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Chairside Challenges in Dentistry: Experiences of Dental Students and Clinicians in Managing Anxious and Uncooperative Patients

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Abstract

Dental anxiety and non-cooperation pose a considerable challenge chair-side affecting the quality of patient care as well as the stress levels among clinicians. This qualitative research aimed to gain an insight into the experiences of dental students and recent graduates when treating such patients, focusing on perceived preparedness, strategies used, challenges encountered and recommendations for curricular change. A total of 20 individuals (dental students, house officers, postgraduate trainees and general practitioners) were enrolled. Junior participants (25%) felt less prepared than their senior colleagues (83%), perceptive status being significantly associated with subjective preparedness. Communication and reassurance were the most commonly reported management approaches, whereas formal behavior guidance strategies (e.g. tell-show-do, distraction) were less often mentioned. Major challenges were time constraints, patient adherence problems, and related emotional burden (anxiety, annoyance, powerlessness). Respondents clearly supported increasing undergraduate student training, with 45% recommending specialist teaching in behavioral management and communication skills whilst 25% suggested higher quality clinical supervision. The results highlight a perceived dichotomy in dental education between technical skills training and the cultivating interpersonal, behavioral, emotional competencies required for treating anxious patients. The authors suggest integrating organized behavioral management instruction, simulation-based training and coach-style supervision may be reasonable strategies to more efficiently prepare future dentists for managing such challenging patients in the dental clinic.

Keywords: Dental anxiety; Patient Management; Dental education; Behavioral dentistry; Chair-side challenges



Introduction

Dental education is a demanding and multifaceted process that requires students to integrate theoretical knowledge, clinical skills, professional judgment, and effective communication. Unlike many other healthcare professions, dentistry involves delivering care in close physical proximity to patients, often through invasive or discomfort-inducing procedures. As a result, fear and anxiety related to dental treatment remain prevalent and pose significant challenges for both patients and clinicians. The ability to recognize and manage dental anxiety and uncooperative behavior is therefore a critical competency for delivering safe, effective, and patient-centered dental care [1].

Dental fear and anxiety affect a substantial proportion of the population, ranging from mild apprehension to severe dental phobia. Anxious patients frequently exhibit behaviors such as restlessness, refusal of treatment, excessive questioning, and lack of cooperation, all of which can complicate clinical procedures and prolong treatment time. These behaviors may negatively impact clinical outcomes and increase stress within the dental setting. Evidence suggests that behavioral management strategies particularly effective communication, reassurance, empathy, and psychological techniques are among the most beneficial approaches for reducing dental anxiety and improving patient cooperation [1, 2, 3].

For dental students, managing anxious and uncooperative patients represents a particularly challenging aspect of clinical training. While students are expected to provide patient-centred and competent care, they are simultaneously developing their technical skills and professional confidence. Encounters with anxious patients can introduce additional emotional and cognitive stressors, especially for students with limited clinical experience and insufficient formal training in behavioral and communication-based patient management [1, 2].

Dental education has been consistently identified as one of the most stressful academic environments. Dental students report multiple sources of stress, including academic workload, clinical performance expectations, and patient-related concerns. Qualitative and mixed-methods research has demonstrated that managing difficult or uncooperative patients contributes substantially to emotional strain during clinical training. Alzahem et al. [4] identified patient management as a major stressor affecting dental students' well-being, while more recent work has further highlighted the emotional burden experienced by undergraduate dental students during challenging patient encounters [5].

When treating anxious or uncooperative patients, dental students must navigate a dual responsibility: managing the clinical procedure while simultaneously regulating their own emotional responses. Feelings such as anxiety, frustration, helplessness, and self-criticism are commonly reported during difficult chairside interactions. Concerns about making mistakes, failing to meet clinical requirements, or being judged negatively by supervisors may further intensify these emotional responses. These experiences are frequently internalised and not openly discussed, contributing to what may be described as silent struggles within the clinical learn-

ing environment [4, 5].

Previous research has examined dental students' approaches to managing anxious patients, largely through quantitative surveys. Findings suggest that many students feel inadequately prepared to manage fearful or uncooperative patients and often experience heightened anxiety during such encounters [6]. Students frequently rely on trial-and-error approaches or model their behavior on senior clinicians rather than consistently applying structured behavioral management techniques taught during training. While these studies provide valuable insights, their quantitative nature limits understanding of the emotional and experiential dimensions of students' interactions with anxious patients [6].

Qualitative research offers a valuable framework for exploring these dimensions by capturing students' lived experiences and personal narratives. By focusing on students' perspectives, qualitative inquiry enables deeper understanding of how dental students perceive, interpret, and cope with challenging patient interactions. Alzahem and colleagues [4] emphasized that qualitative approaches are particularly effective in uncovering hidden stressors and coping strategies that may not emerge through survey-based research alone. This approach is especially relevant within dental education, where hierarchical clinical structures and fear of negative evaluation may discourage students from openly expressing vulnerability.

Despite growing recognition of the importance of behavioral and emotional competencies in dentistry, research exploring dental students' subjective experiences of managing anxious and uncooperative patients remains limited. Much of the existing literature focuses on prevalence and stress measurement, with fewer studies examining how students make sense of these encounters and how such experiences influence their learning, well-being, and professional development.

Therefore, the aim of this qualitative study, titled "**Chairside challenges in dentistry experiences of Dental Students and clinicians in Managing Anxious and Uncooperative Patients,**" is to explore dental students' lived experiences of managing anxiety-provoking and uncooperative patient behaviors during clinical training.

Methods

Study Design

A qualitative descriptive study design was used to investigate the phenomena of how dental students and early-career dentists experience treating anxious and uncooperative patients in clinical practice. This method was chosen so as to provide an in depth insight into the perspective, feelings, and coping strategies of participants within a real-life clinical context.

Ethical Approval

The study was approved by the IRB/EC of [Institution Name] before data collection (Approval No: _ if any). This study adheres to principles of Declaration of Helsinki. All respondents gave a written informed consent, and confidentiality and anonymity were guaranteed at all times.

Subjects Recruitment

A purposive sampling method was used to recruit dental students, house officers, postgraduate trainees, and general dental practitioners from Khyber Pakhtunkhwa (KPK), Pakistan. Data were collected in **January 2026**. A total of twenty (N = 20) dental professionals voluntarily participated in the study. Written informed consent was obtained from all participants prior to data collection. Confidentiality and anonymity were strictly maintained throughout the research process.

Specific Methods Used

The qualitative descriptive design was used with semi-structured interviews being used to examine the experiences of the participants on how they handle anxious and uncooperative patients. Interviews were done either in person or through video conferencing, audio-taped, and transcribed verbatim. The data were identified using thematic analysis to identify patterns and recurrent themes. Data on quantitative information about the demographics

and perceived preparedness were gathered through a short questionnaire and analyzed through the use of descriptive statistics.

Data Analysis

Thematic analysis as defined by Braun and Clarke (2006) were used in analyzing qualitative data. IBM SPSS Statistics version 28 was used to make quantitative data analysis. The perceived preparedness and demographic variables were analyzed with the help of Fisher Exact Test. The 95% confidence interval of less than 0.05 was regarded as statistically significant.

Results

A total of twenty (N=20) Dental Professionals including dental students, house officers and postgraduates participated in the study. The cohort was equally distributed by gender, with ten males (50%) and ten females (50%). Participants represented a range of professional stages: six postgraduate trainees (30%), six general dental practitioners (30%), five house officers/interns (25%), and three undergraduate dental students (15%) as shown in the table 1.

Table 1: Participant Demographics (N=20).

Current Status	Number (n)	Percentage (%)
Postgraduate Trainee	6	30%
General Dental Practitioner	6	30%
House Officer / Intern	5	25%
Dental Student	3	15%
Total	20	100%

Participants were asked to evaluate how well their undergraduate training prepared them to manage anxious and uncooperative patients. Responses were open and later categorized as "Prepared" (indicating adequate or sufficient training) or "Not Prepared" (in-

dicating insufficient or absent training). Overall, 60% (n=12) felt prepared, while 40% (n=8) reported feeling inadequately prepared as shown in Figure 1.

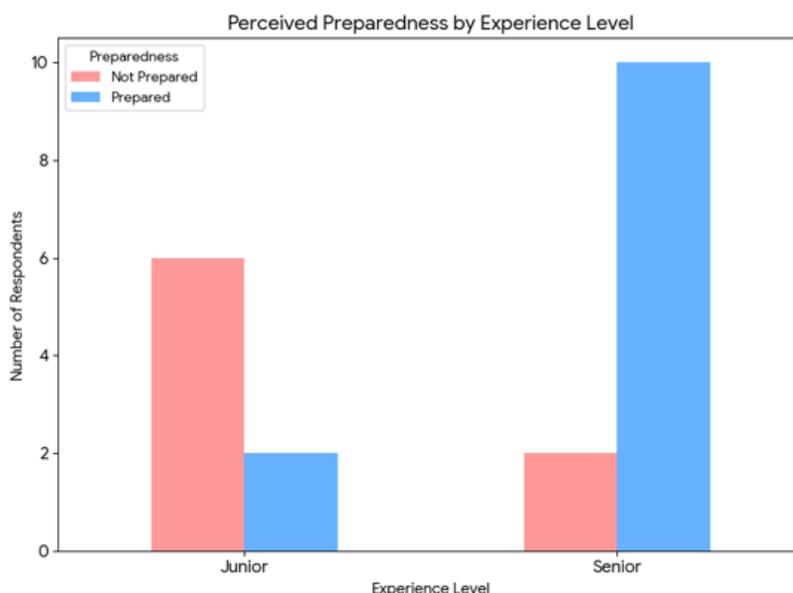


Figure 1

Fisher’s Exact Test revealed a statistically significant association between professional status and perceived preparedness ($p=0.019$). Participants were grouped into Junior (dental students and house officers/interns; $n=8$) and Senior (postgraduate trainees and general practitioners; $n=12$) categories. Among Junior respondents, only 25% ($n=2$) felt prepared, with the majority citing a lack of structured training and clinical exposure. In contrast, 83% ($n=10$) of Senior respondents reported feeling prepared, often attributing their competence to post-qualification clinical experience

rather than undergraduate training alone. No statistically significant difference in perceived preparedness was observed between male and female respondents ($p=0.65$) as shown in table 2.

Thematic analysis of qualitative responses identified commonly employed management techniques and recurrent difficulties. The most frequently reported approach was communication ($n=14$), followed by reassurance ($n=12$). Behavior management techniques such as tell-show-do, distraction, and voice control were noted less frequently ($n=5$) as shown in table 3.

Table 2: Association Between Demographic Variables and Perceived Preparedness.

Comparison	P-Value	Significance
Status (Junior vs. Senior)	0.019	Statistically Significant
Gender (Male vs. Female)	0.65	Not Significant

Table 3: Strategies and Techniques Used to Manage Anxious or Uncooperative Patients.

Strategy Category	Specific Techniques	Frequency (n)	Description
Communication	<ul style="list-style-type: none"> Explaining procedures Counselling Active listening 	14	The most commonly reported approach. Includes clear, step-by-step explanations to demystify treatment, using Tell-Show-Do, and directly addressing patient concerns to build trust.
Reassurance	<ul style="list-style-type: none"> Verbal comfort Empathy Validating feelings 	12	Closely linked to communication, this involves providing emotional support, normalizing anxiety (e.g., “It’s okay to be nervous”), and offering consistent verbal reinforcement during procedures.
Behavior Management	<ul style="list-style-type: none"> Distraction Voice control Positive reinforcement 	5	Specific clinical techniques used to modify patient behavior. Distraction (e.g., discussing non-dental topics) and voice control were noted, particularly in pediatric or highly uncooperative patients.
Referral / Senior Help	<ul style="list-style-type: none"> Calling a supervisor Referring to a specialist 	1	Employed when initial strategies fail, especially by students and junior practitioners, highlighting the reliance on supervisory support in academic and training settings.
Treatment Modification	<ul style="list-style-type: none"> Stopping treatment Postponing appointments 	1	Used as a last resort when patient cooperation is insufficient or safety is compromised. Includes aborting procedures and rescheduling for a later date.
			Frequencies (n) represent the number of times a strategy was explicitly mentioned by respondents. Multiple strategies were used in a single encounter.

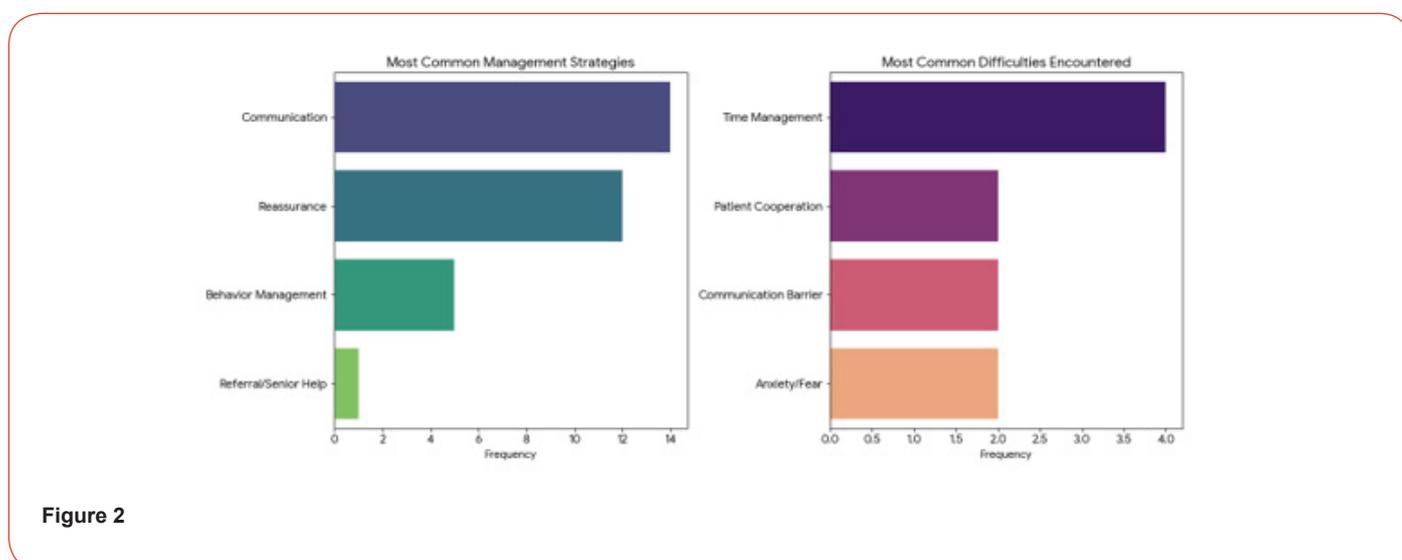


Figure 2

The key difficulties included time management (n=4) and patient cooperation (e.g., refusal to open the mouth, sudden movements, or procedural interruption). Several respondents also described emotional and psychological strain, including feelings of anxiety, stress, frustration, and helplessness during such encounters as shown in figure 2.

Regarding the curricular improvements, the most frequently

suggested change was dedicated training in behavioral management and communication strategies (45%), followed by enhanced clinical supervision during patient interactions (25%). Simulation-based workshops (10%) and structured debriefing sessions (5%) were less commonly mentioned, though many respondents advocated broadly for increased practical exposure and hands-on training as shown in table 4.

Table 4: Frequency of Suggested Improvements in Undergraduate Dental Training (N=20).

Suggestion Category	Count (n)	Percentage (%)*
Dedicated training in behavioral management & communication strategies	9	45%
Enhanced clinical supervision during patient interactions	5	25%
Simulation-based workshops / role-playing exercises	2	10%
Structured debriefing / discussion sessions	1	5%
Other / General suggestions (e.g., "more exposure," "hands-on training," "better curriculum")	11	55%
		Percentages total more than 100% as some responses contained multiple suggestions.

Discussion

This qualitative research examined the experiences of dental students and young dental practitioners in dealing with anxious and uncooperative patients, focusing on perceived preparedness, the management techniques that are usually adopted, and the opportunities to enhance the situation with the help of the curricular changes. The results indicate that there is a significant disparity between the training and practical clinical requirements, especially within the cohort of junior participants, and underscores the paramount importance of experiential learning and post-qualification exposure in building confidence and competence in handling patients.

The most remarkable observation was the statistically significant correlation between professional status and perceived preparedness where the junior participants claimed that they felt much less confident than their senior colleagues. This is in line with previous research that shows that dental students often have a perception that they are inadequately equipped to handle anxious patients and tend to depend on an informal learning strategy, observation, or trial-and-error methods instead of a formal behavioral model [2, 5, 6], which may indicate that contemporary curricula does not provide adequate attention to the interpersonal and emotional aspects of patient care.

The most widely used management strategies were communication and reassurance, which is an intuitive dependency on relational and empathetic methods. This is in line with the larger literature on the need to use a patient-centered communication, empathy and build trust in reducing dental anxiety and enhancing treatment cooperation [1, 3, 7], although the relatively low reporting of formal behavioral interventions (e.g., use of tell-show-do, dis-

traction, voice control) may indicate the lack of confidence or training in implementing structured behavioral interventions in clinical practice. Other researchers have observed that students might be knowledgeable about these methods in principle, but can find it difficult to put them into consistent practice at the chairside unless taught through practice and feedback [8, 9].

The descriptions of emotional/psychological stress of the participants, such as anxiety, stress, frustration, and helplessness, support the perspective that dealing with challenging patient interactions is a significant contributor to stress in dental training. The findings align with other international reports that show dentistry as one of the most stressful learning settings, and the pressure to deal with patients and perform clinical duties as some of the most critical factors leading to student discomfort [4, 10, 11]. The current study contributes to this body of knowledge by revealing that these emotional issues are frequently internalized, especially by junior trainees who may be hesitant to seek supervisory assistance because of perceived hierarchical barriers or fear of negative critique.

Time management and patient compliance were cited as the main practical challenges, which implies that anxious and uncooperative behavior does not only influence the emotional state of students but also interferes with the workflow and performance expectations in a clinical environment. This has a two-fold responsibility which can cause increased stress in the academic environment where students need to achieve the clinical quotas and assessment standards, which makes them discourage the implementation of time-consuming behavior strategies even in the cases when students recognize their therapeutic benefit. Such conflicts between the efficiency and patient-centered care have been observed in the past, both in educational literature and clinical practice [3, 12].

The suggested curricular improvements have a powerful implication to dental education. The intensive orientation to the specialized training on behavioral management and strategies to communicate indicates a perceived need to have more systematic and formal training in this field. Evidence based practice Simulation-based learning, role-playing, and reflective debriefing have been shown to significantly enhance the level of student confidence, empathy, and competence in handling anxious patients [8, 13]. Simulated clinical supervision and feedback in real time have also been shown to strengthen both technical and interpersonal skills, hence fostering professional identity formation and emotional resiliency [11, 14].

Along with its contributions, this paper has certain limitations. The limited number of participants and the fact that they included participants of various professional levels might restrict the externalization of the findings to the groups of undergraduate dental students exclusively. Moreover, a self-report preparedness and emotional response subject is likely to have recall bias and social desirability. Further research requires bigger, multi-institutional samples and longitudinal designs to define the relationship of competencies and coping strategies in dental education and the first several years in practice. Further review of faculty perceptions and institutional policies would also be helpful in generating helpful information on systemic elements that are driving student preparedness [15-17].

In general, this article demonstrates that certain gap in the development of technical instructions and cultivation of emotional, behavioral and communication skills during undergraduate dental education has existed long enough. This might be overcome through a planned behavioral control course, increased supervisory support, and intuitive learning prospects that may assist to equip would-be dentists in how to provide care to anxious and uncooperative patients, which subsequently enhances patient results, student health, and the quality of clinical care overall.

Conclusion

A notable deficiency in the undergraduate dental education curriculum is reflected by this study, which shows the lack of concepts among senior trainees on how to handle anxious and uncooperative patients. Although reassurance and communication were performed more frequently, formalized behavior modification methods were infrequently used. The described experiences of participants suggests both emotional burden and practical hurdles, reinforcing the demand for more integration of behavioral and communication skills in curricula. Structured experiential exposure, simulation-based workshops as well as enhanced guidance at clinical supervision is suggested to better equip the future dentist for these chairside challenges.

Acknowledgement

None.

Conflict of Interest

The authors declare that there are no conflicts of interest related to this study.

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