

Impact of Negative Behavior of Patients and Their Relatives towards Dental Students: A Cross-Sectional Study

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ABSTRACT

Background: The clinical training of dental students involves direct patient interaction, which plays a crucial role in developing clinical competence and communication skills. However, negative behavior from patients and their relatives can adversely affect students' psychological well-being and learning experience.

Aim: To evaluate the prevalence and impact of negative behavior exhibited by patients and their relatives toward dental students, and to assess its effects on their psychological state and clinical performance.

Methods: A cross-sectional, questionnaire-based study was conducted among 323 undergraduate dental students (III BDS, IV BDS, and interns) from dental colleges in the western region of Maharashtra. Data were collected using a validated, self-structured questionnaire distributed via an online platform. The questionnaire assessed types and frequency of negative behavior, psychological impact, effects on clinical learning, coping strategies, and reporting patterns. Data were analyzed using descriptive statistics and chi-square tests, with a p-value <0.05 considered statistically significant. Results: More than half of the participants (56%) reported experiencing negative behavior from patients, while 42% reported similar experiences involving patients' relatives. A significant proportion of students reported stress (63.1%), decreased confidence (35.9%), reduced motivation (28.8%), and increased anxiety (19.8%). Additionally, 43% of students reported hesitation in interacting with patients, and 26.9% experienced difficulty in concentration. Nearly half of the incidents (49.5%) were not reported, indicating under-reporting.

Conclusion: Negative behavior from patients and their relatives significantly impacts the psychological well-being and clinical performance of dental students. There is a need for structured training, improved institutional support, and effective reporting systems to ensure a safer and more supportive clinical learning environment.

Keyword: Violence, Negative behaviour, Dental students.

INTRODUCTION

The clinical training of dental students represents a crucial phase in the development of competent oral healthcare professionals; wherein theoretical knowledge is integrated with practical patient care. During this period, students are expected not only to acquire technical proficiency but also to develop effective communication skills, empathy, and professional conduct. However, the clinical learning environment is often influenced by the behavior and attitudes of patients and

their accompanying relatives, which can significantly affect the psychological well-being and clinical performance of dental students.

Patient behavior in healthcare settings is influenced by multiple factors, including anxiety, fear, pain perception, previous dental experiences, and socio-cultural background. Dental procedures are frequently associated with heightened anxiety and emotional distress, which may manifest as irritability, non-cooperation, or even aggression¹. Such negative

behavioral responses can range from verbal hostility and disrespect to more severe forms such as threats, intimidation, and, in rare cases, physical aggression.

Workplace violence and patient aggression have increasingly been recognized as significant challenges in healthcare professions worldwide. Studies indicate that a considerable proportion of healthcare providers encounter some form of aggression during their professional careers. Dental settings are particularly susceptible due to the invasive nature of procedures, patient expectations, and time constraints. Verbal aggression remains the most commonly reported form, followed by reputational and physical aggression^{2, 3}.

Dental students, owing to their limited clinical experience and perceived lack of authority, are especially vulnerable to negative behavior from patients and their relatives. Research has demonstrated that a significant proportion of dental student's experience patient aggression, including shouting, insults, and threats. Such experiences have been shown to adversely affect clinical performance, increase stress levels, and contribute to emotional exhaustion^{1,4}. In some instances, students have reported decreased confidence and even reconsideration of their professional career.

In addition to patients, the role of accompanying relatives or attendants cannot be overlooked. While their involvement is often supportive, it may sometimes lead to interference in clinical procedures, unrealistic expectations, or confrontational attitudes toward dental students. This dynamic interaction between students, patients, and relatives can complicate communication and decision-making, thereby increasing stress and reducing the efficiency of clinical training.

The psychological impact of repeated exposure to such negative behavior can be profound. Dental students already experience considerable stress due to academic workload and clinical responsibilities. Exposure to hostility and aggression may further exacerbate anxiety, burnout, and reduced empathy, ultimately affecting both personal well-being and the quality of patient care⁵.

Despite the growing body of literature on workplace violence in healthcare, limited

attention has been directed toward understanding the combined impact of negative behavior from both patients and their relatives on dental students. Addressing this gap is essential for fostering a safe and supportive clinical learning environment and for developing effective coping mechanisms and institutional policies.

Therefore, the present study aims to evaluate the impact of negative behavior exhibited by patients and their relatives toward dental students, with particular emphasis on its effects on students' psychological well-being, academic performance, and clinical efficiency.

Furthermore, the study seeks to highlight the importance of implementing strategies to promote respectful interactions and enhance the overall quality of dental education and patient care.

MATERIALS AND METHODS

1. Study Design

The present study was designed as a cross-sectional, questionnaire-based observational study aimed at evaluating the prevalence, impact, and response to negative behaviour encountered by undergraduate dental students during clinical practice. The cross-sectional design enabled the assessment of exposure and associated outcomes within a defined population at a single point in time.

2. Study Setting

The study was conducted in Dental Colleges of Western region of Maharashtra in where undergraduate students are actively involved in clinical training and patient management.

3. Study Population

The study population comprised undergraduate dental students (III BDS, IV BDS, and interns) who were actively engaged in clinical postings. These students routinely interact with patients as part of their curriculum, thereby making them particularly relevant for evaluating exposure to negative behaviour and its subsequent psychological and academic impact.

4. Sample Size Determination and Sampling Technique

A total of 323 participants were included in the study. The sample size was based on the number of eligible students available during the study period and aimed to ensure adequate representation across different

academic levels with clinical exposure. Although formal sample size calculation was not performed, the inclusion of a large proportion of eligible participants enhances the reliability and internal validity of the findings. A non-probability convenience sampling method was employed to recruit participants. Students who fulfilled the inclusion criteria and were accessible during the data collection period were invited to participate.

5. Eligibility Criteria

5.1 Inclusion Criteria

Participants were included if they were undergraduate dental students with active clinical exposure and were willing to participate in the study.

5.2 Exclusion Criteria

Students without clinical exposure and those who did not provide informed consent were excluded to ensure that responses were relevant and reflective of actual clinical experiences.

6. Data Collection Instrument

Data were collected using a self-structured and validated questionnaire specifically developed for this study. The questionnaire was designed following an extensive review of existing literature and expert input to ensure content adequacy and relevance.

The instrument comprised multiple domains, including types of negative behavior encountered, frequency of such incidents, involvement of patients' relatives, psychological impact (stress and emotional response), impact on learning and clinical performance, coping mechanisms and reporting behavior

6.1 Validation of the Instrument

Content validity was established through expert evaluation by faculty members in the field of dental education and behavioral sciences. The questionnaire was reviewed for clarity, relevance, and comprehensiveness.

A pilot study was conducted on a small group of students (not included in the final sample) to assess feasibility, clarity, and understanding of the questions. Necessary modifications were made based on feedback.

Internal consistency of the questionnaire was assessed using Cronbach's alpha (0.87), ensuring acceptable reliability of the instrument.

7. Data Collection Procedure

Data collection was carried out using an

online survey platform (Google Forms), which allowed for efficient distribution and response collection. The questionnaire link was circulated among eligible participants through institutional communication channels.

Participants were provided with a brief introduction outlining the purpose of the study. Participation was entirely voluntary, and informed consent was obtained prior to accessing the questionnaire.

To minimize response bias, anonymity was strictly maintained, and no personally identifiable information was collected. Participants were encouraged to respond honestly based on their clinical experiences.

8. Statistical Analysis

The collected data were compiled and analyzed using appropriate statistical software. Descriptive statistics were used to summarize the data, including frequencies, percentages, and distributions of responses. Inferential statistical analysis was performed to assess associations between variables. The Chi-square test was used to determine the association between categorical variables such as level of study and exposure to negative behaviour, psychological impact, coping strategies, and institutional response.

A p-value of less than 0.05 was considered statistically significant. The results were presented in the form of tables and percentages to facilitate interpretation and comparison.

9. Ethical Considerations

Ethical approval for the study was obtained from the Institutional Ethics Committee prior to data collection. (Ref No.: YDCH/IEC/2107/69/2025). The study adhered to standard ethical principles, including voluntary participation, informed consent, confidentiality, and anonymity.

RESULTS

A total of 322 dental students participated in the study. Demographic Distribution Most participants belonged to the age group of 18–25 years (97.8%). Females constituted 82.4% of the sample, while males accounted for 17.3%. The majority were final-year students (49.8%), followed by third-year students (45.2%) and interns (5%).

Experience of Negative Behavior

More than half of the students (56%) reported experiencing negative behavior

from patients, while 42% reported such behavior from patients' relatives. The most common forms included lack of cooperation, rude comments, and non-compliance during treatment.

Stress Levels

A significant proportion of students reported experiencing stress due to patient interactions. About 43.6% experienced stress occasionally, while 19.5% reported frequent stress. Only a small percentage (8.4%) reported no stress.

Emotional Impact

Negative interactions had a noticeable emotional impact on students. Around 35.9% reported decreased confidence, 28.8% reported reduced motivation, and 19.8% experienced increased anxiety.

Impact on Clinical Learning

Approximately 43% of students reported hesitation in interacting with patients following negative experiences. Additionally, 26.9% reported difficulty in concentrating,

while 12.7% reported reduced clinical exposure.

Coping Strategies

Students adopted various coping strategies, with 38.4% discussing their experiences with peers, 28.8% seeking support from faculty, and 17% practicing relaxation techniques.

Reporting of Incidents

Only 50.5% of students reported such incidents, while 49.5% did not, indicating a significant level of under-reporting.

Institutional Response and Awareness

Only 36.8% of students reported that appropriate action was taken after reporting incidents. Around 52.6% were aware of institutional protocols, while 45.2% were unaware of legal protections.

Need for Training

A large majority (85.7%) expressed the need for workshops on handling difficult patients, and 85.1% were willing to participate.

Table 1: Demographic details

Group	Subgroups	Number	Percentage (%)
Age groups	18 – 25	315	96.63%
	26 – 35	7	2.15%
Gender	Male	56	17.39%
	Female	266	82.61%
Level of Study	III BDS	146	45.3%
	IV BDS	161	50.00%
	Interns	14	4.7%

Table 2: Experience of Negative Behaviour

Question	No N (%)	Yes N (%)
Experienced negative behaviour from patients	142 (43.56%)	180 (55.21%)
If yes, please describe the type of negative behaviour you encountered	Lack of co-operation 77 (42.77%) Rude behaviour and passing on negative comments 103 (57.23%)	
Experienced negative behaviour from relatives	187 (57.36%)	135 (41.41%)

Table 3: Experience with negative behaviour (Q4 to Q6)

	III BDS	IV BDS	Interns	χ^2	P value
Have you experienced negative behaviour from patients during your clinical training	68 (21.1%)	101 (31.4%)	11(3.4%)	10.048	0.007**

Have you ever experienced negative behaviour from relatives of patients	48 (14.9%)	80 (24.8%)	7(2.2%)	9.034	0.011*
* - significant ** - highly significant # - not significant					

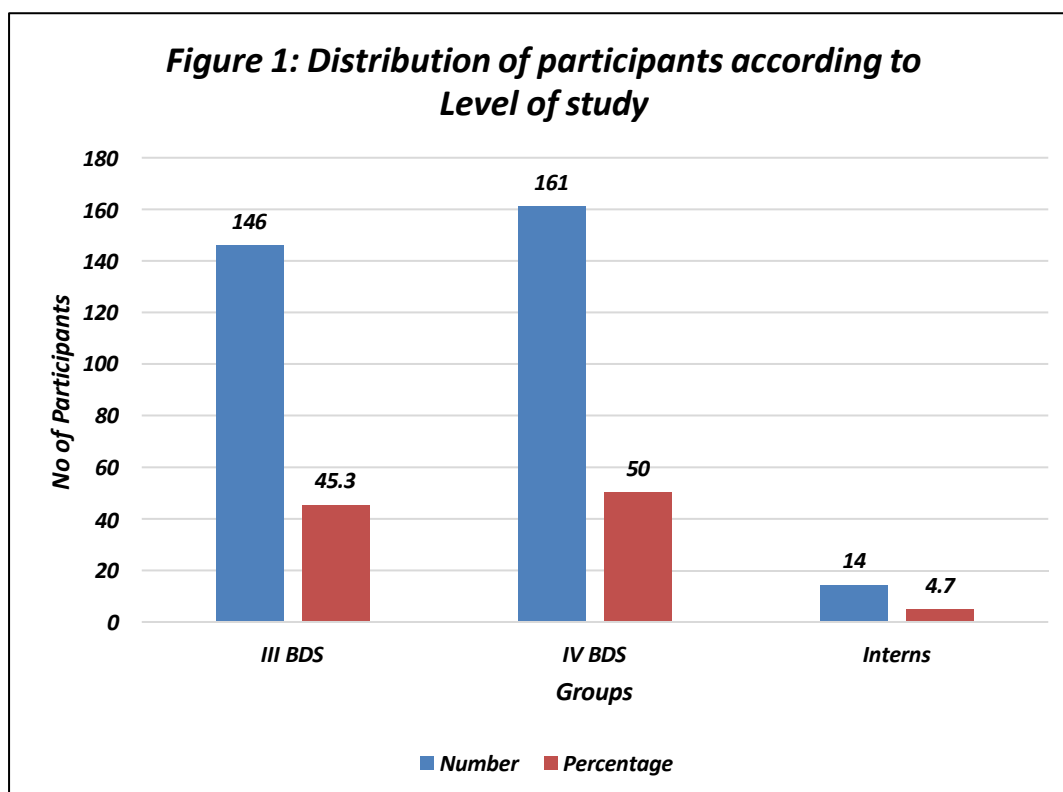
Table 4: Impact on your well-being (Q7 to Q9)

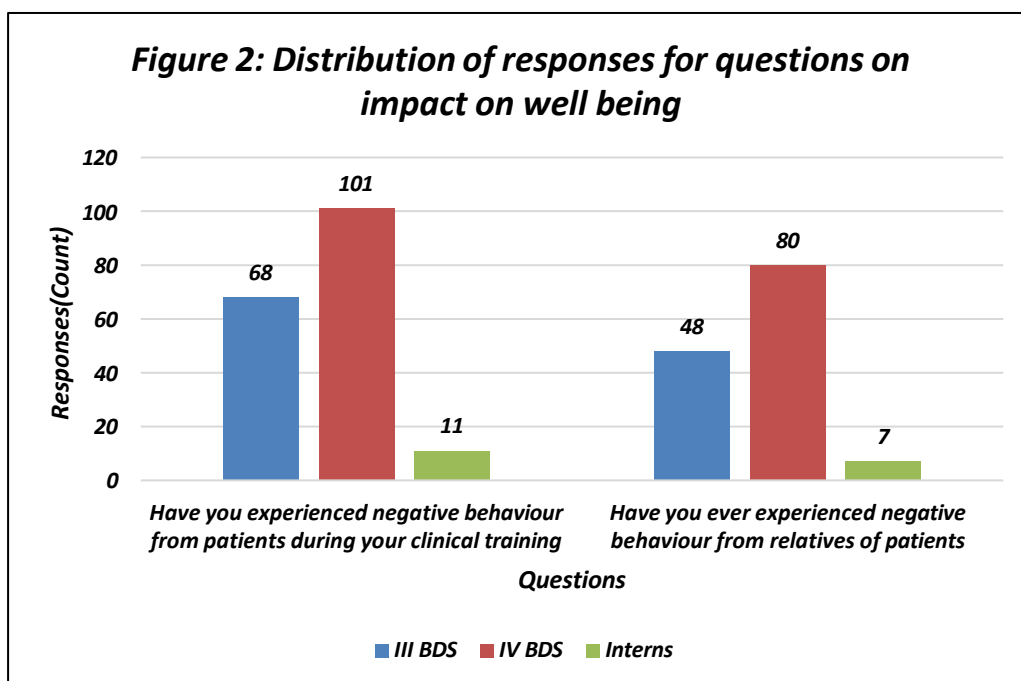
	Responses	III BDS	IV BDS	Interns	χ^2	P value
How often do you feel stressed due to negative interactions with patients or their relatives	Always	9(2.8%)	19(5.9%)	1(0.3%)	15.795	0.045*
	Often	30(9.3%)	33(10.2%)	0(0.0%)		
	Sometimes	63(19.6%)	69(21.4%)	9(2.8%)		
	Rarely	25(7.8%)	34(10.6%)	3(0.9%)		
	Never	19(5.9%)	6(1.9%)	2(0.6%)		
How do these interactions affect your emotional well - being	Increase anxiety	27(8.4%)	34(10.6%)	2(0.6%)	15.553	0.016*
	Decrease motivation	40(12.4%)	50(15.5%)	3(0.9%)		
	Decrease confidence	45(14.0%)	62(19.3%)	9(2.8%)		
	Other	34(10.6%)	15(4.7%)	1(0.3%)		
In what ways has your learning experience been affected by negative behaviour	Difficulty focusing	31(9.6%)	52(16.1%)	3(0.9%)	17.489	0.008**
	Hesitation to interact with patients	62(19.3%)	70(21.7%)	7(2.2%)		
	Decreased time for clinical practice	15(4.7%)	24(7.5%)	2(0.6%)		
	Other	38(11.8%)	15(4.7%)	3(0.9%)		

Table 5: Coping strategies and recommendations (Q10 to Q18)

	Responses	III BDS	IV BDS	Interns	χ^2	P value
What strategies do you use to cope with negative behaviour from patients or their relatives	Discuss in experience with peer	53(16.5%)	66(20.5%)	5(1.6%)	15.859	0.015*
	Seeking support from instructors	38(11.8%)	50(15.5%)	5(1.6%)		
	Practicing relaxation techniques	20(6.2%)	31(9.6%)	4(1.2%)		
	Other	35(10.9%)	34(10.6%)	3(0.9%)		

Have you reported such incidents to institution	Yes	69(21.4%)	86(26.7%)	7(2.2%)	1.244	0.537#
	No	77(23.9%)	75(23.3%)	8(2.5%)		
Was action taken by your institution	Yes	45(14.0%)	65(20.2%)	8(2.5%)	9.792	0.044*
	No	60(18.6%)	49(15.2%)	1(0.3%)		
	Maybe	41(12.7%)	47(14.6%)	6(1.9%)		
Does your institute have any protocol to handle such situations	Yes	68(21.1%)	92(28.6%)	9(2.8%)	7.365	0.118#
	No	33(10.2%)	28(8.7%)	0(0.0%)		
	Maybe	45(14.0%)	41(12.7%)	6(1.9%)		
Are you aware of any laws protecting health care workers from violence	Yes	72(22.4%)	98(30.4%)	6(1.9%)	5.489	0.064#
	No	74(23.0%)	63(19.6%)	9(2.8%)		
Do you think there should be mandatory lectures or workshop in college for handling such incidents	Yes	122(37.9%)	140(43.5%)	14(4.3%)	1.467	0.048*
	No	24(7.5%)	21(6.5%)	1(0.3%)		
Would you like to participate in such workshop	Yes	115(35.7%)	145(45.0%)	14(4.3%)	8.543	0.014*
	No	31(9.6%)	16(5.0%)	1(0.3%)		





DISCUSSION

The present study highlights that negative behaviour from patients and their relatives is a common issue faced by dental students. The finding that 56% of students experienced such behaviour is consistent with previous studies, which report high prevalence of patient aggression in dental settings^{2,3,10,13}. Verbal aggression and lack of cooperation were the most commonly reported forms, which aligns with earlier research indicating that verbal abuse is the predominant type of workplace aggression in healthcare^{1,14,15}. The psychological impact observed in this study, including decreased confidence and increased anxiety, is supported by previous findings that workplace violence significantly affects the mental health of dental students^{5,11,12}. Additionally, the hesitation in interacting with patients reported by 43% of students is concerning, as it may hinder clinical skill development and professional growth, particularly in the context of effective dentist-patient communication emphasized in literature⁷. The role of accompanying relatives is an important aspect highlighted in this study. Their interference and confrontational behavior can further complicate clinical interactions, increasing stress levels among students. Similar concerns regarding interpersonal challenges, including microaggressions and discrimination in clinical environments, have been reported in educational settings⁸.

Another important finding is the issue of underreporting, with nearly half of the students not reporting incidents. This may be due to fear, lack of awareness, or inadequate institutional support. Previous studies have emphasized that lack of structured policies and reporting systems contributes to continued workplace violence in healthcare settings¹⁰. The high demand for training programs indicates that students are aware of the issue and are willing to develop better coping strategies. Literature supports that structured training in communication, conflict resolution, and stress management can significantly improve student resilience and professional behaviour^{8,12}. Furthermore, studies have shown that repeated exposure to aggression may lead to burnout and reduced job satisfaction among healthcare professionals^{11,14}. Extreme forms of misconduct, including harassment, have also been documented in dental educational settings, highlighting the need for stricter institutional safeguards¹⁶.

CONCLUSION

The present study highlights that negative behavior from patients and their relatives is a common and significant challenge faced by dental students during clinical training. A substantial proportion of students reported experiencing such behavior, which negatively affects their psychological well-being. Increased stress, anxiety, reduced confidence, and decreased motivation were commonly

observed outcomes. These psychological impacts further influence students' ability to interact effectively with patients. Many students reported hesitation and reduced concentration during clinical procedures. This can ultimately hinder their clinical skill development and academic performance

The involvement of patients' relatives adds an additional layer of complexity to clinical interactions. Addressing these challenges is essential to ensure a safe and conducive learning environment. Overall, improving communication, support systems, and institutional policies is crucial for enhancing student well-being and quality of patient care.

Recommendations

Based on the findings of the study, several measures can be implemented at institutional, educational, and patient levels to effectively address and mitigate the impact of negative behavior. Dental institutions should incorporate regular training sessions focused on communication skills, patient management, and conflict resolution. These programs can equip students with practical strategies to handle difficult situations confidently and professionally. Students should be encouraged to report incidents without fear, and timely action must be ensured to build trust in the system. Educational initiatives should be conducted to sensitize patients and their attendants about the role of dental students, the importance of cooperation, and maintaining respectful behavior during treatment. By implementing these recommendations, dental institutions can create a more positive and supportive clinical atmosphere, ensuring the holistic development of students while maintaining high standards of patient care.

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