

# Evaluation of the knowledge levels of the students that preferred the faculty of dentistry about specialty in dentistry

Ufuk Tasdemir<sup>1</sup>, Hasan Onur Simsek<sup>2</sup>, Berrin Iyilikci<sup>1</sup>

<sup>1</sup>Dentistry of Faculty, Department of Oral and Maxillofacial Surgery, Pamukkale University, Denizli, Turkey

<sup>2</sup>Dentistry of Faculty, Department of Oral and Maxillofacial Surgery, Adnan Menderes University, Aydin, Turkey

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## Abstract

**Aim:** The aim of this study was to examine some of the characteristics of students who prefer Pamukkale University Faculty of Dentistry and Adnan Menderes University, to investigate the level of knowledge about the specialty, to determine the expectations of the students from the specialty, and to create a guide for the applicants.

**Material and Methods:** A survey was applied including questions about their gender, level of expertise, which specialty they would prefer and the most important factor in this preference, their expectations from the specialty at the time of graduation and whether they found the education received in the faculty adequate for entering the specialty exam; to all students in the 1st 2nd and 3rd grades of Pamukkale University Faculty of Dentistry and to all students in the 1st 2nd 3rd 4th and 5th grades of Adnan Menderes University Faculty of Dentistry.

**Results:** According to results, of our study, 76.1% of the students thought that the education they received in the faculty was not sufficient to pass the Specialty Examination in Dentistry (SED). However, 76.1% of the students stated that they were planning to go to the private teaching institutions during the preparation process for SED. In addition, the most preferred specialty is Orthodontics with 31.2%, followed by Oral, Maxillofacial and Maxillofacial Surgery with 31%. They stated that situations such as the desire for academic career and the comfort of working conditions were the most important factors in choosing the specialty.

**Conclusion:** As a result, it was found that the students who choose the faculty of dentistry, which have a long and challenging education process both theoretically and practically, not enough knowledge about SED and therefore it is important getting the right information about SED and specialty education.

**Keywords:** Branches of specialty; dentistry student; specialty in dentistry

## INTRODUCTION

Beginning with the applications for dental treatments in 3000 BC, the emergence of dentistry as an independent profession took place in the 18th century (1). History of Turkish Dentistry has been studied as a chapter in Turkish Medical History for many years (2). However, the art of surgical dentistry in the 19th century in Turkey as well as in the whole world begins to grow; it has become inevitable to be studied as a separate science. Dentistry in Turkey in the 19th century, began to be taken under other branches of medicine as a discipline and developed further in the 20th century. In the 19th century, Ottoman medicine turned to the West more than the other centuries and gained a more modern character. Tanzimat and Meşrutiyet movements also pioneered this (2). Together with the Republic, the foundations of many organizations

that would later take a modern look were laid and the transition to modern medicine and dentistry education took place during this period. In the last century, in parallel with the developments in the medical sciences, serious developments have emerged in the field of dentistry. Following this, the differentiation and diversification of treatment applications made it necessary to specialize in the field of dentistry. For this reason, since 2012, our country has started to take the Specialty Examination in Dentistry (SED), just like the Specialty Examination in Medicine (SEM). This is an exam to select students who will receive specialty training in dental faculties.

This study aimed to examine some of the characteristics of the students being educated Pamukkale University Faculty of Dentistry and Adnan Menderes University Faculty of Dentistry, to determine their level of knowledge

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Corresponding Author: Ufuk Tasdemir, Dentistry of Faculty, Department of Oral and Maxillofacial Surgery, Pamukkale University, Denizli, Turkey E-mail: ufukdt@gmail.com

about specialization, expectations from the specialization which specialty they will prefer and what the most important factor in this preference.

### MATERIAL and METHODS

At the beginning of the study, ethical approval was received from the Ethical Committee of Pamukkale University (Date: 11/06/19 Number: 11). This study is a cross-sectional and descriptive study. The survey was designed by the authors. Participants were informed about the objectives of the study and written informed consent was obtained from each participant. All participants in 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> grades of Pamukkale University Faculty of Dentistry and 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> grade students in Adnan Menderes University Faculty of Dentistry was included. The survey was applied including questions about their gender, level of expertise, which specialty they would prefer and the most important factor in this preference, their expectations from the specialty at the time of graduation and whether they found the education received in the faculty adequate for entering the specialty exam. Opinions about the specialty were evaluated according to the 5-point Likert scale. 5% type deviation  $\alpha = 0.05$ , power  $(1-\beta) = 0.80$ , confidence interval 95%, 0.362 effect size (in similar study) was determined as a total of 174 people. However, all students (493) in the 1<sup>st</sup>, 2<sup>nd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> grades were included in the study. Data were analyzed using SPSS 23.0 package program. The data obtained are shown as means  $\pm$  standard deviation and grouped data as percentage.

### RESULTS

Of the 493 students who participated in the study, 272 (55.2%) were female students and 221 (44.8%) were male students. 194 (39.4%) of the students were in the first grade, 162 (32.9%) were in the second grade, 64 (13%) were in the third grade, 58 (11.8%) were in the fourth grade and 15 (3%) were fifth grade students. 251 (50.9%) of the them stated that they live with their families and 197 (40%) of them stated that they live separately from their families. When questioned about the existence of sufficient time and opportunity to prepare for the specialty exam in their city, 176 (35.7%) of them answered yes and 316 (64.1%) of them answered no. While 380 (77.1%) of the students knew how many specialties were in dentistry, 113 (22.9%) were have no information about this subject. When asked "When will you start preparing for SED?" to the students; 165 (33.5%) students were in the first grade, 34 (6.9%) students were in the second grade, 23 (4.7%) students were in the third grade, 125 (25.4%) students were in the fourth grade, 103 (20.9%) students were in the fifth grade and 42 (8.5%) students responded after the graduation. 59 (12%) of them for 1 hour a day, 166 (33.7%) of them for 3 hours a day, 166 (33.7%) of them for 5 hours a day, 87 (17.6%) of them for 8 hours a day, 13 (2.6%) of them for 12 hours a day stated that it would be enough to study SED (Table 1 and Figure 1).

When asked to the students "Do you think that the education you received in the faculty is enough to pass the SED?" 118 of them (23.9%) answered with "yes" and

375 of them (76.1%) answered with "no". 375 (76.1%) of the students stated that they were planning to go to the courses (private teaching institution) during the preparation process of SED and 118 (23.9%) stated that they were not planning to go to the classroom. While 235 (47.7%) of the students thought that job opportunities were sufficient after graduation from faculty, 258 (52.3%) thought that job opportunities were insufficient. When asked to the students "Which specialty do you want to choose?" 154 of them (31.2%) responded as Orthodontics and 153 of them responded as Oral and Maxillofacial Surgery. 179 (36.3%) of the students education quality, 89 (18.1%) of the students city's living conditions and 87 (17.6%) of the students stated that equipment and hardware are important in the selection of faculty for specialization. When asked to the students "Is the risk of malpractice (legal situation arising from misapplication) important?" 413 (83.9%) of them answered as "yes" and 80 (16.2%) of them answered as "no" (Table 1 and Figure 1).

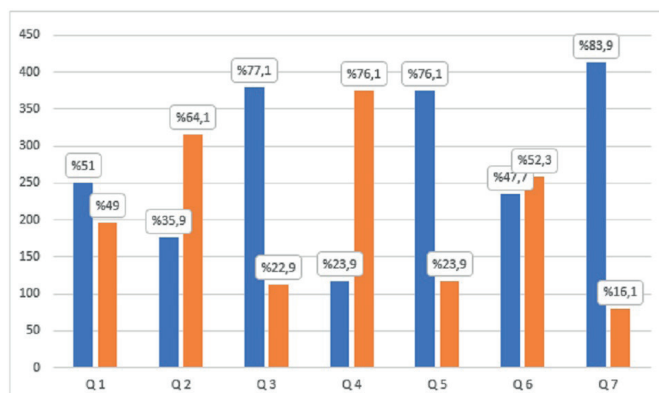


Figure 1. Descriptive data of questions and answers. Blue diagram : Yes, Orange Diagram: No

Table 1. Descriptive data of questions and answers

		Yes (n %)	No (n %)
Q 1	Living with families	251(%51)	197(%49)
Q 2	Having sufficient time and opportunity to prepare for the specialty exam in their city	176(%35.9)	316(%64.1)
Q 3	Knowledge about specialties in dentistry	380 (%77.1)	113(% 22.9)
Q 4	Education in the faculty is enough for SED	118 (%23.9)	375 (%76.1)
Q 5	Planning to go to the courses during the preparation process of SED	375 (%76.1)	118 (%23.9)
Q 6	The job opportunities sufficiency after graduation from faculty	235 (%47.7)	258 (%52.3)
Q 7	The risk of malpractice importance during choosing a speciality	413 (%83.9)	80 (%16.1)

## DISCUSSION

Dentistry is a highly popular job in the world which is interested in high school students. Recently studies demonstrated that female students mostly preferred dentistry compare to male students. In their studies, Aggarwal et al. (3) and Orenugo et al. (4) found that most of the students who preferred dentistry were female students. Laloo et al. (5) stated that a significant increase in the number of female students who preferred dentistry between 2000-2005 compared to previous years. According to a study's results which was made in India (3), 73.7 percent of the students were female and 26.3 percent were male. Polychronopoulou et al. (6) reported that majority of Greek dental students were female. Scarbecz et al. (7) asserted that 43 percent of the dental students were female in America. In our study, it was observed that female students were more than male students in Pamukkale University and Adnan Menderes University. According to these results, our study is similar to other studies and it can be said that female students have more interest in the dental profession in recent years than male students. Based on our extensive literature research and results of our study, we believe that this profession is preferred by female students because it has regular working hours and it is easy to balance the family life and career.

When asked to the students whether they lived with their families or in a city separate from their families, approximately half (50.9%) stated that they lived with their families. In India, most students live with their families (3). However, in 2005, students in another study conducted in Turkey reported that only 8% of the students live in the same city with their families during their educational process (8). Based on the significant differences between the studies, because of the opening of the faculty of dentistry in the last fifteen years in many regions and provinces Turkey, we believe that students preferred the schools in the region where they live.

When questioned about the availability and time to prepare for the specialty exam in the city they live in, a large proportion of the students answered as "no". According to this result, it is seen that students do not find the variety of courses and similar facilities for SED exam in small scale cities like Aydın and Denizli compared to metropolitan cities. Since there is no study on this subject in our country, no comparison could be made.

It is determined that while 77.1% of the students know how many specialties are in dentistry, 22.9% of them do not have knowledge about this subject. In the light of these results, we conclude that not all of the students studying in the faculty of dentistry in our country still have sufficient knowledge about the branches and concept of specialty in dentistry.

The majority of the students think that 3-5 hours of study per day will be enough for SED preparation process. It was observed that the number of students who stated

that they needed to work 8-12 hours a day was too much. When asked to the students when to start preparing for the exam, it was observed that the number of those who started from the first grade was quite high, while those who said after graduation were in the minority. This shows us that SED is a very selective and challenging exam and that students are aware of this situation. For this reason, most of the students want to start preparing before the end of faculty education in order to pass this challenging exam. In our country, we did not have a chance to make comparisons since there was no study on this subject.

According to a study, it was seen that the number of students who found the education they received in the faculty inadequate was high especially in the fifth grade (8). According to the results of our study, 76.1% of the students think that their education in the faculty is insufficient for the specialty exam in dentistry. Again, 76.1% of the students stated that they wanted to go to the courses during the preparation process for SED. In the light of the answers given to these two questions, most of the students find that faculty education is inadequate to pass the SED and, they want to go to the courses in order to close the gap between faculty education and the requirements of the exam because of SED is a challenging and selective exam.

According to the study conducted by Orenuga et al. In Nigeria in 2006 (4), a proportion of the dental students stated that their job opportunities were sufficient after graduation. According to the study conducted by Uskun and colleagues (8) in our country in 2005, it is seen that students' anxiety of not having a good job for the future does not have an important place in life problems. However, in our study, more than half of the students think that job opportunities are not sufficient after graduation from faculty. Compared to the previous years, the increase in the number of dental faculty and graduated dentists in our country restricts the employment of newly graduated GPs. Therefore, we see that the importance of specialization in dentistry is increasing day by day.

According to the study conducted by Aggrawal and colleagues in India (3), most of the students stated that they would prefer oral surgery, secondly orthodontics and thirdly endodontics. In our study, 154 (31.2%) of the students were answered orthodontics, 153 (31%) of the students were answered oral and maxillofacial surgery, when asked to them "Which specialization branch do you prefer?". Orthodontics and oral and maxillofacial surgery are the most preferred branches when compared with studies in other countries. And when asked to the students about the reasons of preference for this specialty, they responded to their academic career desire, comfort of working conditions and sympathy for department professors. Most of the students stated that education is important in the selection of faculty, followed by those who stated that the city's living conditions, equipment and hardware are important. Alper et al. (9) showed that in their study in the field of medicine, the most important

reason for choosing a specialization area is financial satisfaction. There is no such study in the field of dentistry in our country yet. Therefore, one-to-one comparison was not possible.

## CONCLUSION

When asked to the students "Does the risk of malpractice (legal status arising from misapplication) be of importance when choosing your area of expertise?", 413 (83.9%) of them answered as "yes", 80 (16.2%) of them answered as "no". According to the study of medicine and dentists in our country, 79.5% of graduates stated that they do not have sufficient knowledge about malpractice (10). According to the results of this study, it was determined that physicians were mostly interested in medical subjects while they were performing their post-graduate and post-occupational professions due to the intensity of work and did not have detailed information about the legal aspects of medical practices (10). Karaoglu et al. (11) in a study on malpractice, emphasized the importance of increasing the level of knowledge about medical errors from the beginning of medical education. Therefore, the importance of malpractice during the faculty education and the legal dimensions of the profession they are performing should be explained to the students in detail and this awareness should be given to our young physicians both before graduation and during the specialty education.

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