm Al-Qura University Dental Teaching Hospital curriculum, foster a culture of continuous improvement, implement peer review processes, and promote a patient-centered approach. By implementing these recommendations, dental professionals and



institutions can better align their practices with patient expectations, ultimately enhancing patient satisfaction and care quality.

3 Also, the type of questionnaire we used (OHIP-5) was well-rounded enough to reflect the actual effect of impacted 3rd molar on health-related quality-of-life. Still, a more comprehensive one could provide more data. Moreover, this study was limited to impacted 3rd molars and the extent of their impact on health-related quality of life. There may be other confounding factors common to the sample participants that negatively affect health-related quality of life.

Finally, our study acknowledges some limitations, primarily the small sample size of 94 participants. However, this number accounts for about 34% of all the patients who visited the dental teaching hospital in that period. Despite this, the data clearly highlights key strengths, such as high satisfaction scores across many areas, while also identifying areas that require improvement. Future research should focus on identifying the exact reasons for the lower scores in some areas, such as non-verbal communication and patient education. Furthermore, future research could incorporate broader participant groups, additional variables (*e.g.*, socio-economic or behavioral factors), and comparisons across dental institutions.

## CONCLUSION

The findings of this study identified the need enhanced professionalism training in dental education to better align with patient expectations, including non-verbal communication and patient education. This research contributes to understanding how dental professionals' behavior impacts patient satisfaction and highlights areas for further development, thereby facilitating enhancements in professionalism among dental professionals and in patient care.

## AUTHORS' CONTRIBUTIONS

The authors confirm contribution to the paper as follows: O.B., A.B, G.A, A.S, A.A, T.A: Study conception and design; G.A, A.S, A.A, T.A: Data collection; O.B., A.B.: Analysis and interpretation of results; O.B., A.B, G.A, A.S, A.A, T.A: Draft manuscript. Author. All authors reviewed the results and approved the final version of the manuscript.

## ABBREVIATION

SD = Standard deviations

## ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Ethical approval was granted by the Biomedical Research Ethics Committee of Umm Al-Qura University under approval no. HAPO-02-K-012-2023-11-1849

## HUMAN AND ANIMAL RIGHTS

All procedures performed in studies involving human participants were in accordance with the ethical standards of institutional and/or research committee and with the 1975 Declaration of Helsinki, as revised in 2013.

## CONSENT FOR PUBLICATION

Informed consent was obtained from all participants.

## STANDARDS OF REPORTING

STROBE guidelines were followed

## AVAILABILITY OF DATA AND MATERIALS

All data generated or analyzed during this study are included in this published article.

## FUNDING

None.

## CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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No AI tools were used in generating this research.

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