

Original article**Attitudes of dental interns towards learning communication skills****Ashwin C Shetty¹, Nora Meshal Al Rasheed²**¹ Assistant Professor, Riyadh Colleges of Dentistry and Pharmacy, Riyadh, Kingdom of Saudi Arabia² Coordinator of the national initiative for the prevention of dental caries, Ministry of health, Riyadh, Kingdom of Saudi Arabia

ARTICLE INFO



Keywords:

Attitude, communication skills, dental interns

ABSTRACT

Aim: To investigate dental interns' attitudes towards communication skills learning and the association between their attitudes and demographic and education-related characteristics. **Material and Methods:** A cross-sectional survey using a self-administered twenty-six-item adapted Dental Communication Skills Attitude Scale (DCSAS) that contained both positive (PAS) and negative (NAS) attitude subscales was carried out targeting all dental interns at the Riyadh Colleges of Dentistry and Pharmacy (RCsDP). Participants' demographic and education related variables were also recorded. Relationship of the positive and negative attitudes with these variables was determined using appropriate statistical tests such as Mann-Whitney U and Spearman's rho. **Result :** A total of 152 dental interns completed the survey, yielding a response rate of 60percent. The overall median PAS scores and NAS scores were 52 and 34.5 respectively. Dental interns with more negative attitudes tended to be male ($p<0.05$) and those with more positive attitudes tended to non-Saudi nationals ($p<0.05$). **Conclusion:** This study found that dental interns have positive and negative attitudes towards learning communication skills. These attitudes were significantly associated with certain background attributes. There is a need for integrating communication skills course in the dental curriculum.

Introduction

Teaching communication skills as a part of the dentistry curriculum leads to an increase in the dentist's ability to understand the patient's needs, comments, and responses to these needs. Effective communication with patients reduces the patients' anxiety, and increases the patients' interest to accept dental treatments and perform the dentists' recommendations. A study which evaluated the efficacy of a communication skills training program to manage the patients' stress and fear of dental treatments reported that communication skills training

effectively increased the dental students' knowledge and behavior.¹⁻³

Past studies have reported that dental students are generally receptive to learning communication skills.⁴ Despite a substantial amount of literature relating to communication skills of medical students,^{7,8} there is a scarcity of evidence on the attitudes toward communication skills learning among dental students. Very few studies were carried out regarding learning communication skills. One study concluded that the Communication Skills Attitude Scale (CSAS) modified for dental students, or Dental Communication Skills Attitude Scale (DCSAS), is a

* Corresponding author: *Dr. Ashwin C Shetty, Assistant Professor, Riyadh Colleges of Dentistry and Pharmacy, Riyadh, Kingdom of Saudi Arabia, drashwinshetty@yahoo.co.in, +966 564906617*

Variables		Frequency (n)	Percent (%)
Gender (n=152)	Male	49	32.2
	Female	103	67.8
Nationality (n=152)	Saudi	130	85.5
	Non-Saudi	22	14.5
Teaching language in secondary school (n=150)	English	28	18.7
	Arabic	122	81.3

Table 1. Demographics

useful tool to assess attitudes towards learning communication skills among dental students.⁹

The acquisition of the skill of dentist-patient communication hardly exists in any undergraduate or postgraduate dental curriculum in the Kingdom of Saudi Arabia (KSA). It is important that comprehensive research be done to clarify the needs of students and professionals, and outline the objectives, the modalities of training in this skill.¹⁰Hence, the aim of this study was to assess the attitude of dental students toward learning communication skills, to identify factors that may influence attitude toward learning communication skills and to suggest the inclusion of appropriate communication skill course in the dental curriculum.

Material and Methods

This study involved a cross-sectional population survey of all dental interns at Riyadh Colleges of Dentistry and Pharmacy (RCsDP) using a self-administered questionnaire. The questionnaire consisted of two sections. The first section included demographic characteristics of the participants such as age, gender, nationality, and teaching language in secondary school. The second section has assessed the attitude of the participants towards learning

communication skills using the Dental Communication Skills Attitude Scale (DCSAS).⁹

The final questionnaire was administered in English and consisted of an introductory letter. DCSAS comprises 26 statements and includes two scales, the positive attitude scale (PAS) and the negative attitude scale (NAS) both comprise 13 items each. Respondents were asked to rate how strongly they agreed or disagreed with the statements on a five-point Likert-type scale from strongly disagree, disagree, neutral, agree, to strongly agree, with the responses scored from 1 to 5 respectively. Overall, two scores could be determined from the adapted CSAS: the median PAS and NAS scores. The highest median score would indicate stronger attitude.

RCsDP ethics committee approved the protocol for this study of dental interns and the questionnaire instrument. A completed questionnaire indicated the consent to participate in the study. The data was entered onto computer for analysis using Statistical Package for Social Science (IBM SPSS) Version 22 for Windows. Descriptive analysis was undertaken to present an overview of the findings from this population. Differences between groups were examined using Mann-Whitney U test. Spearman's rho correlation test was used to assess relationships between overall PAS and NAS scores and age. A p value of ≤ 0.05 was considered as statistically significant.

Results

One hundred fifty two completed the survey out of a total of 254 dental interns, giving an overall response rate of 60%. Table 1 shows the frequency distribution of demographic variables of the sample. The mean (\pm SD) age of the respondents' was 24.3(\pm 0.99) years with a range from 23-27 years. Just over two third of the respondents were female (67.8%, n=103). The

Table 2. Scores on the items of PAS and NAS

Items	Median	
1. In order to be a good dentist, I must have good communication skills.	4.00	
2. I can't see the point in learning communication skills. †	2.00	
3. Nobody is going to fail his or her dental degree for having poor communication skills.†	3.00	
4. Developing my communication skills is just as important as developing my knowledge of dentistry.	4.00	
5. Learning communication skills has helped me or will help me respect patients.	4.00	
6. I haven't got time to learn communication skills.†	2.50	
7. Learning communication skills is interesting.	4.00	
8. I can't be bothered to turn up to sessions on communication skills.†	3.00	
9. Learning communication skills has helped or will facilitate my team-working skills.	4.00	
10. Learning communication skills has improved my ability to communicate with patients.	4.00	
11. Communication skills teaches the obvious and then complicates it.†	3.00	
12. Learning communication skills is fun.	4.00	
13. Learning communication skills is too easy.†	3.00	
14. Learning communication skills has helped or will help me respect my colleagues.	4.00	
15. I find it difficult to trust information about communication skills given to me by non-clinical lecturers.†	3.00	
16. Learning communication skills has helped or will help me recognize patients' rights regarding confidentiality and informed consent.	4.00	
17. Communication skills teaching would have a better image if it sounded more like a science subject.†	3.00	
18. When applying for dentistry, I thought it was a really good idea to learn communication skills.	4.00	
19. I don't need good communication skills to be a dentist.†	2.00	
20. I find it hard to admit to having some problems with my communication skills.†	3.00	
21. I think it's really useful learning communication skills for the dental degree.	4.00	
22. My ability to pass exams will get me through dental school rather than my ability to communicate.†	3.00	
23. Learning communication skills is applicable to learning dentistry.	4.00	
24. I find it difficult to take communication skills learning seriously.†	2.00	
25. Learning communication skills is important because my ability to communicate is a lifelong skill.	4.00	
26. Communication skills learning should be left to psychology students, not dental students.†	2.00	
Median	<i>PAS</i>	52.00
	<i>NAS</i>	34.50

†Item was negatively phrased.

majority were Saudi nationals (85.5%, n=130) and teaching language in secondary school was Arabic (81.3%, n=122). There was a statistically significant difference between age and gender ($p=0.000$); and age and nationality ($p=0.000$).

The median score of the PAS for the study participants was 52. As for the NAS score, the overall median NAS for the study participants was 34.5 (Table 2). A

higher score indicates a more positive attitude towards learning communication skills. Relationships between

the PAS and NAS and the demographic characteristics were explored. No significant correlation was found between the median PAS score and respondents' age ($r=-0.122$, $p>0.05$). This suggests that as age increased, median PAS score decreased. However, the

Table 3. Scores on the items of PAS and NAS by gender

Items	Gender		p value	
	Male	Female		
1. In order to be a good dentist, I must have good communication skills.	4.00	4.00	0.366	
2. I can't see the point in learning communication skills. †	2.00	2.00	0.509	
3. Nobody is going to fail his or her dental degree for having poor communication skills.†	3.00	3.00	0.514	
4. Developing my communication skills is just as important as developing my knowledge of dentistry.	4.00	4.00	0.005*	
5. Learning communication skills has helped me or will help me respect patients.	4.00	4.00	0.001*	
6. I haven't got time to learn communication skills.†	3.00	2.00	0.716	
7. Learning communication skills is interesting.	4.00	4.00	0.205	
8. I can't be bothered to turn up to sessions on communication skills.†	3.00	3.00	0.365	
9. Learning communication skills has helped or will facilitate my team-working skills.	4.00	4.00	0.000*	
10. Learning communication skills has improved my ability to communicate with patients.	4.00	4.00	0.000*	
11. Communication skills teaches the obvious and then complicates it.†	4.00	3.00	0.457	
12. Learning communication skills is fun.	3.00	4.00	0.009*	
13. Learning communication skills is too easy.†	3.00	3.00	0.053	
14. Learning communication skills has helped or will help me respect my colleagues.	4.00	4.00	0.001*	
15. I find it difficult to trust information about communication skills given to me by non-clinical lecturers.†	3.00	2.00	0.058	
16. Learning communication skills has helped or will help me recognize patients' rights regarding confidentiality and informed consent.	4.00	4.00	0.000*	
17. Communication skills teaching would have a better image if it sounded more like a science subject.†	3.00	3.00	0.223	
18. When applying for dentistry, I thought it was a really good idea to learn communication skills.	4.00	4.00	0.345	
19. I don't need good communication skills to be a dentist.†	2.00	2.00	0.041*	
20. I find it hard to admit to having some problems with my communication skills.†	3.00	3.00	0.426	
21. I think it's really useful learning communication skills for the dental degree.	4.00	4.00	0.084	
22. My ability to pass exams will get me through dental school rather than my ability to communicate.†	3.00	3.00	0.138	
23. Learning communication skills is applicable to learning dentistry.	4.00	4.00	0.400	
24. I find it difficult to take communication skills learning seriously.†	2.00	2.00	0.848	
25. Learning communication skills is important because my ability to communicate is a lifelong skill.	4.00	4.00	0.176	
26. Communication skills learning should be left to psychology students, not dental students.†	2.00	2.00	0.630	
Median	PAS	51.00	52.00	0.102
	NAS	36.00	33.00	0.010*

†Item was negatively phrased.

Table 4. Scores on the items of PAS and NAS by nationality

Items	Nationality		p value	
	Saudi	Non-Saudi		
1. In order to be a good dentist, I must have good communication skills.	4.00	5.00	0.029*	
2. I can't see the point in learning communication skills. †	2.00	2.00	0.868	
3. Nobody is going to fail his or her dental degree for having poor communication skills.†	3.00	3.00	0.327	
4. Developing my communication skills is just as important as developing my knowledge of dentistry.	4.00	4.00	0.712	
5. Learning communication skills has helped me or will help me respect patients.	4.00	5.00	0.003*	
6. I haven't got time to learn communication skills.†	3.00	2.00	0.000*	
7. Learning communication skills is interesting.	4.00	4.00	0.017*	
8. I can't be bothered to turn up to sessions on communication skills.†	3.00	3.00	0.628	
9. Learning communication skills has helped or will facilitate my team-working skills.	4.00	4.00	0.186	
10. Learning communication skills has improved my ability to communicate with patients.	4.00	4.50	0.053	
11. Communication skills teaches the obvious and then complicates it.†	3.00	4.00	0.097	
12. Learning communication skills is fun.	4.00	4.00	0.004*	
13. Learning communication skills is too easy.†	3.00	3.00	0.050*	
14. Learning communication skills has helped or will help me respect my colleagues.	4.00	4.00	0.035*	
15. I find it difficult to trust information about communication skills given to me by non-clinical lecturers.†	3.00	2.00	0.141	
16. Learning communication skills has helped or will help me recognize patients' rights regarding confidentiality and informed consent.	4.00	4.00	0.836	
17. Communication skills teaching would have a better image if it sounded more like a science subject.†	3.00	4.00	0.571	
18. When applying for dentistry, I thought it was a really good idea to learn communication skills.	4.00	4.00	0.041*	
19. I don't need good communication skills to be a dentist.†	2.00	2.00	0.525	
20. I find it hard to admit to having some problems with my communication skills.†	3.00	3.00	0.509	
21. I think it's really useful learning communication skills for the dental degree.	4.00	4.00	0.040*	
22. My ability to pass exams will get me through dental school rather than my ability to communicate.†	3.00	3.00	0.233	
23. Learning communication skills is applicable to learning dentistry.	4.00	4.00	0.043*	
24. I find it difficult to take communication skills learning seriously.†	3.00	2.00	0.041*	
25. Learning communication skills is important because my ability to communicate is a lifelong skill.	4.00	4.00	0.225	
26. Communication skills learning should be left to psychology students, not dental students.†	2.00	1.00	0.129	
Median	<i>PAS</i>	52.00	54.50	0.026*
	<i>NAS</i>	36.00	34.00	0.798

†Item was negatively phrased.

Table 5. Scores on the items of PAS and NAS by teaching language in secondary school

Items	Teaching language		p value	
	English	Arabic		
1. In order to be a good dentist, I must have good communication skills.	4.00	4.00	0.830	
2. I can't see the point in learning communication skills. †	2.00	2.00	0.221	
3. Nobody is going to fail his or her dental degree for having poor communication skills.†	3.00	3.00	0.483	
4. Developing my communication skills is just as important as developing my knowledge of dentistry.	4.00	4.00	0.023*	
5. Learning communication skills has helped me or will help me respect patients.	4.00	4.00	0.296	
6. I haven't got time to learn communication skills.†	2.00	3.00	0.072	
7. Learning communication skills is interesting.	4.00	4.00	0.546	
8. I can't be bothered to turn up to sessions on communication skills.†	2.00	3.00	0.001*	
9. Learning communication skills has helped or will facilitate my team-working skills.	4.00	4.00	0.430	
10. Learning communication skills has improved my ability to communicate with patients.	4.00	4.00	0.719	
11. Communication skills teaches the obvious and then complicates it.†	3.00	3.00	0.315	
12. Learning communication skills is fun.	4.00	4.00	0.227	
13. Learning communication skills is too easy.†	3.00	3.00	0.045*	
14. Learning communication skills has helped or will help me respect my colleagues.	4.00	4.00	0.054	
15. I find it difficult to trust information about communication skills given to me by non-clinical lecturers.†	2.00	3.00	0.060	
16. Learning communication skills has helped or will help me recognize patients' rights regarding confidentiality and informed consent.	4.00	4.00	0.639	
17. Communication skills teaching would have a better image if it sounded more like a science subject.†	4.00	3.00	0.073	
18. When applying for dentistry, I thought it was a really good idea to learn communication skills.	4.00	4.00	0.945	
19. I don't need good communication skills to be a dentist.†	2.00	2.00	0.575	
20. I find it hard to admit to having some problems with my communication skills.†	3.00	3.00	0.658	
21. I think it's really useful learning communication skills for the dental degree.	4.00	4.00	0.391	
22. My ability to pass exams will get me through dental school rather than my ability to communicate.†	3.00	3.00	0.576	
23. Learning communication skills is applicable to learning dentistry.	3.00	4.00	0.069	
24. I find it difficult to take communication skills learning seriously.†	3.00	2.00	0.527	
25. Learning communication skills is important because my ability to communicate is a lifelong skill.	4.00	4.00	0.917	
26. Communication skills learning should be left to psychology students, not dental students.†	1.50	2.00	0.421	
Median	PAS	51.00	52.00	0.413
	NAS	33.50	35.00	0.619

†Item was negatively phrased.

trend was not statistically significant. The median NAS score did not correlate significantly with respondents' age ($r=0.057$, $p>0.05$).

Overall, the female dental interns had higher median PAS score than the male whose difference was statistically not significant ($p>0.05$). As for the individual PAS items, the female dental interns had significantly higher median scores only one out of the thirteen items ($p<0.05$). In terms of negative attitudes towards communication skills learning, although the male dental interns had higher median scores on three out of the thirteen NAS items no statistically significant difference was observed. However, overall statistical significant difference was observed between the male and female dental interns ($p<0.05$) (Table 3).

As for the individual PAS items, the non-Saudis had significantly higher median scores on two out of the thirteen items and overall statistical significant difference was observed between the Saudi and non-Saudi dental interns ($p<0.05$). Although, Saudis had significantly higher median scores on two out of the thirteen NAS items ($p<0.05$), no overall statistical significant difference was observed between the Saudi and non-Saudi dental interns ($p>0.05$) (Table 4). Dental interns with Arabic teaching language in secondary school possessed higher overall median scores in both PAS and NAS items than English ($p>0.05$) (Table 5).

Discussion

In spite of a considerable amount of literature relating to communication skills of dental students, there is a scarcity of evidence on their attitudes towards communication skills learning. Emphasis on the importance of communication in medical and dental students has made studies on medical students' attitudes towards communication skills learning to be of relevance to dental students.¹¹The present study

used the adapted version of 26 item modified DCSAS.⁹To the best of our knowledge, this is the first study identifying factors that may influence attitude toward learning communication skills in dental schools in KSA.

A reasonable response rate of 60% was obtained, compared to 83.3% in Malaysia¹¹ and to 88% in New Zealand⁴. This implies that survey results may be representative of the intern population of the studied faculties. The overall average PAS and NAS scores were higher than a previous study.¹²Age was found to have no significant correlation with PAS and NAS scores among dental interns. As age increased, NAS scores increased, suggesting that older interns had more negative attitudes towards communication skills learning than younger. This finding is consistent with several previous studies.^{11, 13}

Gender was found to have statistically significant relationship with NAS scores among dental interns. Male interns had higher NAS scores compared to female interns. This finding is consistent with earlier research who also reported similar trend.^{11, 13-15}Non-Saudi nationals showed a significantly higher PAS score than Saudi nationals. The results of the present study suggest that dental interns lack the knowledge about the importance of learning communication skills. One limitation of the study is the low response rate. A non-response rate of 40% may lead to less accurate and biased estimate of population characteristics.

Conclusions

In this study, positive attitudes towards communication skills learning were associated with non-Saudi nationals and negative attitudes towards communication skills learning were associated with male gender. Considering the high NAS scores, communication skills training at RCSDP should be

added as separate subject in curriculum. Dental schools educators should pay more attention to the importance of communication skills. Further studies in other dental colleges are required to gain an insight into the problems of communication skills training in KSA.

Acknowledgments

We are grateful to all the dental intern respondents for participating in the study.

Conflict of interest

The authors declared that they have no conflicts of interest.

References:

1. Hottel TL, Hardigan PC. Improvement in the interpersonal communication skills of dental students. *Journal of Dental Education*. 2005;69(2):281-4.
2. Yoshida T, Milgrom P, Coldwell S. How do US and Canadian dental schools teach interpersonal communication skills? *Journal of Dental Education*. 2002;66(11):1281-8.
3. Van der Molen H, Klaver A, Duyx M. Effectiveness of a communication skills training programme for the management of dental anxiety. *British dental journal*. 2004;196(2):101.
4. Hannah A, Millichamp CJ, Ayers KM. A communication skills course for undergraduate dental students. *Journal of Dental Education*. 2004;68(9):970-7.
5. Carey J, Madill A, Manogue M. Communications skills in dental education: a systematic research review. *European Journal of Dental Education*. 2010;14(2):69-78.
6. Wagner J, Arteaga S, D'Ambrosio J, Hodge CE, Ioannidou E, Pfeiffer CA, et al. A patient-instructor program to promote dental students' communication skills with diverse patients. *Journal of Dental Education*. 2007;71(12):1554-60.
7. Rees C, Sheard C. Evaluating first-year medical students' attitudes to learning communication skills before and after a communication skills course. *Medical Teacher*. 2003;25(3):302-7.
8. Langille DB, Kaufman DM, Laidlaw TA, Sargeant J, MacLeod H. Faculty attitudes towards medical communication and their perceptions of students' communication skills training at Dalhousie University. *Medical Education*. 2001;35(6):548-54.
9. Laurence B, Bertera EM, Feimster T, Hollander R, Stroman C. Adaptation of the Communication Skills

- Attitude Scale (CSAS) to dental students. *Journal of dental education*. 2012;76(12):1629-38.
10. Wouda JC, van de Wiel HB. Education in patient-physician communication: How to improve effectiveness? *Patient education and counseling*. 2013;90(1):46-53.
 11. Nor NAM, Yusof ZY, Shahidan MNF. University of Malaya dental students' attitudes towards communication skills learning: implications for dental education. *Journal of dental education*. 2011;75(12):1611-9.
 12. Yashoda R, Puranik MP. Dental students' attitude toward learning communication skills in Bengaluru city, India. *Journal of Indian Association of Public Health Dentistry*. 2016;14(3):327.
 13. Rees C, Sheard C. The relationship between medical students' attitudes towards communication skills learning and their demographic and education-related characteristics. *Medical education*. 2002;36(11):1017-27.
 14. Atteya S, Saleh SM, Essam WA. Attitudes of dental interns towards learning communication skills in Alexandria University. *Alexandria dental journal*. 2017;42:20-7.
 15. McKenzie CT. Dental student attitudes towards communication skills instruction and clinical application. *Journal of dental education*. 2014;78(10):1388-96.