BULLETIN OF STOMATOLOGY AND MAXILLOFACIAL SURGERY
Volume 21, Issue 2

DOI: 10.58240/1829006X-2025.2-250

RESEARCH ARTICLE

ATTITUDE TOWARDS LEARNING COMMUNICATION SKILLS AMONG DENTAL INTERNS: A CROSS-SECTIONAL STUDY

Anjala Begum[1], Athira Sreedevi[1], Christeena Babu[1]

[1]Department of Public Health Dentistry, Government Dental College, Thiruvananthapuram, Kerala, India

Corresponding Author: Dr. Athira. Sreedevi, Assistant Professor, Department of Public Health Dentistry, Government Dental College, Thiruvananthapuram, Kerala. India e-mail dr.athiramahadevan@gmail.com

Received: *Feb. 17, 2025;* ***Accepted:*** *Feb. 27, 2025;* ***Published:*** *Mar. 20, 2025*

ABSTRACT

Objective: The primary objective was to assess the attitudes of dental interns in Kerala towards communication skills acquisition using the Dental Communication Skills Attitude Scale (DCSAS) questionnaire. The additional objective was to determine the association between age, gender, prior academic accomplishment, self-evaluation of communication abilities, and respondents' attitudes towards developing them.

Methods and materials: A structured proforma in Google Forms collected demographic data, and self-assessed communication skill levels of dental interns of Kerala. The validated DCSAS questionnaire to assess students' perspectives and willingness to learn communication skills during their professional course.

Results: The study participants had an average age of 22.94±0.93 years. In all four DCSAS sections, students' mean attitude scores for developing communication skills were statistically significant for most factors. Age was strongly correlated with average positive and negative attitudes towards learning communication skills. Positive attitude was highest in first-class students. Students with moderate communication skills had the greatest mean positive attitude score. Students who identified as poor communicators had the highest mean total negative attitude score, whereas those who identified as good communicators had the lowest.

Conclusion: The average positive attitude of dental interns towards communication skills development was related to gender, age, academic performance, and self-assessed communication ability. Higher self-assessment in communication skills, academic success, and older age were the main factors related to the study sample's negative attitude.

Keywords: Academic performance, Attitude scale, Dental interns, Learning

INTRODUCTION

Communication among healthcare providers is a fundamental aspect of the patient-clinician interaction. The acquisition of communication skills is essential in medical and dental schooling, as these fundamental abilities significantly enhance multiple facets of the healthcare process, such as performing thorough examinations, achieving accurate diagnoses, developing comprehensive plans, and delivering appropriate treatments.[1,2] Effective patient communications is essential for fostering confidence, enhancing rapport and cooperation, and decreasing ambiguities. An optimal atmosphere is to be established for conversation with a varied array of individuals, encompassing various interests, traits, and cultures.[3,4]

Evidence indicates that patients infer a clinician's technical proficiency and expertise from their communication skills. It also guarantees superior and ethical clinical practice, enhancing healthcare professionals' diagnostic proficiency and decision-making capabilities, while also fostering the satisfaction of healthcare users.[5] Dental students are

typically open to acquiring communication skills, and their recognition of the importance of these capabilities can be greatly enhanced by training. In recent years, the necessity of communication skills in the school of dentistry has garnered significant attention from academicians.[6,7]

The perspective of dental students about communication skills training may serve as a significant marker for the value they assign to such training, potentially impacting their communication behaviours in clinical environments.[8]

The efficacy of a communication skills instruction course could be enhanced with a deeper comprehension of students' ideas and attitudes towards relationships between doctors and patients. Competence in communication, team-building, and global awareness has grown into a fundamental component of the dental curriculum in India. To date, the literature lacks reports on assessments or training of communication skills in undergraduate dental courses in India.[9] A training program can assist students in overcoming challenges related to organizing oral examinations, acquiring precise data from patients, and understanding patients' perspectives of their oral health concerns. An individual's attitude and motivation can significantly impact their behaviour, rendering communication a learned skill. Investigating the attitudes of dental students is essential, as it may assist dental instructors in developing effective strategies to guide students in acquiring communication skills, enhancing their abilities, and preventing negative attitudes from obstructing the effective delivery of training programs.[10]

Numerous research on dentistry students' attitudes towards learning communication skills in Western contexts are available in the scholarly literature, however, few have been conducted in Indian contexts.[7] The primary objective of the study was to evaluate the attitudes of dental interns in Kerala regarding the acquisition of communication skills, utilizing the Dental Communication Skills Attitude Scale (DCSAS) questionnaire. The second objective was to ascertain the relationship between age, gender, prior academic success, and self-evaluation of communication skills and the attitudes of the respondents towards developing communication skills.

MATERIALS AND METHODS

This is a census-type survey in which all interns from dental colleges (both government and private) in the state of Kerala in 2024 were prompted to participate. The study was approved by the Institutional Ethics Committee, Government Dental College, Thiruvananthapuram, Kerala with IEC Approval No. DCT/IEC/SS/24/19 dated 05/09/2024. The interns who consented to take part were enrolled after being informed of the study objectives through a participant information form. To optimize the response rate, a representative from each institution was appointed, and contact details for all participants were gathered, with periodic notifications and personal outreach conducted periodically. A minimum of 80% of the 1200 interns across all colleges were ensured to respond.

Data were gathered through Google Forms utilizing a structured proforma that included sections for recording demographic information (age, gender, college name, and final-year BDS academic performance), self-assessed communication skill levels, and the validated pretested DCSAS questionnaire to gather data on students' perspectives and their willingness to learn communication skills during their professional course. The DCSAS questionnaire comprised 24 items addressing both positive and negative attitudes. Responses were evaluated using a 5-point Likert scale ranging from strongly disagree to strongly agree, with higher scores reflecting a more positive or negative perspective. The range of positive attitude scores for each individual was from one to 65. Scores less than or equal to 32 indicate a low positive attitude, while scores greater than or equal to 33 indicate a high positive attitude. The range of negative attitude scores for each individual was between one and 55. Scores below or equal to 29 indicate a low level of negative attitude, while scores more than or equal to 30 indicate a high level of negative attitude. The DCSAS comprises four sections: learning, importance, quality, and success, featuring 13 positively phrased items and 11 negatively phrased items.

The learning section encompassed ten items, all of which represented positive attitudes. This element encompasses both utilitarian and ethical dimensions of the dental profession. The learning attitude score varies between 10 and 50. The importance section consisted of six items, all of which addressed negative attitudes. This component signifies the intricacy of communication and the challenge of attaining proficiency. The attitude score of the importance section is between 6 and 30. The quality section consisted of four items, two reflecting a positive attitude and two reflecting a negative

attitude. This component encompasses assertions regarding the acquisition of effective communication skills and positions the significance of communication on par with other competencies and knowledge in dentistry. The learning attitude score of the quality section varies from 4 to 20. The success section comprised four elements: three negative attitudes and one positive with the attitude score ranging between four and 20. The element includes assertions regarding the process and the beneficial impacts of communication skills on achieving success in dental school.[11]

Statistical analysis

The data were analyzed utilizing the Statistical Package for Social Sciences (SPSS Inc., SPSS for Windows, Version 26.0, Chicago, IL, USA) at a 5% significance level. The data were evaluated by applying descriptive analysis, Chi-square test, unpaired t-test, and ANOVA.

RESULTS

The average age of the study respondents was 22.94±0.93 years. The survey had an 83.83% response rate (n=1006). A female preponderance comprised 72.5% of the group. Participants were between the ages of 21 and 26, with 73.5% unravelling within the 23.1 and 25 age spectrums. Participants in the study were posed two questions for self-evaluation on their roles as students and communicators. Approximately 48.41% of the students identified as first-class students. Approximately 30.91% of individuals classified themselves as second-class students, 19.78% as pass-class students, and merely 0.89% as distinction students. Among the interns, 24.25% self-assessed to be excellent communicators, 41.05% as good, 33.10% as moderate, and barely 1.59% as poor communicators (Table 1).

Table 1. Demographic profile of the study participants

Sociodemographic variables	Total N (%)	Males N (%)	Females N (%)	λ^2	p-value
Age (Years)[+]	22.94±0.93	22.98±0.92	22.89±0.94	1.36	0.17
Sector of the college					
Government	222 (22.1)	61 (22)	161 (22.1)	0.02	0.89
Private	784 (77.9)	216 (78)	568 (77.9)		
Total	1006 (100)	277 (100)	729 (100)		
Past academic performance					
Distinction	9 (0.89)	6 (2.16)	3 (0.41)	0.66	0.88
First class	487 (48.41)	134 (48.38)	353 (48.42)		
Second class	311 (30.91)	80 (28.88)	231 (31.69)		
Pass	199 (19.78)	57 (20.58)	142 (19.48)		
Total	1006 (100)	277 (100)	729 (100)		
Self-perceived communication skill					
Excellent	244 (24.25)	82 (29.6)	162 (22.22)	11.32	0.010**
Good	413 (41.05)	119 (42.96)	294 (40.33)		
Moderate	333 (33.1)	72 (25.99)	261 (35.8)		
Poor	16 (1.59)	4 (1.44)	12 (1.65)		
Total	1006 (100)	277 (100)	729 (100)		

[+]t-test; **highly significant; p>0.05-statistically insignificant

According to Figure 1, 36.48% (n=367) and 43.94% (n=442) of students believed that communication is crucial for dental academia and professional practice, respectively. Conversely, 41.95% (n=422) and 38.87% (n=391) of students believed that it was not significant for either of these reasons respectively. Furthermore, 21.57% (n=217) and 17.20% (n=173) of students were unaware of the significance of communication in educational institutions and clinical settings, respectively. The data analysis about students' attitudes towards developing communication skills across each of the four sections of DCSAS revealed that the mean attitude scores were statistically significant for most of the variables examined. The mean attitude scores of students regarding the learning aspect of DCSAS were statistically insignificant for gender (p=0.3), college sector (p=0.58), and self-reported communication skills (p=0.37) (Table 2).

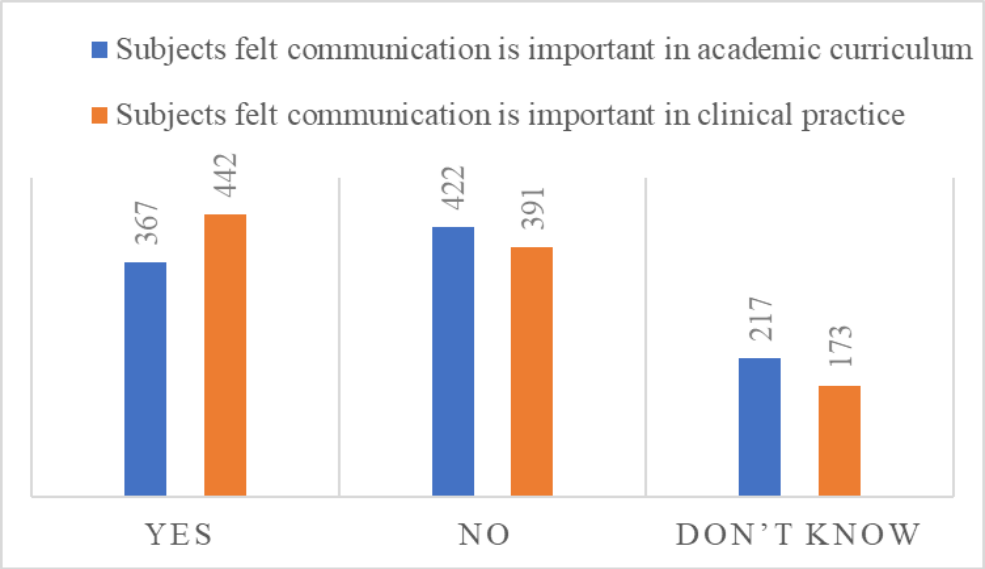

Figure 1. Distribution of responses based on opinions regarding the importance of learning communication skill

Table 2. Distribution of the means of attitude score in the four DCSAS factors concerning the variables under study

Variables under study	Learning	Importance	Quality	Success
Gender				
Male	40.71±4.88	25.85±3.47	17.53±1.42	15.73±2.42
Female	40.39±4.16	24.97±3.36	17.04±1.61	14.8±2.49
t-test	1.04	3.68	4.45	5.33
p-value	0.30	0.0002*	<0.0001*	<0.0001*
Age (Years)				
21.0-23.0 (n=174)	41.15±4.12	26.17±2.26	14.29±2.69	13.08±3.95
23.1-25.0 (n=739)	41.18±4.36	25.18±2.65	15.09±3.07	14.16±3.97
>25 (n=93)	40.0±4.28	25.23±2.44	15.14±2.18	14.0±3.98
ANOVA	3.13	10.59	5.43	5.22
p-value	0.044*	0.001*	0.005*	0.006*
Academic performance				
Distinction	43.82±3.23	23.43±4.6	14.91±2.56	16.58±1.08
First class	42.38±3.17	21.27±4.36	13.74±2.47	16.46±1.23
Second class	40.07±3.48	21.31±3.28	13.25±1.25	14.49±1.1
Pass	35.62±3.02	20.25±2.13	13.39±1.09	14.18±1.18
ANOVA	209.14	5.40	5.98	266.52
p-value	0.0001*	0.001*	0.0001*	0.0001*
Self-reported communication skills				
Excellent	44.28±2.26	23.83±3.8	16.11±1.47	17±1.08
Good	44.17±2.85	23.57±3.57	15.75±1.87	16.37±1.5
Moderate	44.01±2.3	22.8±3.6	13.08±1.98	12.49±2.35
Poor	43.37±2.14	21.23±3.14	12.35±1.68	11.21±2.87
ANOVA	1.05	6.29	187.97	427.52
p-value	0.37	0.0001*	0.0001*	0.0001*

*significant; p>0.05-statistically insignificant

The overall mean score for positive attitude was greater in females (53.41±4.80) than in males (52.74±4.73), with a statistically significant difference (p=0.047). Conversely, the total mean score for negative attitude was nearly identical between males (27.62±5.17) and females (27.76±4.79), with statistically insignificant differences observed. Age was determined to have a strong relationship with the average positive and negative attitudes towards acquiring communication skills. As age advanced, positive attitude scores increased, indicating that older interns exhibited more positive attitudes towards the acquisition of communication skills compared to their younger counterparts. Concurrently, with advancing age, there is a propensity for a diminished negative attitude towards acquiring communication skills (Table 3).

Table 3. Comparison of mean attitude scores based on gender, age, and college sector

Variables	Mean positive attitude score	Mean negative attitude score
Gender		
Male	52.74±4.73	27.62±5.17
Female	53.41±4.80	27.76±4.79
t-test	-1.99	-0.41
p-value	0.047*	0.69
Age (Years)		
21.0-23.0 (n=174)	44.29±3.91	29.08±3.86
23.1-25.0 (n=739)	46.67±3.78	28.71±4.28
>25 (n=93)	50.41±3.24	26.07±4.64
t-test	80.85	17.74
p-value	0.001**	0.001**

*significant; p>0.05-statistically insignificant

The highest mean total positive attitude was observed in students who classified themselves as first-class (52.73±4.43), while the least mean total positive attitude was noted in students who identified as pass-class (47.77±3.39). The variations in academic performance and the positive attitude towards the acquisition of communication skills were statistically significant (p=0.000). The highest mean total negative attitude was observed in students who classified themselves as pass-class students (29.66±3.97), whilst the lowest mean total negative attitude was noted in students who identified as distinction students (25.28±4.07). The mean total score for first-class and second-class students was 25.28±4.07 and 27.41±4.46 respectively. According to academic achievement, there was a statistically significant difference in the negative attitude score (Table 4).

Table 4. Comparison of mean attitude scores based on academic performance, and self-reported communication skill

Academic performance	Mean positive attitude score	Mean negative attitude score
Distinction	51.84±4.17	22.07±5.3
First class	52.73±4.43	25.28±4.07
Second class	51.22±3.48	27.41±4.46
Pass	47.77±3.39	29.66±3.97
ANOVA	68.35	58.37
p-value	0.0001*	0.0001*
Self-reported communication skill		
Excellent	51.46±4.83	27.44±3.27
Good	52.84±4.11	28.12±3.7
Moderate	53.7±4.31	29.91±3.63
Poor	48.32±3.79	38.84±5.47
ANOVA	17.97	69.85
p-value	0.0001*	0.0001*

*significant; p>0.05-statistically insignificant

The highest mean total positive attitude score was reported in students identifying as moderate communicators (53.7±4.31), whereas the lowest mean total positive attitude score was recorded in students identifying as poor communicators (48.32±3.79). The average total positive attitude score for good communicators was (52.84±4.11), whereas for excellent communicators it was (51.46±4.83). These variations were statistically significant (p=0.000). The highest mean total negative attitude score was recorded in students who self-identified as poor communicators (38.84±5.47), whilst the lowest mean total negative attitude score was noted in students who considered themselves excellent communicators (27.44±3.27). The average overall negative attitude score for good communicators was (28.12±3.7), while for moderate communicators it was (29.91±3.63). These variations were statistically significant (p=0.0001) (Table 4).

DISCUSSION

The current study employed the modified 24-item DCSAS scale owing to its robust internal consistency in evaluating attitudes towards acquiring communication skills. All responses were assessed using a five-point Likert scale, with 1 representing "strongly disagree" and 5 indicating "strongly agree." A noteworthy response rate of 83.83% was achieved, in contrast to 70.59% at Alexandria University and 82.65% at Pharos University, as reported by Atteya et al.[12] Additionally, response rates of 94.4% were noted at the University of Malaya, 83.3% at the University of Kebangsaan Malaysia,[13] and 88% at Dunedin University in New Zealand.[6] Consequently, this suggests that the survey findings may accurately reflect the intern population of Kerala.

In line with a related study conducted among Pharos interns,[12] it became apparent that age significantly influenced both positive and negative scores among the sample group.[11] As age advanced, the positive attitude ratings spiked indicating that older interns exhibited positive attitudes towards the acquisition of communication skills than their younger counterparts. The most likely cause for this observation is that senior interns may have employed their communication skills in diverse contexts beyond their academic background, including prior training experiences. Consequently, they began to acknowledge the significance, pertinence, and ramifications of effective communication abilities. This aligns with other earlier studies.[12,14-17] However, this contrasts with the results of Nor et al.[13] and Rees and Sheard,[19] who observed that younger students were more predisposed to acquiring communication skills, attributing this phenomenon to their lesser experience in interacting with unfamiliar individuals.

The current study revealed substantial gender disparities in positive attitude scores among dental students, whereas no significant differences were observed in negative attitude scores. These findings refute previous research on dental students in Bangalore,[8] and medical trainees in Sri Lanka,[20] Nepal,[17] and Iran,[21] where no significant differences were detected. The current study found a highly significant relationship between positive attitude scores and gender, consistent with findings reported among Pharos interns.[11] Female interns exhibited superior positive attitude scores in comparison to their male counterparts. This conclusion aligns with the prior studies by Nor et al.,[12] Rees and Sheard,[17] and Wright et al.,[22] who similarly reported this pattern. The mastery of communication may be more innate to females, and as a student, she is bound to value the science of dentist-patient communication more significantly.[10] Nevertheless, a study conducted in Nepal with a cohort of medical residents revealed no significant correlation between gender and positive views towards the acquisition of communication skills.[16] In the current study, the mean score for positive attitude was elevated, while the negative attitude score lowered, indicating optimistic attitudes towards communication abilities, consistent with earlier findings.[13,24] A notable disparity in positive attitudes was seen between males and females, although the mean negative attitude scores exhibited no significant difference across genders. However, earlier research by Ramesh et al.[8] revealed that male students had a more positive attitude than female students, whereas Atteya et al.,[12] reported that female students had a more positive attitude.

Students exhibiting subpar academic achievement demonstrated a more negative attitude towards communication skills, aligning with a previous study.[24] In a comparable manner, interns who indicated deficient communication abilities exhibited a markedly more negative attitude than those who reported proficient communication skills. The results align with several research indicating that students who self-assess their communication skills as proficient exhibit a more favourable attitude towards communication compared to those who perceive themselves as poor communicators.[8,12,13,23,24]

Conversely, Yavagal et al.[25] revealed that distinction students exhibited a markedly more negative attitude than first-class students. Further, Richa et al.[24] indicated that a negative score was directly associated with self-reported inadequate communication abilities.

Communication skills are acquired during dental education, which can be enhanced by integrating student perspectives and requirements into curriculum creation. Although students acknowledge the importance of communication skills, the curriculum does not assign any instructional hours for this subject. Therefore, incorporating communicational challenges into the dental curriculum from the perspectives of the dentist, dental student, and patient will facilitate the enhancement of communication skills among dentists. Dental students need to receive education in skill-based communication training grounded in the latest research. This approach will enhance dental students' preparedness for clinical practice, enabling them to manage patient anxiety, identify ethical dilemmas, and recognize critical psychological variables that contribute to more precise diagnosis and treatment, ultimately improving patient satisfaction and safety.[6]

It should be noted that as this study was cross-sectional, causality cannot be established. The self-reported questionnaire included inquiries on the students' attitudes, perhaps resulting in social desirability bias. A positive attitude score among dental students about the acquisition of communication skills reveals their recognition of the significance of these abilities in dental practice. Moreover, a dental student who has assimilated positive values related to communication skills training is likely to exhibit behaviours aligned with those values, including actively listening to patients, articulating treatments in comprehensible terms, and addressing the physical, psychological, and social needs of patients. Nonetheless, the low negative attitude scores in the present study cannot be overlooked, as they may undermine the significance of the "Communication Skill Training" component in the undergraduate dental curriculum.

CONCLUSION

The learning factor of DCSAS was determined to be statistically insignificant concerning gender, and self-reported communication skills. The importance, quality, and success components of DCSAS were statistically significant for all variables examined. The overall average positive attitude of dental interns about the acquisition of communication skills was related to gender, age, academic performance, and self-assessed communication abilities. The negative attitude of the study sample was primarily associated with advanced age, academic achievement, and elevated self-assessment in communication skills. Interns who assessed their communication abilities as good demonstrated markedly higher positive attitudes than those who evaluated their communication skills as deficient. Interns who indicated deficient communication abilities exhibited markedly higher negative attitudes compared to those who claimed optimistic communication skills.

DECLARATIONS

Acknowledgments

None

Funding

None

Competing and conflicting Interests

The authors declare no conflicts of interest.

Ethical approval

The study was approved by the Institutional Ethics Committee, Government Dental College, Thiruvananthapuram, Kerala with IEC Approval No. DCT/IEC/SS/24/19 dated 05/09/2024.

Informed consent

The interns who consented to take part were enrolled after being informed of the study objectives through a participant information form.

Type you

REFERENCES

1. Nourein AAE, Shahadah RF, Alnemer MA, Al-Harbi SS, Fadel HT, Kassim S. Comparative Study of Attitudes towards Communication Skills Learning between Medical and Dental Students in Saudi Arabia. Int J Environ Res Public Health. 2020;18(1):128.
2. Alotaibi FS, Alsaeedi A. Attitudes of medical students toward communication skills learning in Western Saudi Arabia. Saudi Med J. 2016;37(7):791-795.
3. Anbuselvan GJ, Raja S, Vilvanathan P, Megabob N, Prabhakar K. Changing concepts of positive patient communication in dentistry and orthodontics: South Indian perspective. J Pharm Bioallied Sci. 2013;5(Suppl 1):S109-112.
4. Dash KS, Mathur A, Rajpurohit L, Kharat P, Mehta V. Effect Of Dental Anxiety On Oral Health Value Among Professional Adults - A Correlational Study. Bulletin of Stomatology and Maxillofacial Surgery. 2024;20(1):82-91.
5. Woelber JP, Deimling D, Langenbach D, Ratka-Krüger P. The importance of teaching communication in dental education. A survey amongst dentists, students and patients. Eur J Dent Educ. 2012;16(1):e200-204.
6. Jain L, Hegde V, Shetty R, et al. Ergonomic Awareness Survey: Examining Musculoskeletal Pain Prevalence and Contributing Factors Among Dental Professional in a Sample of Indian Population. Bulletin of Stomatology and Maxillofacial Surgery. 2024;20(2):126-141.
7. Hannah A, Millichamp CJ, Ayers KM. A communication skills course for undergraduate dental students. J Dent Educ. 2004;68(9):970-977.
8. Ramesh S, Vanishree N, Anushri M, Chaithra V, Bullappa D, Pragathi DS. Attitude of Dental Interns toward Learning Communication Skills in Bangalore City: A Cross-Sectional Study. J Indian Assoc Public Heal Dent 2018;16(3):226-230.
9. Sangappa SB, Tekian A. Communication skills course in an Indian undergraduate dental curriculum: a randomized controlled trial. J Dent Educ. 2013;77(8):1092-1098.
10. Venkatesh P, Soundariya K, Deepika V. A study on attitude of medical students towards learning of communication skills. . J Evol Med Dent Sci. 2014;3(27):7567–7573.
11. Laurence B, Bertera EM, Feimster T, Hollander R, Stroman C. Adaptation of the Communication Skills Attitude Scale (CSAS) to dental students. J Dent Educ. 2012;76(12):1629-1638.
12. Atteya S, Saleh S, Essam W. Attitudes of dental interns towards learning communication skills in Alexandria University. Alexandria Dent J. 2017;42:20–27.
13. Nor NA, Yusof ZY, Shahidan MN. University of Malaya dental students' attitudes towards communication skills learning: implications for dental education. J Dent Educ. 2011;75(12):1611-1619.
14. Rees CE, Garrud P. Identifying undergraduate medical students' attitudes towards communication skills learning: a pilot study. Med Teach. 2001 Jul;23(4):400-406.
15. Kahari L, Takavarasha P. A study of University of Zimbabwe Medical Students' attitudes towards the teaching and learning of communication skills. International Journal of Advance Research. 2013;1(9):35-42.
16. Khashab SS. Attitudes of Alexandria Medical Students towards Communication Skills Learning. J Egypt Public Health Assoc. 2006;81(5-6):355-372.
17. Shankar RP, Dubey AK, Mishra P, Deshpande VY, Chandrasekhar TS, Shivananda PG. Student attitudes towards communication skills training in a medical college in Western Nepal. Educ Health (Abingdon). 2006;19(1):71-84.
18. Mehta V, Tripathy S, Merchant Y, et al. Oral health status of children with intellectual and developmental disabilities in India: a systematic review and meta-analysis. BMC Pediatr. 2024;24(1):748.
19. Rees C, Sheard C. The relationship between medical students' attitudes towards communication skills learning and their demographic and education-related characteristics. Med Educ. 2002;36(11):1017-1027.
20. Marambe KN, Edussuriya DH, Dayaratne KM. Attitudes of Sri Lankan medical students toward learning communication skills. Educ Health (Abingdon). 2012;25(3):165-171.

21. Fazel I, Aghamolaei T. Attitudes toward learning communication skills among medical students of a university in Iran. Acta Med Iran. 2011;49(9):625-629.
22. Wright KB, Bylund C, Ware J, Parker P, Query JL, Baile W. Medical Student Attitudes Toward Communication Skills Training and Knowledge of Appropriate Provider-Patient Communication: A Comparison of First-Year and Fourth-Year Medical Students. Med Educ Online. 2006;11(1):4594.
23. Mehta V, Negi S, Mathur A, et al. Oral health status among the transgender population of India: A systematic review and meta-analysis. Spec Care Dentist. 2024;44(6):1535-1546.
24. Richa, Yashoda R, Puranik MP. Dental students' attitude toward learning communication skills in Bengaluru city, India. J Indian Assoc Public Health Dent 2016;14:327-331.
25. Yavagal PC, Raj R, Kateel P, Mrunal SP, Diwakar NR, Lokapur RM. Attitude towards Learning Communication Skill among Dental Interns in Davanagere City : A Cross-sectional Survey. 2023;21(1):54–58.