

Burnout Syndrome Among Dentists in Turkey

Türkiye'deki Diş Hekimlerinde Tükenmişlik Sendromu

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ABSTRACT

Background: The brief definition of burnout syndrome is exhaustion from work and work-related factors. It is more common in jobs that require face-to-face contact with people, such as dentists. In this study, we researched the burnout levels of dentists working in Turkey and evaluated them according to gender, title, place of work, and experience.

Methods: Burnout scores were determined by the Copenhagen Burnout Inventory. This questionnaire was delivered to dentists online through various social media applications. We analyzed data via SigmaPlot Software.

Results: The answers of a total of 477 dentists were considered valid. We observed that 73,5% of them had high burnout scores. A statistically significant difference was found in the evaluations according to the title and workplace. Experience and gender do not statistically affect burnout scores.

Conclusion: It has been observed that dentists working in Turkey are more likely to face burnout syndrome at high levels. It has been predicted that patient burden may be closely related to burnout syndrome.

Keywords: burnout syndrome, copenhagen burnout inventory, dentist, title, workplace

ÖZ

Amaç: Tükenmişlik sendromunun kısa tanımı işten ve işle alakalı faktörlerden kaynaklı emosyonel olarak aşırı yorgun hale gelmektir. Bu durum, diş hekimleri gibi insanlarla yüz yüze temas gerektiren mesleklerde daha yaygın görülmektedir. Bu çalışma Türkiye'de görev yapan diş hekimlerinin tükenmişlik düzeylerinin araştırılmasını ve cinsiyet ünvan iş yeri ve deneyimlerine göre değerlendirmesini amaçlamaktadır

Gereç ve Yöntemler: Tükenmişlik puanları Kopenhag Tükenmişlik Envanteri kullanılarak belirlendi. Bu anket çeşitli sosyal medya uygulamaları aracılığıyla diş hekimlerine online olarak ulaştırılmıştır. Verileri SigmaPlot yazılımı ile analiz edildi.

Bulgular: Toplam 477 diş hekiminin cevapları geçerli kabul edildi. Bunların %73,5'inin tükenmişlik skorlarının yüksek olduğunu gözlemlendi. Ünvan ve işyerine göre yapılan değerlendirmelerde istatistiksel olarak anlamlı bir farklılık bulunmuştur. Tükenmişlik puanlarının, deneyim ve cinsiyetten bağımsız olduğu sonucuna varılmıştır.

Sonuç: Türkiye'de çalışan diş hekimlerinin tükenmişlik sendromu ile karşılaşma olasılıklarının daha yüksek olduğu gözlenmiştir. Hasta yükünün tükenmişlik sendromu ile yakından ilişkili olabileceği öngörülmüştür.

Anahtar Kelimeler: tükenmişlik sendromu, kopenhag tükenmişlik envanteri, diş hekimi, ünvan, işyeri

INTRODUCTION

One of the most used definitions of burnout syndrome is a case of mental, emotional, and physical exhaustion caused by work or work-related factors.¹ But one must know that stress and burnout are two different situations. Stress is a transitory feeling caused by internal or external stimuli, while burnout is the collapse of adaptation and suffering from chronic and prolonged job stress.²

Burnout syndrome is usually seen in professional groups working with people face to face. In addition to face-to-face interaction, workload, work environment, patient anxiety, risk of medical error, uncomfortable physical posture, working with inadequate qualified dental assistants, job dissatisfaction, and economic pressures are also risk factors for dentists.³⁻⁶ As a result of burnout syndrome, mental health issues, drug use, medical mistakes, and less job satisfaction can be seen.¹

Several inventories for measuring burnout levels include Maslach, Oldenburg, and Copenhagen. The more recent Copenhagen Burnout Inventory (CBI)⁷ is a 19-item survey with three scales to measure different burnout types; personal, work-related, and patient-related burnout levels.

This study aims to evaluate the burnout levels of dentists in Turkey. In addition, it determines whether there is a difference according to gender, workplace, experience, or title.

MATERIALS AND METHOD

Since Maslach defined the concept of burnout, the Maslach Burnout Inventory has been used frequently. CBI, more recently created in 2005, CBI showed high reliability and a high correlation with the SF-36 scale.⁷

CBI is a 19-item inventory that consists of three subscales personal, work-related, and patient-related.

There are six questions for personal, seven for work-related, and six for patient-related subscales. All questions have the same answer form as always, often, sometimes, seldom, and never/almost never or to a very high degree, to a high degree, somewhat, to a low degree, and a very low degree and are summarized into scores of 100, 75, 50, 25 and 0 respectively.

All subscale scores are calculated by averaging all items in the relevant subscale. The researchers set low, intermediate, and high burnout levels and ranges were determined as less than 25, between 25-50, and greater than 50, respectively.⁸ The overall burnout score (OBS) was calculated by averaging all subscales.

The research and Ethics Board of the University of Selcuk Dentistry Faculty reviewed and approved the study(2021/20). All participants confirmed the informed consent form before answering the questions. Dentists who work in Turkey are invited by e-mail or open invitation posts on social media to participate in this study. Our volunteers completed an online 23-question survey including gender, professional experience, workplace, title, and a 19-item Copenhagen burnout inventory. Only participants who answered all questions were included in the study. The burnout levels of the dentists participating in the study were statistically analyzed according to gender, title, experience, and workplace.

All statistics were made using SigmaPlot 14 software. No normal distribution was observed in intragroup evaluations, and the Kruskal-Wallis test was applied. In the groups with differences, we used Dunn's Method with the program's recommendation for dual assessment.

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RESULTS

Five hundred sixty-three dentists participated in the study, but only 477 answered all survey questions. Two hundred thirty-eight of them(49,8%) carry the title of the general dentist(GD), 112 (23,4%) of them are specialists or have PhD Degrees, and 127(26,6%) of them work as residents. While 275 (57,6%) of the participants were women, 201 (42,1%) were men. Furthermore, 173 (36,2%) of participants stated their professional experience as 0-5 years, 162 (33,9%) of them as 5-10 years, 61 (12,7%) of them as 10-15 years, and 81 (16,9%) of them as 15 years and above. As for the places they work, 133 (27,8%) of our participants stated public oral and dental health centers(PODHC), 174 (36,4%) faculty of dentistry, 160 (33,5%) private clinics, and 10 (2%) others.

The mean OBS of dentists working in Turkey and participating in our study is 62,2. Dentists participating in the survey had high-level burnout syndrome observed in 73,5%. It shows that approximately 3 out of 4 dentists working in Turkey suffer from burnout syndrome at a high level.

When we evaluate the subclasses, we observe that the burnout levels of personal(61) and work-related(60,8) are almost the same. But when it comes to patient-related burnout, it increases to 65,7. There was a significant difference between patient-related and other subclasses.

We found a statistically significant difference between dentist-resident(p<0,001) and dentist-specialist/Ph.D. Degree(p=0,013). All statistics related to gender, experience, title, and workplace are given in Table 1.

Table 1. Statistical data of all groups

Female n:275 median:63,7	Male n:202 median:64,1			p=0,206
0-5 years n:173 median:63,3	5-10 Years n:162 median:62,3	10-15 Years n:61 median:67,3	15 and above n:81 median:65,7	p=0,921
General Dentist (GD) n:238 median:71,7	Resident n:127 median:60,7	Specialist / PhD Degree n:112 median:57,4		p<0,001*
		GD	Resident	p<0,001*
		GD	Specialist / PhD Degree	0,013*
		Resident	Specialist / PhD Degree	0,543
Public Oral and Dental Health Center (PODHC) n:133 median:71,6	Dentistry Faculty n:174 median:60,4	Private n:160 median:59,3		p<0,001*
		PODHC	Dentistry Faculty	p=0,003*
		PODHC	Private	p<0,001*
		Dentistry Faculty	Private	p=0,292
* There is significantly difference(p<0,05).				

DISCUSSION

Burnout syndrome is a condition associated with long-term workload and job dissatisfaction. At the same time, the frequency of burnout in health workers is much higher than in the general population.⁹ When it is considered as a situation that is observed more frequently, especially in healthcare workers, it is revealed by the studies^{8,10} that satisfaction and workload do not balance each other while working in a divine job that requires idealism. In this study, we examined Turkish dentists' burnout

degrees and evaluated whether there was a significant difference according to gender, experience, workplace, or title.

In different burnout studies conducted on dentists in other countries, the prevalence of burnout was stated as 13% in America¹¹, 26% in Ireland,¹² or 15% in the United Kingdom.¹³ In an evaluation of a specialty, it was 9% in pediatric dentistry in the USA.¹⁴ In our study, this result jumps to 73%.

We can seek the source of this in many factors, such as the development level of the country, the economic situation, the socioeconomic and sociocultural levels of the patients, violence against health workers, and insufficient salary. It is seen that all subclasses cause this high level of burnout. Since the average of all is above 60, it would be wrong to blame only one of them. However, it is necessary to highlight one of the subclasses. In that case, the patient-related burnout with the highest average(65,7) has a more significant effect with a statistical difference. Health workers are quickly exhausted, and most of the above factors are seen together. In intra-country comparison, Burnout percentages ranged from 22.3 to 29 in studies that generally included private practitioners or were student-based¹⁵⁻¹⁷. In a study conducted during the pandemic period, it increased to 34 percent in filiation groups¹⁸. When we evaluate our study, these figures are quite low. We think that these deviations occur as a result of the difference in the target groups of other studies and the populations they can reach.

Most studies have reported that females are at higher risk of burnout due to home-work conflict.¹⁹ On the contrary, studies report that males have more chance of burnout.^{20,21} Our study was on the side of other studies that did not find statistical differences between the genders.²² This result shows that, at least in our study population, no situations did create a female-male difference.

When evaluated according to our experience data, it is seen that there is no statistical difference between the experience classifications. Although it has been shown that burnout scores decrease with experience in doctors, it has been observed that these scores increase with experience in dentists.

There was a significant difference when the workplaces were evaluated (p<0,001). Dunn's method significantly differs between PDHC and Faculty, PHDF, and private clinics. Contrary to our findings, a study found a difference between faculty and private clinics.¹¹ The researchers also stated PDHC and Faculty differences in another study¹⁰. The fact that the communication with the patients in the faculties is less than in the public dental health centers reduces the burnout scores noticeably. Faculty members devote more time to administration, learning, and teaching.²³ When private clinics and public dental health centers are considered, the patient load in public dental health centers is high. The density of any private clinic cannot compete with the patient load of public dental health centers. In addition, the divergence in income may have created this difference. Comprehensive research is required to identify the possible causes.

Studies evaluating the effect of title on burnout give conflicting results. While some studies found a significant difference between titles, some were not.²⁴ In studies that did not find a difference in burnout between titles, researchers suggested that the work environment and patient burden played a more significant role in burnout.²⁵ Our study found a considerable difference between GD-resident and GD-specialist/PhD degrees. There was no significant difference between resident and specialist/PhD degrees. The group includes most of our study's specialist/PhD Degrees, and all residents work in faculties. Considering that most GDs in our study work in public dental health centers, a result similar to the burnout difference between faculty and PODHC emerges. Based on these results, it would be correct to say that the work environment and patient burden play a more significant role in burnout.

The present study and previous studies have shown that the burnout scores of dentists are higher than the average population. Studies investigating the high scores reasons, the causes have changed from the past to the present. In the past, lagging appointments were dentists' most significant stress factor.^{26,27} A

study conducted in the United Kingdom showed that this factor was replaced by litigation and new regulations.¹⁰ Although patient dissatisfaction is also evaluated in this category, in Turkey, the patient who is unsatisfied or thinks that a misdiagnosis or malpractice is done, instead of applying to the patient rights unit, can make a complaint directly through the presidential communication center. It creates an additional source of stress for the physician or dentist and is among the possible reasons for the increased burnout score.

We have two significant limitations to this study. First, individuals participating in the survey may have lowered their scores because of anxiety about identification, even though they knew they were anonymous while answering the questions. At the same time, considering that the participation rate of stressed individuals in such surveys is lower than non-stressed individuals²⁸, the scores may have decreased accordingly. The survey response rate is 88%, but it only shows the participant number among those who open the page. It makes it impossible to find our real response rate and selection bias. We should also emphasize that this study was carried out during the pandemic.

CONCLUSION

The burnout levels of dentists in Turkey were relatively high compared to their colleagues in other countries. Significant increases in burnout scores were observed in general dentists and dentists working in institutions with a high patient load. However, the patient load from PODHC should be reduced to decrease the burnout scores of dentists.

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İki Dış Hakem / Çift Taraflı Körleme

Etik Beyan / Ethical statement

Bu makale, 11. ConsEuro Sempozyumu'nda sözlü olarak sunulan ancak tam metni yayınlanmayan "Türkiye'de Diş Hekimlerinde Tükenmişlik Sendromu" adlı sunumun içeriğinin geliştirilip kısmen değiştirilerek hazırlanmış halidir.

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This article is the version of the presentation named "Burnout Syndrome Among Dentists in Turkey", which was presented orally at the 11th ConsEuro Symposium, but whose full text was not published, by improving and partially changing the content.

It is declared that during the preparation process of this study, scientific and ethical principles were followed and all the studies benefited are stated in the bibliography.

Benzerlik Taraması / Similarity scan

Yapıldı - ithenticate

Etik Bildirim / Ethical statement

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Çıkar Çatışması / Conflict of interest

Çıkar çatışması beyan edilmemiştir.

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Yazar Katkıları / Author Contributions

Çalışmanın Tasarlanması | Design of Study: GG (%30), ŞK (%30), AA (%20), AK (%10), ED (%10)

Veri Toplanması | Data Acquisition: GG (%30), ŞK (%30), AA (%20), AK (%10), ED (%10)

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Makalenin Yazımı | Writing up: GG (%30), ŞK (%30), AA (%20), AK (%10), ED (%10)

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