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Sağlık Bilimlerinde Eğitim Dergisi

Future Career Goals of Turkish Dental Students Attended to Newly Implemented Nationwide Career Planning Course

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Abstract

Objective: The Career Planning Course introduced by the Presidency of Republic of Türkiye Human Resources Office in 2021, intends to create and raise an awareness on prospective career goals of higher education students. The aim of this study was to analyse future career goals of first and second year Turkish dental students attended on Career Planning Course. **Methods:** All students enrolled to the course (n=141) were evaluated by eligibility and non-Turkish students and unsubmitted evaluation forms were excluded, finally 135 evaluation forms were reviewed by study year, gender, language proficiencies and self-stated practice plans (Public/ Private/Abroad/Academic/Specialty). **Results:** The highest attendance rates to the Career-related module of the course were observed in overall dental students (n=111; 82.2%) which had significant impact on a stating a specific career plan in homeland (OR 7.90 (2.90-21.50); p<0.001). Findings demonstrated high preference of private practice (54.3%); however nearly one third of the first (28.6%) and second year (36,2%) students had no decisive statement regarding practice plan in homeland. Most were indicated a specialty plan (n=109; 80.7%). **Conclusion:** Attendance to Career Planning Course had significant impact on having specific career plan. We recommend adding profession-oriented modules for attenuating absent statements.

Key Words: *Career choice, dental education, dental student*

Kariyer Planlama Dersine katılan Türk Diş Hekimliği Öğrencilerinin Kariyer Hedefleri

Öz

Amaç: T.C. Cumhurbaşkanlığı İnsan Kaynakları Ofisi tarafından 2021 yılında tanıtılan Kariyer Planlama Dersi, yükseköğretim öğrencilerinin gelecekteki kariyer hedefleri konusunda farkındalık yaratmayı amaçlamaktadır. Bu çalışmanın amacı, Kariyer Planlama Dersi'ne katılan birinci ve ikinci sınıf Türk diş hekimliği öğrencilerinin gelecekteki kariyer hedeflerini analiz etmektir. **Yöntem:** Derse kayıtlı tüm öğrenciler (n=141) uygunluk kriterlerine göre değerlendirildi: T.C. vatandaşı olmayan öğrenciler ve eksik değerlendirme formları hariç tutuldu, son olarak 135 değerlendirme formu eğitim yılı, cinsiyet, dil yeterlilikleri ve hedeflenen çalışma alanlarına (Kamu/ Özel Sektör/Yurtdışı/Akademik/Uzmanlık) göre değerlendirildi. **Bulgular:** Modüller arasında, en yüksek ders katılımının "Kariyerle ilgili konseptler" olduğu (n=111; %82.2) ve derslere katılımın öğrencilerin yurtiçinde belirli bir kariyer planının belirtmesinde önemli etkisi olduğu (OR 7.90 (2.90-21.50); p<0.001) gözlemlendi. Öğrencilerin çoğunlukla (%54.3) özel muayenehane tercihinde bulunduğu; ancak birinci sınıf öğrencilerinin (%28.6) ve ikinci sınıf öğrencilerinin (%36.2) yaklaşık üçte birinin spesifik bir hedef belirtmediği görülmüştür. Ayrıca öğrencilerin büyük çoğunluğu (n=109; %80.7) uzmanlık tercihinde bulunmuştur. **Sonuç:** Kariyer Planlama Dersine katılımın belirli bir kariyer planına sahip olmada önemli etkisi olmuştur. Hedeflerin kesin sınırlarla belirlenmesinde Kariyer Planlama Dersi kapsamında mesleğe yönelik modüller eklenmesi faydalı olabilir.

Anahtar Kelimeler: *Kariyer seçimi, diş hekimliği eğitimi, diş hekimliği öğrencisi*

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INTRODUCTION

Definition of a healthcare workforce planning is an employment of healthcare workers in sufficient quantity, high quality, in a uniform distribution, on time and in an accurate manner in order to carry out the health services offered to the society today and in the future (Hogarth, 1975). Dentists represent an indispensable part of the healthcare workforce (Dussault, 2003).

Dentistry education in Türkiye includes 5 years of theoretical and practical training in dental faculties. The number of dental faculties, which was 19 in 2002, has increased to 103 during 2019-2021. The quota in dental faculties in the country, which was 960 in 2005; has reached up to 4991 in 2018 and 8866 in 2021 (Turkish Dental Association, 2022).

Despite this increasing trend over the years, it has been determined that number of dentists graduated is not enough to meet country requirements compared to OECD countries with developed economies. Additionally, the regional disparities exist in terms of workforce of dentist. According to a 2019 report the vast majority of them are clustered in the Western regions and Ankara, economic and political capitals in Türkiye (Cinaroglu, 2021). Moreover, more than half (56%) of dentists preferred private practice and 29% in governmental centers (Turkish Dental Association, 2022). Similar to Türkiye, results from a study of 230 Dutch dentists in Netherlands indicated that 77% of them worked as a general dentist in a practice, primarily in urban areas (den Boer, 2021). The choice for a practice was affected by location, earnings, and the opportunity to gain experience. Considering these data, future career plans of dentistry students may serve as a reference for healthcare policy makers.

Therefore, in 2021 newly implemented nationwide "Career Planning Course" has been introduced by Presidential Human Resources Office of Turkish Republic as a 14-lesson compulsory course to first year students of all universities in order to raise awareness about the expectations and dynamics of working life and to contribute to the personal and professional development of all higher education students including dentistry.

Career Planning Course were comprised of four modules of general concepts, career-related concepts, introduction to sectoral organization, designing a remarkable CV and final evaluation.

The aim of this study was to analyse future career goals of first and second year Turkish dental students attended in newly implemented nationwide Career Planning Course.

METHODS

This study was approved by Ethics Committee of Bursa Uludag University with an approval reference number 2022-4/10 Date:23.02.2022.

Total of 141 dental students were enrolled in Career Planning Course. Following the completion of the first 13 Lessons, submitted evaluation forms of Turkish Dental students (n=135) were reviewed ($n_{\text{first year}}$=77; $n_{\text{second year}}$=58)

Evaluation forms were consisted of personal statements of dental students on their foreign languages, high school education, practice plans (public/private), abroad, academic and specialty plans (orthodontics, restorative dentistry, periodontics, pedodontics, oral and maxillofacial surgery, oral diagnosis and radiology, endodontics, prosthodontics).

The results were presented as frequency and percentages. Categorical variables were compared using Pearson Chi-Square test. Binary Logistic Regression was performed and the crude odds ratios (OR) along with their 95% Confidence Intervals (CIs) were reported. Significance level was at $p<0,05$. Statistical analyses were performed with IBM SPSS ver. 23.0 (IBM Corp. Armonk, NY).

RESULTS

Of the 141 students enrolled to Career Planning Course, 95,7% (n=135) personal statements were eligible for the analysis.

Attendance on Lesson #5 and #6 entitled “Career-related concepts” (OR 7.90; 95% 2.90 - 21.50) and Lessons #7-12 entitled “Introduction to sectoral organization” (OR 2.89; 95% 1.37 - 6.09) had significant impact on stating a specific career plan in homeland of dental students as indicated in Table 1.

Table 1. Logistic Regression Between Attendance to 14-Week Career Planning Course and Presence of a Specific Practice Plan in Homeland.

(No. of Module)	Career Planning Course (Lessons)	Content	Participants N_{TOTAL} =135 n (%)	OR (95 % CI)	p
1	General concepts (1-4)	Intelligence, personality, knowledge, skill, talent, competence, fine skills and technical skills.	86 (63.7)	0.89 (0.44 - 1.79)	0.7462
2	Career-related concepts (5-6)	Academic, social, artistic and sports activities, university clubs	111 (82.2)	7.90 (2.90 - 21.50)	< 0.001
3	Introduction to Sectoral Organization (7-12)	National/International NGO’s, State and Private practice, Academic Career, Entrepreneurship	104 (77.0)	2.89 (1.37 - 6.09)	0.0052
4	Steps to a remarkable CV (13)	Curriculum Vitae templates	81 (60.0)	1.21 (0.62 - 2.38)	0.5715
	Evaluation (14)	Personal essay on career goal and CV	135 (100)	N/A	N/A

Female students among second-year students (63.8%) are significantly higher compared to first year counterparts (44.4%) ($p=0.028$; $p<0.05$) (Table 2).
The courses with the highest attendance rate were the 2nd and 3rd modules with 82.2% and 77.0% respectively.
When the practice plan in homelands is evaluated, almost a third of the first (28,6%) and second year (36,2%) students have not stated either governmental, private practice, policlinic, or solo practice. For both first and second year students, the order of preference for practice plan in homeland was from highest to lowest: solo practice (29,9%), private polyclinics (24,4%) and governmental (14,1%).

	First year N=77 n (%)	Second year N=58 n (%)	Total N=135 n (%)	p
Gender				
Female	34 (44.2)	**37 (63.8)**	71 (52.6)	0.024
Male	43 (55.8)	21 (36.2)	64 (47.4)	
Attandance to Course				
1. Module	50 (64.9)	36 (62.1)	86 (63.7)	0.732
2. Module	62 (80.5)	49 (84.5)	111 (82.2)	0.551
3. Module	61 (79.2)	43 (74.1)	104 (77.0)	0.487
4. Module	47 (61.0)	33 (56.8)	81 (60.0)	0.943
Practice Plan in homeland				
Governmental	11 (14.3)	8 (13.8)	19 (14.1)	0.777
Private (Polyclinic)	19 (24.7)	14 (24.1)	33 (24.4)	
Private (Solo)	25 (32.5)	15 (25.9)	40 (29.9)	
Unstated	22 (28.6)	21 (36.2)	43 (31.9)	
Abroad Plan				
	35 (45.5)	24 (41.4)	59 (43.7)	0.637
Academic Plan				
	7 (9.1)	11 (19.0)	18 (13.3)	
Language Proficiency				
	12 (15.6)	6 (10.3)	18 (13.3)	0.375
Specialty Plan				
	64 (83.1)	45 (77.6)	109 (80.7)	0.402
Specialty of interest				
Orthodontics	21 (27.3)	6 (10.3)	27 (20.0)	
Maxillofacial Surgery	7 (9.1)	8 (13.8)	15 (11.1)	
Pedodontics	2 (2.6)	5 (8.6)	7 (5.2)	
Periodontology	1 (1.3)	1 (1.7)	2 (1.5)	<0.001
Restorative Dentistry	1 (1.3)	0 (0.0)	1 (0.7)	
Endodontics	1 (1.3)	0 (0.0)	1 (0.7)	
Prosthodontics	0 (0.0)	1 (1.7)	1 (0.7)	
Unstated	**44 (57.1)**	**37 (63.7)**	**81 (60.0)**	

Table 2. Descriptive Statistics and Career Plans of Study Groups

In addition, it has been noted that nearly half of the all student (43.7%) were having abroad practice plan where the 1st year students (45.5%) with abroad practice plan were slightly higher compared to the 2nd year students (41.4%) (p=0.637). However, only 1/3 and 1/4 of the 1st and 2nd year students who have an abroad career plan, respectively, stated an advanced English language proficiency.

A great majority of first year and second year students were having specialty plan. However, specialty of interests was differed as the 63.6% of the first students and 28.6% of second year students were considered "orthodontics" while for their post-graduate education.

Finally, preferences on practice in homeland, academic, and abroad plans were not significantly differed between female and male students for both year groups.

DISCUSSION AND INTERPRETATION

This study is the first to highlight the career plans of first and second year dental students attending newly implemented nationwide Career Planning Course. The nationwide Career Planning Course has been implemented to all first year students of all universities in Türkiye which suggest dental students who will make career choices suitable for their qualifications, skills, abilities, and competencies. As an exception this year, second year students were also included in this course at Bursa Uludag University Faculty of Dentistry due to the COVID-19 pandemic. Similarly, an university in Hungary also offers a curricular career skills course for dental students which observed a high level of satisfaction among the students in terms of forming future professional plan (Szabo, 2020).

The masculine nature of dentistry (Adams, 1998) has been a controversial issue in the past, with the increasing number of female dentists today (Stewart 2000; Shaker 2009; Oshima 2021; Gallager 2021). According to 2020 data in Türkiye, 44% of actively working dentists are women; 56% are male (Turkish Dental Association, 2022). In our study, females in second year students (n=37; 63.8%); males in first year students (n=43; 55.8%) were dominant. Similar to our study, no definite conclusion could be reached stating that dentistry is a male-dominated or female-dominated profession.

Dentists' attendance to lectures has been examined in the literature (Mawardi, 2021; Alamoudi, 2021) potential reasons for absenteeism were associated with early morning classes (47.9%), exams preparation (42%), and lecturer's weak presentation skills (Alamoudi, 2021). It was also found to be over 55% in module (Table 2). The high attendance can be attributed to the fact that the course is online, student-centered and student-participated, interactive and professionally prepared by a central resource. The reason for the lower attendance of second-year students to the majority of the modules may be associated yearly increase in burden of professional and applied courses in dental education.
Moreover, the results of this study indicated that the attendance to the course (#5-6 and #7-12) provided a significant knowledge ($p<0,001$ and $p=0,0052$) to the first and second year dental students on designing their future career plans.
However, despite the high attendance, unclear and absent statements were remained as nearly one third of all dental students in a present study. This is probably, present study conducted in students are at the beginning of their education life.

In our study, of the 92 Turkish dental students who state a specific practice plan in homeland 54.5% had a preference on private practice whether in polyclinics or solo. The results was consistent with Turkish Dental Association 2020 report it has been reported that dentists in Türkiye mostly practice private practice (57%), followed by 29% of them working in governmental institutions. Findings were compatible with the recent study from Netherlands, were showed high consideration of private practice in a 5 year time span after graduation (den Boer, 2021). Another study from United States of America, had founded 58.9% of overall final year dental student planning to have private practice in accordance with our study (Nashleanas, 2014)

Most of the reports gives information about career plans of final year students (Khami 2008; Gallager, 2009; Rashid, 2013; Che Musa, 2016) where all student had a specific career plan. Gallagher et al. (2009), reported that over 50% of final year students wished to extend their skills to train as a ‘specialist’. In our study, a great majority of first-year (83.1%) and second-year (77.6%) student stated having a post-graduate specialty plan. This result was consisted with the studies by Khami et al. (2008) and Vahid Dastjerdi et al. (2012), demonstrated the high preference for postgraduate specialty plans among Iranian dental students. Moreover, a study from eight dental schools in Malaysia reported a specialty plan among 59% of final year students’ long term career goals (Che Musa, 2016).

In addition, according to the present study, getting a post graduate degree in orthodontics consisted the majority of interest of specialty among first-students (n=21; 63.6%) consistent with results of the Rashid et al. (2013) which indicated Orthodontics and Oral and Maxillofacial Surgery as a most preferred specialties within their study population. The previous orthodontic treatment history of first year students (Rouhiainen, 2022), as well as the high income reputation of orthodontics may have been influenced the findings of the present study.

In our study, nearly half of the first year (n=35; 45.5%) and second year (n=21; 41,4%) stated a practice plan in abroad. However, a study conducted in the United Emirates, the students stated high preference (%41) in governmental practice due to financial assurance of income (Rashid, 2013). However, findings of our study stated above may not be well-determined, since only one third of students with abroad plan have advanced English proficiency (Table 2).

The academic career plans of first year students remained at the rate of 9,1% in first-year and 19,0% in second-year students. A study of future expectations of final year Turkish and Arabic students were

indicated the rate of 25.3% and 23,7% of academic career goal respectively (Tanalp, 2012; Halawany, 2017)
To the best of our knowledge, there is no current scientific literature investigating the relationship between future career plan and goals of first and/or second year dental students and Career Planning Course.

CONCLUSIONS AND RECOMMENDATIONS

There was a positive relation between the attendance of Career Planning Course and having a specific practice plan in homeland. Absent statements may be associated by non-profession-oriented curriculum of the course. Because this course was implemented nationwide its curriculum has been prepared within the framework of more general topics and we recommend adding few more profession-oriented modules especially on dental practice.

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