



CONGRESS PROCEEDING

A Cross-Sectional Study On The Readiness Of Dentistry Specialty Students In The Role Of Associate Educator

Işıl Sarıkaya^{1,*}, Alem Coşgun² and Hüseyin Hatırlı³

¹Tokat Gaziosmanpaşa University Faculty of Dentistry, Department of Prosthodontics and ²Tokat Gaziosmanpaşa University Faculty of Dentistry, Department of Pediatric Dentistry and ³Tokat Gaziosmanpaşa University Faculty of Dentistry, Department of Restorative Dentistry

*Corresponding Author; sarikayaisil@gmail.com

Abstract

Purpose: Our study aims to contribute to the literature by self-evaluating Dentists who graduated from different universities in our country, in the departments where they currently receive specialization training on Communication, Adaptation Skills, Information Management, Thinking and Problem Solving, and Professionalism.

Materials and Methods: Research assistants who received specialist training in 8 departments of Tokat Gaziosmanpaşa University Faculty of Dentistry and who had not completed the first year of their education were included in the study. Participants were asked to participate in a ten-question survey on an entirely voluntary basis. When comparing the means of quantitative variables between groups, the Significance of the Difference Between Two Means test was used. Cross-tabulations and chi-square tests were used to evaluate whether there was a relationship between qualitative variables. p values were considered statistically significant when calculated to be less than 0.05.

Results: According to the results obtained from our study, 78% of the speciality students reported that they thought that the clinical practice training they received during their student years was sufficient to educate clinical students, and 87.8% reported that they did not have communication problems with clinical practice students. While the answer to the question "The treatment planning I make in my clinical practice is compatible with the faculty member's planning" was 95.1% agree, 51.2% of the participants answered that they agreed with the question "I feel competent enough to solve any problem I encounter in clinical practice on my own."

Conclusions: All participants are eager to learn different treatment methods related to the cases they encounter in clinical practice. Likewise, the vast majority reported that they were willing to develop new tools and techniques for use in clinical practice. This situation is promising for the future of our profession.

Key words: Dental Specialty Student; Dentistry Clinical Practice Training; Teamwork

Introduction

Clinical practice education at the undergraduate level in Dentistry cannot be limited to the faculty member's efforts to educate his students, as in the traditional model. It is a complex and demanding training in which, in addition to many environmental factors, assistant trainers also take an active role. Assistant physicians are considered the workforce in the role of assistant educators in clinical processes.¹ In this context, while providing service as a team member, producing and managing scenarios when necessary in the clinic, and being able to communicate healthily, Those who learn and teach should have the mission of health protection.² Instructors' mastery of their subject plays a significant role in correcting students' mistakes. Survey-based studies involving the attitudes of

assistant physicians in the clinical environment are available both in the Faculty of Medicine and in the field of Dentistry.³⁻⁵

Evidence-based work for graduate dentists will only be possible if they are employed based on evidence during their clinical practices during undergraduate education.^{6,7} At the same time, teaching activities continue outside the clinic. Instructors produce knowledge and supervise and support students so they can develop their competencies. In addition, instructors must be continuously educated and continue their professional development.⁸

Self-assessment can be defined as students' evaluation of the progress of their learning activities and their attitudes and abilities against accepted standards.⁹ Self-evaluation of the person enables safe and effective clinical practice. It is an effective learning tool and can support lifelong learning.



Table 1. Distribution of qualitative variables

Questions	Agree n(%)	Disagree n(%)
Q1 I think that the clinical practice training I received is sufficient to train clinical students.	32(78)	9(22)
Q2 I feel competent enough to solve any problem I encounter in clinical practice on my own.	21(51,2)	20(48,8)
Q3 I do not have communication problems with clinical students.	36(87,8)	5(12,2)
Q4 I think I make evidence-based clinical practices in my clinical practice.	35(85,4)	6(14,6)
Q5 The treatment planning I make in clinical practice is compatible with the planning of the faculty member.	39(95,1)	2(4,9)
Q6 In my clinical practice, I do not have difficulty working with other physicians in cases that require multidisciplinary treatment.	36(87,8)	5(12,2)
Q7 I do literature research on the cases I encounter in clinical practice.	34(82,9)	7(17,1)
Q8 I am willing to learn different treatment methods regarding the cases I encounter in clinical practice.	41(100)	0(0)
Q9 I am keen to develop new tools and techniques for use in clinical practice.	40(97,6)	1(2,4)
Q10 In clinical practice, the intensity of students or their attitudes and behaviours do not affect my professionalism.	23(56,1)	18(43,9)

The aim of our study is to contribute to the literature by self-evaluation of Dentists who graduated from different universities in our country, in the departments where they currently receive specialization training on Communication, Adaptation Skills, Information Management, Thinking and Problem Solving, and Professionalism.

Methods

The present study was carried out with the number of "24-KAEK-040" permission of the Clinical Research Ethics Committee of the Medical School of Tokat Gaziosmanpaşa University. For the sample size of our study, which investigates the readiness of specialist students in clinical practice training, it was determined that 40 specialization students should be included in the study with a single sample design of 80% power, 5% and an effect size of 0.2. G*Power 3.9.1.6 program was used for Sample Volume. Research assistants who received specialist training in 8 departments of Tokat Gaziosmanpaşa University Faculty of Dentistry and who had not completed their first year of education were included in the study on a voluntary basis. A 10-question survey was conducted with a total of 41 specialization students via Google Forms, including gender, field of specialization, faculty of graduation and graduation year. Descriptive analyses were conducted to provide information about the general characteristics of the study groups. Data for continuous variables are presented as mean \pm standard deviation; Data regarding categorical variables are given as n (%). The Significance of the Difference Between Two Means test was used to compare the means of quantitative variables between groups. Cross-tabulations and chi-square tests were used to evaluate whether there was a relationship between qualitative variables. p values were considered statistically significant when calculated to be less than 0.05. Ready-made statistical software was used in the calculations (IBM SPSS Statistics for Windows, Version 27.0. Armonk, NY: IBM Corp).

Results

The distribution of qualitative variables according to survey responses is presented in Table 1.

When looking at the post-graduation working hours of specialty students, there was no significant difference between the answers given to all questions and the working time. The average working time of the participants after graduation was 2.24 \pm 1.8 years.

To question Q1, "I think the clinical practical training I received

is sufficient to train intern students," 78% of the participants answered "I Agree", and 22% answered, "I Disagree." Q2: "I feel competent enough to solve any problem I encounter in clinical practice on my own" is the question with the highest rate of disagreeing answers. A statistically significant difference was detected between the answers to Q1 and Q2 (p = 0.006). To question Q4, "I think I use evidence-based practices in clinical practice," the answer was 85.4% Agree and 14.6% Disagree. A statistically significant difference was found between the answers to Q1 and Q4 (p = 0.004).

A statistically significant difference was found between male and female participants in the answers to the question Q3 "I do not have communication problems with clinical students" (p<0.001) (Table 2).

To question Q6 "I do not have difficulty working with other physicians in cases requiring multidisciplinary treatment in clinical practice", 87.8% answered "Agree" and 12.2% answered "I Disagree".

Discussion

While 78% of the participants said "I agree" to the question "I think the clinical practical training I received is sufficient to educate clinical students", 48.8% answered "I disagree" to the question "I feel competent enough to solve any problem I encounter in clinical practice on my own." The answer to the "I think I use evidence-based practices in clinical practice" was 85.4% Agree and 14.6% Disagree. It was understood that specialty students think transferring the clinical skills they gained during their student years to student education is acceptable. However, they feel they need to be more competent to solve problems independently due to a problem that may occur in the clinical environment. One reason for this is that the cases given to clinical students are chosen from cases that can be easily studied. However, when they encounter more complex cases, such as on clinical duty by himself/herself, they feel inadequate themselves.

As a result, the specialty students felt they needed to have the students do similar work they had done in the clinical environment. However, they need to determine whether their treatments are evidence-based. They reported that 17% of them needed to conduct literature research on the cases they encountered in the clinic. However, 97.6% reported they were willing to develop new tools and techniques for clinical practice. All participants are willing to learn different treatment methods regarding the cases I encounter in clinical practice. In other words, there is a tendency to obtain information readily available. However, students specializing in

Table 2. Distribution of variables by gender

		Total n(%)	Gender		P
			Female n(%)	Male n(%)	
Q1	Agree	32(78)	21(77,8)	11(78,6)	0,954
	Disagree	9(22)	6(22,2)	3(21,4)	
Q2	Agree	21(51,2)	11(40,7)	10(71,4)	0,062
	Disagree	20(48,8)	16(59,3)	4(28,6)	
Q3	Agree	36(87,8)	27(100)a	9(64,3)b	<0,001
	Disagree	5(12,2)	0(0)	5(35,7)	
Q4	Agree	35(85,4)	23(85,2)	12(85,7)	0,964
	Disagree	6(14,6)	4(14,8)	2(14,3)	
Q5	Agree	39(95,1)	25(92,6)	14(100)	0,296
	Disagree	2(4,9)	2(7,4)	0(0)	
Q6	Agree	36(87,8)	25(92,6)	11(78,6)	0,193
	Disagree	5(12,2)	2(7,4)	3(21,4)	
Q7	Agree	34(82,9)	24(88,9)	10(71,4)	0,159
	Disagree	7(17,1)	3(11,1)	4(28,6)	
Q8	Agree	41(100)	27(100)	14(100)	0,160
	Disagree	0(0)	0(0)	0(0)	
Q9	Agree	40(97,6)	27(100)	13(92,9)	0,219
	Disagree	1(2,4)	0(0)	1(7,1)	
Q10	Agree	23(56,1)	17(63)	6(42,9)	
	Disagree	18(43,9)	10(37)	8(57,1)	

Pearson chi-square test was used. (ab): The common letter as a row indicates statistical insignificance.

entrepreneurship should be encouraged and directed to do more research. The biggest obstacle to this is the limited period of expertise.

When students choose their specialization areas, their expectations of financial gain and the difference in effectiveness between departments are at the forefront.¹⁰ In the study of Çulhaoglu et al.,⁴ Dentistry Specialty students were asked about their reasons for specialization, and it was reported that the priority was the desire to pursue an academic career and improve themselves. According to the results of our study, it is promising that there is a belief that the goal is not reached after gaining expertise and that there is a need to continue research and training to improve oneself. Career planning after specialization and creating motivation in this direction will enable specialization students to progress on the path that will lead to academic success.

When the answer to "I agree with the statement "The intensity or attitude and behaviour of students in clinical practice does not affect my professionalism" was examined by gender, a significant difference was found between men and women. This may be because women with a higher participation rate may be more tolerant in the clinical study environment. Otherwise, men may be weaker in terms of communication.

When the faculties from which the Specialty students participating in our study graduated were examined, the presence of graduates of the Faculty of Dentistry of 22 different universities ensured a homogeneous distribution of the participants. Thus, our study can be considered a cross-sectional study. In addition, as a limitation of our study, the small sample size of our sample group and the fact that the survey questions are summary and conducted online cause one to wonder whether sufficient time was spent or whether the questions were clearly understood.

Conclusion

Lifelong learning and rational knowledge management are essential for medical practice. Regarding clinical practice, specialist students participate in clinical processes as a part of the team for limited periods. Their adaptation skills, communication, decision-making processes, problem-solving skills, and professionalism will be developed during their years of expertise in the course. In order to follow this development more closely and spend it with

maximum efficiency, self-evaluation studies similar to our study should be conducted, and the results should be closely monitored. In addition, taking precautions such as arranging specialization course curricula, including up-to-date devices and techniques, and encouraging multidisciplinary studies will increase the quality of Specialization education in Dentistry.

Author Contributions

Concept : I.S.
 Design : A.C.
 Data Collection or Processing : All Authors
 Analysis or Interpretation : A.C. , H.H.
 Literature Search : All Authors
 Writing : I.S.

Conflict of Interest

The authors declare that they have no conflict of interest.

Authors' ORCID(s)

I.S. [0000-0002-2172-4724](https://orcid.org/0000-0002-2172-4724)
 A.C. [0000-0001-6586-6700](https://orcid.org/0000-0001-6586-6700)
 H.H. [0000-0002-4451-7576](https://orcid.org/0000-0002-4451-7576)

References

- Akaltan KF, Ozturk I. Öğrenci, eğitimci ve hastaların bakış açısıyla diş hekimliği klinik eğitimi. *Selcuk Dent J*. 2019;6(2):134–147. doi:10.15311/selcukdentj.485929.
- TUKMOS [Legal Rule or Regulation]; 2021.
- Albino JE, Young SK, Neumann LM, Kramer GA, Andrieu SC, Henson L, et al. Assessing dental students' competence: best practice recommendations in the performance assessment literature and investigation of current practices in predoc-

- toral dental education. *J Dent Educ.* 2008;72(12):1405–1435. doi:10.1002/j.0022-0337.2008.72.12.tb04620.x.
4. Çulhaoğlu AK, Kılıçarslan MA, Deniz KZ. Diş hekimliğinde uzmanlık sinavının farklı eğitim seviyelerdeki algı ve tercih durumlarının değerlendirilmesi. *J Dent Fac Ataturk Univ.* 2021;31(3):420–426. doi:10.17567/ataunidfd.911839.
 5. Yılmaz Y, Uçar E, Ertin H. Tıpta uzmanlık eğitimi ve asistan hekimlerin sorunlarının irdelenmesi: bir anket çalışması. *Tıp Eğitimi Dünyası.* 2019;18(54):21–29. doi:10.25282/ted.431136.
 6. Moezzi M, Rasekh S, Zare E, Karimi M. Evaluating clinical communication skills of medical students, assistants, and professors. *BMC Med Educ.* 2024;24(1):19. doi:10.1186/s12909-023-05015-4.
 7. Stormon N, Ford PJ, Kisely S, Bartle E, Eley DS. Depression, anxiety and stress in a cohort of Australian dentistry students. *Eur J Dent Educ.* 2019;23(4):507–514. doi:10.1111/eje.12459.
 8. Chuenjitwongsa S, Bullock A, Oliver R. Roles and competences for educators of undergraduate dental students: a discussion paper. *Eur J Dent Educ.* 2018;22(1):47–56. doi:10.1111/eje.12243.
 9. Akaltan KE. Diş hekimliği eğitiminde beceri ve yeterliğin değerlendirilmesi II: Değerlendirme yöntemleri. *Selcuk Dent J.* 2019;6(5):72–91. doi:10.15311/selcukdentj.562531.
 10. Aksoy A, Yanıkoğlu N. Diş Hekimliği Fakültesi Öğrencilerinin Protetik Diş Tedavisi Anabilim Dalında Uzmanlaşma Konusundaki Motivasyonlarının Değerlendirilmesi. *J Dent Fac Ataturk Univ.* 2019;29(4):623–630. doi:10.17567/ataunidfd.437118.