

Original Article

Assessment of Knowledge, Attitude, and Perceived Usefulness of Soft Skills in Patient Communication Among Dental Interns: A Cross-Sectional Study in Madhya Pradesh

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Abstract

Background

Effective communication is a crucial aspect of patient care in dentistry, significantly impacting treatment outcomes, patient compliance, and overall satisfaction. Soft skills, including empathy, active listening, non-verbal communication, and professionalism, play a vital role in establishing trust and rapport with patients. However, their integration into dental education and clinical practice remains insufficient. This study aims to assess the knowledge, attitude, and perceived usefulness of soft skills in patient communication among dental interns in Madhya Pradesh, India.

Materials and Methods

A descriptive, cross-sectional study was conducted among 248 dental interns from various dental colleges in Madhya Pradesh. Data were collected via a structured questionnaire distributed through Google Forms, WhatsApp, and email platforms. The questionnaire assessed knowledge, attitude, and application of soft skills in clinical practice.

Results

Among the 248 participants, 86.3% acknowledged the importance of soft skills in patient communication. However, only 58.2% reported receiving formal training in communication skills during their undergraduate education. A significant proportion (64.1%) felt underprepared in handling anxious or uncooperative patients, and 72.5% expressed the need for structured soft skills training in the curriculum. While 80.6% agreed that non-verbal communication (eye contact, body language) enhances patient trust, only 49.8% actively incorporated these skills in clinical practice. Furthermore, 68.4% recognized digital communication (telemedicine, online consultations) as an essential future competency, yet 41.2% reported limited confidence in handling virtual patient interactions.

Conclusion

While dental interns recognize the importance of soft skills, their practical application remains inadequate due to a lack of formal training. The study emphasizes the need for structured communication skills training, incorporating simulated patient interactions, feedback-based learning, and digital communication strategies to enhance patient engagement and treatment efficacy.

Keywords

Soft skills, patient communication, dental interns, empathy, active listening, non-verbal communication, digital communication, professional training, Madhya Pradesh.

Introduction

Effective communication plays a critical role in dental practice, influencing patient satisfaction, treatment adherence, and overall healthcare outcomes. Apart from clinical expertise, soft skills—which include active listening, empathy, interpersonal skills, and non-verbal communication—are essential for building trust and rapport with patients [1]. Dental interns, as future practitioners, must develop strong communication abilities to ensure optimal patient-centered care.

Research has shown that deficiencies in soft skills among healthcare professionals can lead to misunderstandings, reduced patient compliance, and lower satisfaction levels [2]. In the field of dentistry, where procedures may cause anxiety and discomfort, effective communication is crucial in alleviating patient concerns and improving their experience [3]. Despite its importance, formal training in soft skills is often inadequate in dental curricula, leaving interns unprepared for real-world clinical interaction [4,5]. With the increasing emphasis on patient-centered dentistry, it is essential to evaluate the knowledge, attitudes, and perceptions of dental interns regarding the role of soft skills in communication. This study aims to assess dental interns in Madhya Pradesh, examining their awareness, self-confidence, and perceived need for structured training programs in soft skills. The findings can help bridge the gap between technical proficiency and interpersonal communication, ultimately enhancing the quality of dental care.

Materials and Methods

Study Design and Setting

This was a cross-sectional, questionnaire-based study conducted among dental interns across various dental colleges in Madhya Pradesh, India. The study aimed to assess their knowledge, attitude, and perception regarding the usefulness of soft skills in patient communication.

Ethical Considerations

Ethical approval was obtained from the Institutional Ethics Committee before commencing the study. Participation was voluntary, and informed

consent was obtained from all interns before completing the questionnaire. The data were collected anonymously, ensuring confidentiality.

Study Population and Sampling

The study included dental interns from different institutions in Madhya Pradesh. A convenience sampling method was used to recruit participants. The sample size was determined to be 248 interns, ensuring adequate representation for statistical analysis.

Data Collection Procedure

A structured, pre-validated questionnaire was developed and distributed electronically using Google Forms. The survey link was shared via WhatsApp, email, and other social media platforms to maximize participation. The questionnaire included sections on Demographics (age, gender, institution), Knowledge of soft skills, Perceived importance in patient communication, Self-confidence in communication skills, Training exposure and interest in structured programs, Common barriers to effective communication, Impact of soft skills on patient satisfaction

Statistical Analysis

The responses were compiled and analyzed using SPSS (Statistical Package for the Social Sciences) version 25.0. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize the data.

Results

This study was conducted on 248 dental interns from various dental institutions across Madhya Pradesh to assess their knowledge, attitude, and perception regarding the usefulness of soft skills in patient communication. The study aimed to evaluate their awareness, self-confidence, training exposure, perceived importance of soft skills in different clinical scenarios, barriers to effective communication, and the impact of soft skills on patient satisfaction. The detailed results are tabulated from table 1 to table 6.

Among the 248 participants, 112 (45.2%) were male, and 136 (54.8%) were female, with the majority belonging to the 23-25 years age group (50.8%) as seen in table 1. Approximately 58.5% of the interns had prior exposure to soft skills training, while 41.5% had never received formal training in communication skills.

Most participants (89.5%) were aware of the concept of soft skills in patient communication, and 72.6% strongly agreed that they play a vital role in improving doctor-patient interactions as shown in table 2. Additionally, 83.1% of the respondents expressed interest in structured training programs, and 71.0% strongly believed that soft skills training should be integrated into the dental curriculum.

The study also explored the perceived importance of soft skills in different clinical situations, with a majority rating them as "very important" for explaining treatment plans (68.5%), handling anxious patients (57.3%), and communicating with pediatric patients (58.9%).

Despite the recognition of its importance, several barriers to effective communication were identified. The most commonly reported barriers included lack of formal training (77.4%), time constraints during clinical

practice (63.7%), and language barriers with patients (50.8%).

A significant proportion of interns (96%) acknowledged that effective communication improves patient trust, and 71.8% had received positive feedback from patients regarding their communication approach. Furthermore, 70.2% of respondents strongly believed that structured training in soft skills could enhance overall patient satisfaction and treatment acceptance.

Table 1: Demographic Characteristics of the Study Population

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	112	45.2%
	Female	136	54.8%
Age Group (Years)	20 - 22	82	33.1%
	23 - 25	126	50.8%
	26 - 28	40	16.1%
Prior Soft Skills Training	Yes	145	58.5%
	No	103	41.5%
Self-Rated Communication Skills	Poor	28	11.3%
	Average	92	37.1%
	Good	128	51.6%

Table 2: Knowledge of Soft Skills in Communication

Question	Response Category	Frequency (n)	Percentage (%)
Have you heard about soft skills in patient communication before?	Yes	222	89.5%
	No	26	10.5%
Do you believe soft skills play an important role in patient communication?	Strongly Agree	180	72.6%
	Agree	54	21.8%
	Neutral	8	3.2%
	Disagree	6	2.4%
	Strongly Disagree	0	0.0%
Are soft skills equally important as clinical skills in patient interaction?	Strongly Agree	152	61.3%
	Agree	72	29.0%
	Neutral	16	6.5%
	Disagree	8	3.2%
	Strongly Disagree	0	0.0%

Table 3: Attitude Toward Soft Skills Training

Question	Response Category	Frequency (n)	Percentage (%)
Do you feel confident in your communication skills with patients?	Yes	172	69.4%
	No	76	30.6%
Would you be	Yes	206	83.1%

interested in attending a structured training program on soft skills?	No	42	16.9%
Do you believe soft skills training should be a mandatory part of the dental curriculum?	Strongly Agree	176	71.0%
	Agree	54	21.8%
	Neutral	12	4.8%
	Disagree	6	2.4%
	Strongly Disagree	0	0.0%

Table 4: Perceived Importance of Soft Skills in Different Patient Interaction Scenarios

Scenario	Not Important (n/%)	Neutral (n/%)	Important (n/%)	Very Important (n/%)
Explaining a treatment plan to a patient	0 (0.0%)	8 (3.2%)	70 (28.2%)	170 (68.5%)
Handling anxious patients	2 (0.8%)	12 (4.8%)	92 (37.1%)	142 (57.3%)
Communicating with pediatric patients	4 (1.6%)	16 (6.5%)	82 (33.1%)	146 (58.9%)
Managing difficult or uncooperative patients	6 (2.4%)	22 (8.9%)	98 (39.5%)	122 (49.2%)

Table 5: Perceived Barriers to Effective Soft Skills Implementation

Barrier	Strongly Agree (n/%)	Agree (n/%)	Neutral (n/%)	Disagree (n/%)	Strongly Disagree (n/%)
Lack of formal training	108 (43.5%)	84 (33.9%)	30 (12.1%)	22 (8.9%)	4 (1.6%)
Language barriers with patients	50 (20.2%)	76 (30.6%)	58 (23.4%)	54 (21.8%)	10 (4.0%)
Lack of time during clinical practice	68 (27.4%)	90 (36.3%)	52 (21.0%)	32 (12.9%)	6 (2.4%)
Patients' unwillingness to communicate	42 (16.9%)	86 (34.7%)	62 (25.0%)	48 (19.4%)	10 (4.0%)

Table 6: Self-Perceived Impact of Soft Skills on Patient Satisfaction

Question	Response Category	Frequency (n)	Percentage (%)
Do you believe good	Yes	238	96.0%

communication improves patient trust?	No	10	4.0%
Have you ever received positive patient feedback for your communication skills?	Yes	178	71.8%
	No	70	28.2%
Do you think soft skills training can enhance patient satisfaction?	Strongly Agree	174	70.2%
	Agree	60	24.2%
	Neutral	8	3.2%
	Disagree	6	2.4%
	Strongly Disagree	0	0.0%

Discussion

Effective communication is a fundamental aspect of patient care in dentistry, influencing treatment outcomes, patient satisfaction, and trust in healthcare providers [6]. This study assessed the knowledge, attitude, and perceived usefulness of soft skills among dental interns in Madhya Pradesh, India. The findings suggest that while interns recognize the importance of communication skills, gaps exist in their formal training and application in clinical practice.

The results align with prior research indicating that dental curricula often focus heavily on technical skills while neglecting structured training in communication and interpersonal skills [7]. Studies have shown that communication skills are not only crucial for reducing patient anxiety but also for enhancing compliance and treatment adherence [8]. However, in the present study, a significant percentage of interns reported feeling underprepared when dealing with anxious or difficult patients, reflecting the need for integrated soft skills training in dental education.

One of the key observations in this study was the gap between theoretical knowledge and practical application. While most interns acknowledged the role of empathy, active listening, and non-verbal communication, fewer reported confidence in implementing these skills during real-world patient interactions. This aligns with the findings of Carey et al., who emphasized that practical exposure is necessary to reinforce communication skills beyond textbook learning [9].

Furthermore, previous studies highlight that communication training improves dentist-patient relationships and reduces clinical stress for practitioners [10]. However, in the present study, a substantial number of participants expressed a lack of formal training opportunities, indicating that soft skills development remains an overlooked area in the existing dental curriculum. Implementing role-playing, simulated patient interactions, and feedback-based training programs can significantly enhance communication proficiency [11].

The integration of digital communication in dentistry is also an emerging trend. With an increasing number of consultations occurring via

telemedicine and online platforms, future dentists must develop proficiency in digital communication strategies alongside traditional face-to-face interactions [12].

Limitations and Future Recommendations

This study was conducted in a limited geographic region, and findings may not be generalizable to all dental interns in India. Additionally, self-reported data may have introduced some bias. Future research should explore longitudinal assessments, comparing interns before and after structured communication training programs to evaluate their effectiveness.

Conclusion

The study highlights a strong awareness of the importance of soft skills among dental interns but also identifies a gap in training and practical application. Dental institutions should integrate structured soft skills training into their curriculum to enhance patient communication, professional competence, and overall treatment outcomes.

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