

Evaluation of Occupational Burnout Levels of Dental Nurses

Dental Hemşirelerin Mesleki Tükenmişlik Düzeylerinin Değerlendirilmesi

Seçil Çalışkan¹, Ebru Delikan², Sena Kızılaslan¹

¹ Department of Pediatric Dentistry, Faculty of Dentistry, University of Eskisehir Osmangazi, Eskisehir

² Department of Pediatric Dentistry, Faculty of Dentistry, University of Nuh Naci Yazgan, Kayseri

ORCID

Seçil Çalışkan <https://orcid.org/000-0002-8059-584X>

Ebru Delikan <https://orcid.org/0000-0003-1624-3392>

Sena Kızılaslan <https://orcid.org/0000-0003-3067-3452>

Yazışma Adresi / Correspondence:

Assist. Prof. Seçil ÇALIŞKAN

Department of Pediatric Dentistry, Faculty of Dentistry, University of Eskisehir Osmangazi, Eskisehir, Turkey

E-mail: scctn@hotmail.com

Geliş Tarihi / Received : 25-10-2019

Kabul Tarihi / Accepted : 28-11-2019

Yayın Tarihi / Online Published: 27-12-2019

Çalışkan S., Delikan E., Kızılaslan S., Evaluation of Occupational Burnout Levels Of Dental Nurses, J Biotechnol and Strategic Health Res. 2019;3(3):192-196 DOI:10.34084/bshr.611956

Abstract

Objective	To investigate of occupational burnout levels of in dental nurses who working in dental institutions.
Materials and Methods	100 dental nurses working at various institutions and who agreed to participate this study were included. The questionnaire was used to determine the vocational burnout levels of dental assistants. The questionnaires were sent by e-mail. All statistical analyses were performed using SPSS version 22.0.
Results	75% of the individuals participating in the survey are female and 25% are male. Average age was 32 years-old, working time was average of 40 hours per week. It was determined that 6.6% of the participants had 0-1 years, 40.8% 1-4 years, 26.3% 4-9 years 26.3% 9 and more years of professional experience. 40.8% of the dental nurses observed burn out.
Conclusion	Dental nurses involved in this study constitute the occupational group at risk for burnout.
Keywords	Burnout, Chronic fatigue, Dental Nurse

Özet

Amaç	Diş hekimliği kurumlarında çalışan dental hemşirelerin mesleki tükenmişlik seviyelerinin değerlendirilmesidir
Materyal ve Metod	Çeşitli kurumlarda çalışan ve bu çalışmaya katılmayı kabul eden 100 dental hemşire çalışma grubuna dahil edildi. Dental hemşirelerin mesleki tükenmişlik düzeylerini belirlemek için anket kullanıldı. Anketler mail yoluyla uygulanarak değerlendirildi. İstatistiksel analizler SPSS version 22.0 programı ile yapıldı.
Bulgular	Ankete katılanların % 75'i kadın, % 25'i erkektir. Ortalama yaş 32, çalışma süresi haftada ortalama 40 saat idi. Katılımcıların %6.6'sının 0-1 yıl, %40.8'inin 1-4 yıl, % 26.3'ünün 4-9 yıl arasında ve % 26.3'ünün 9 yıldan fazla mesleki tecrübeye sahip olduğu belirlenmiştir. Dental hemşirelerin % 40.8'inde tükenmişlik gözlenmiştir.
Sonuç	Bu araştırmaya konu olan dental hemşireler tükenmişlik için risk altında olan meslek grubunu oluşturmaktadır.
Anahtar Kelimeler	Dental Hemşire, Kronik yorgunluk, Tükenmişlik

INTRODUCTION

The concept of burnout is first described by the psychiatrist Freudenberg in 1974 as an occupational disease and failing, starting to wear out and exhaustion due to excessive demand for energy, power or resources ¹.

The most accepted definition of burnout was the definition of Christina Maslach, who developed the Maslach Burnout Inventory (MBI). This concept, which is very common in individuals who have to keep in contact with people because of their profession, defines in three stages as emotional exhaustion, depersonalization and low personal success feeling ². Emotional exhaustion is often the first finding of burnout. Individuals feel physically and mentally exhausted, tired, and overwhelmed. In depersonalization, the individual acts like an object to the person who serves. The individual exhibits sloppy attitudes and keeps one's distance from colleagues. In the personal feeling of low success, the person feels inadequate because of comparing with colleagues and also feels as a mediocre employee ³.

Studies about the occupational burnout level of health staff showed that the highest rates group is nursing^{4,5}. Nurses encounter many stress factors in their professional lives because they have to communicate with a lot of people, are working on human health so their mistakes cannot be easily countered. Nursing profession not has enough status and prestige on the other hand the versatility of the job, the uncertainty of the role, the conflicts and tensions with the team members, obligation to work in chaotic environments are some of the problems of profession ⁶.

In dentistry, the importance of dental nurses in team work is quite high. For the success of clinical trials, as much as the level of knowledge and skill of the people in the team; they have to speak the same language with each other, and they should be able to move in harmony with one another⁶. Dental nurses are individuals who have duties and responsibilities in many different fields, from secretarial

to financial matters, from sterilization to surgical assistants especially in countries where they are not recognized a profession by legal regulation. In addition to being an integral part of the dentist's clinical program which has a high-stress factor, the dental nurses also support patients psychologically thus they help dentists⁷. Dental nurses have been reported that they feel themselves worthless and dissatisfied because of high responsibilities and the requirement of working environment ⁶.

The purpose of this study was to investigate of occupational burnout a level of dental nurses who working in dental institutions.

Methods

The study was approved by the Ethics Review Board of the Medical Faculty of Mersin University (Turkey-2018-174). In the survey, 100 dental assistants between 20 and 60 years old, who served as dental assistant in the different faculties of dentistry, were included on a voluntary basis.

The questionnaire was used to determine the vocational burnout levels of dental assistants. The first part of the questionnaire consists of descriptive information including professional experience periods of the nurses also it is the participant approval part. In the second section, MBI which consisting of 22 questions was used. The original MBI has 7 options. This inventory has been adapted to Turkish culture and used a questionnaire form with 5 options (0 = Never, 1 = Very rare, 2 = Sometimes, 3 = Most of the time, 4 = Always)

The survey which including Turkish version of the MBI was delivered by emails to dental nurses who work in the dentistry faculty for determine the level of vocational burnout.

For the emotional exhaustion (EE) at work subscale, low was defined as 0–20, moderate as 21–30, and high as 31 and above. For the depersonalization (DP) subscale, low

was defined as 0–5, moderate as 6–10, and high as 11 and above. For personal accomplishment (PA), low was defined as 42 and above, moderate as 36–41 and high as 35 and below. Since the 5 options subscale was used to interpret the scores, the values were reduced by 2/7. A combination of high scores on EE and DP, and a low score on PA, correspond to a high level of burnout.

Data obtained from the questionnaires were statistically evaluated using the Chi-square test in the Statistical Package for the Social Science 2.0 (SPSS 22.0) program. The statistical significance level was accepted as $p < 0,05$ in the analyzes.

Results

75% of the individuals participating in the survey were female and 25% were male. Mean age was 32, working time was 40 hours per week. It was determined that 6.6% of the participants had 0-1 years, 40.8% 1-4 years, 26.3% 4-9 years 26.3% 9 and more years of professional experience. 40.8% of the dental nurses observed burnout. Additionally, 53.9% high level EE at work, 96.1% low PA and 69.7% high level DP were observed in nurses. When the distribution of MBI subscale scores according to the professional years of nurses was examined, PA subscale score distributions were found to be statistically significant. The highest EE, PA and DP were observed in individuals with 1-4 professional years.

Statistically significant difference was not found between the burnout status of participants and years of professional experience (Table 1.). Burnout was significantly higher in females than males. Also statistically significant difference was found between + burnout and participant's experimental years (Table 2.).

Table 1. Comparison of participants the burnout status and professional years

		Burn out Status		Total	p
		-	+		
Professional years	0-1 year	Count	2	3	5
		%	40,0%	60,0%	
	1-4 year	Count	17	14	31
		%	54,8%	45,2%	
	4-9 year	Count	13	7	20
		%	65,0%	35,0%	
	9 <	Count	13	7	20
		%	65,0%	35,0%	
Total	Count	45	31	76	
	%	59,2%	40,8%		

Table 2. Comparison of participants the +burn out and gender-professional years

		+ burn out	p
Gender	Female	28,6%	<0.00
	Male	16,7%	
Professional years	0-1 year	9,7%	
	1-4 year	22,6%	
	4-9 year	22,6%	
	9 <	38%	0.011

Discussion

Nurses have various degrees of burnout depending on the institutional, personal, and professional reasons for where they work. Reasons which the necessity of communicating with a large number of patients and / or healthy persons, the encounter with death, the shift in physical and psychosocial issues associated with it, the scarcity of wages and the difficulties associated with career planning, the conflict with colleagues make it easier for people working in this field to show their burnout ⁸.

In the literature, it was found that nurses caring for the more acute patients showed higher levels of burnout ⁹. Cicchitti et al. showed that 50% of the nurses experienced the highest rate of burnout, moderate depersonalization and emotional exhaustion in half ¹⁰. The results of Denizoğlu et al. showed that 33.4% of the nurses had high EE

and 80% had low PA 11. The data of recent study are in parallel with similar researches.

When studies investigating the relationship between burnout and professional experience are examined, it was seen that as the professional experience increases, the burnout rate decreases^{7,12}. According to the results of a meta-analysis by Brewer and Shapard published in 2004, burnout is more frequent and heavier between inexperienced people¹³. Also among nurses when experience increased, burnout decreased. Because nurses should gain experience in dealing with difficulties to see themselves more proficiently and more successfully in the professional sense with the increasing experience and the advancing age^{5,8}. In this study, almost half of the dental nurses had less than 4 years of professional experience and also under the age of³⁰.

When the relationship between burnout and gender is examined, it can be generally concluded that burnout is seen more in female than male^{8,14-16}. Similar results were obtained in this study, but the distribution of male and female nurses included in the study was not equal.

Excessive working hours, increased workload, dissatisfaction with working environment and co-workers are the factors leading to burnout. All of these adversely affect daily life and disrupt biological health.

Conclusions

Dental nurses constitute the occupational group at risk for burnout. It is also important to have an individual relationship with human health for the occupation in question, as a mistake can lead to irreversible consequences. It is possible to prevent the burnout syndrome in the individuals who work in this profession by recruiting new staff and wages for the units where the workload and stress are more frequent in order to overcome the possible causes of exhaustion and reorganizing the working hours and seizure numbers. In addition, the conditions affecting burnout in dental nurses should be evaluated in detail and supported

by new studies.

Competing Interests

The authors declare that they have no competing interest.

Financial Disclosure

There are no financial supports.

Kaynaklar

1. Freudenberger HJ. Staff Burn-Out. *Journal of Social Issues*. 1974;30(1):159-165.
2. Maslach C, Jackson SE. The measurement of experienced burnout. *Journal of Organizational Behavior*. 1981;2(2):99-113.
3. Jackson SE, Schuler RS. Preventing employee burnout. *Personnel*. 1983;60(2):58-68.
4. Shanafelt TD, Hasan O, Dyrbye LN, et al. Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014. *Mayo Clinic proceedings*. 2015;90(12):1600-1613.
5. Taycan O, Kutlu L, Çimen S, Aydın N. Bir üniversite hastanesinde çalışan hemşirelerde depresyon ve tükenmişlik düzeyinin sosyodemografik özelliklerle ilişkisi. *Anadolu Psikiyatri Dergisi*. 2006;7(2):100-108.
6. Gibson B, Freeman R, Ekins R. The role of the dental nurse in general practice. Vol 1861999.
7. Te Brake H, Bouman AM, Gorter R, Hoogstraten J, Eijkman M. Professional burnout and work engagement among dentists. *European journal of oral sciences*. 2007;115(3):180-185.
8. Kaya N, Kaya H, Ayık SE, Uygur E. Bir devlet hastanesinde çalışan hemşirelerde tükenmişlik. *Uluslararası İnsan Bilimleri Dergisi*. 2010;7(1):401-419.
9. Oehler J, Davidson M. Job stress and burnout in acute and nonacute pediatric nurses. *American Journal of Critical Care*. 1992;1(2):81-90.
10. Cicchitti C, Cannizzaro G, Rosi F, Maccaroni R, Menditto V. Burnout syndrome in pre-hospital and hospital emergency. Cognitive study in two cohorts of nurses. *Recenti progressi in medicina*. 2014;105(7-8):275-280.
11. Denizoğlu S, Yılmaz B, Akyıl R, Akyıl MŞ. Atatürk Üniversitesi Diş Hekimliği Fakültesinde Çalışan Diş Hekimleri ve Hemşirelerinin Mesleki Durum Değerlendirmesi, BÖLÜM II: Tükenmişlik. *Atatürk Üniversitesi Diş Hekimliği Fakültesi Dergisi*. 2005;2005(2):43-53.
12. Taycan O, Kutlu L, Aydın N. Bir üniversite hastanesinde çalışan hemşirelerde depresyon ve tükenmişlik düzeyinin sosyodemografik özelliklerle ilişkisi. 2018;6(2):279-286
13. Brewer EW, Shapard L. Employee burnout: A meta-analysis of the relationship between age or years of experience. *Human resource development review*. 2004;3(2):102-123.
14. Erol A, Saricicek A, Gülseren S. Asistan hekimlerde tükenmişlik: İş doyumu ve depresyonla ilişkisi/Burnout in residents: association with job satisfaction and depression. *Anadolu Psikiyatri Dergisi*. 2007;8(4):241.
15. McMurray JE, Linzer M, Konrad TR, et al. The work lives of women physicians. *Journal of General Internal Medicine*. 2000;15(6):372-380.
16. Gautam M. Topics in Review: Women in medicine: stresses and solutions. *Western Journal of Medicine*. 2001;174(1):37.