

## Levels of Burnout Among Nurses and Related Factors Hemşirelerde Tükenmişlik ve İlişkili Faktörlerin İncelenmesi

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### Abstract

Nurses frequently experience challenging emotional situations such as severe illness, poor prognosis, and patient death, and they often work in complex and high-stress work environments. The aim of this study was to examine the levels of burnout and related factors among nurses working in a public hospital. The data of this cross-sectional descriptive study were obtained with the Nurse Information Form and Maslach Burnout Scale between March and April 2023. The comparison of burnout scores was analyzed with independent sample t-tests for gender, marital status, and voluntary choice of profession; one-way analysis of variance for educational status, total working time in the profession, weekly working time, and working order. The study included 121 participants ( $\geq 18$  years); the majority were female (66.1%), married (52.1%), and had a bachelor's degree (61.2%). The depersonalization and emotional exhaustion scores of nurses working in specialized units were significantly higher than those of nurses working in inpatient services. The emotional exhaustion and depersonalization scores of nurses with 6-10 years of professional experience were significantly higher than those with 1-5 years of experience. Our findings suggest that nurses may experience more emotional exhaustion and depersonalization when they do not choose the profession willingly and when their professional experience and weekly working hours increase.

**Keywords:** Nursing, nursing care, professional burnout.

### Özet

Hemşireler sıklıkla ağır hastalık, kötü prognoz, hasta ölümü gibi zorlu duygusal durumlar yaşamakta, karmaşık ve yüksek stresli iş ortamlarında çalışmaktadırlar. Bu çalışmanın amacı, bir kamu hastanesinde çalışan hemşirelerin tükenmişlik düzeylerini ve ilişkili faktörleri incelemektir. Kesitsel tanımlayıcı tipteki bu araştırmanın verileri Mart-Nisan 2023 tarihleri arasında Hemşire Bilgi Formu ve Maslach Tükenmişlik Ölçeği ile elde edilmiştir. Tükenmişlik puanlarının karşılaştırılması cinsiyet, medeni durum ve mesleği isteyerek seçme durumları için bağımsız örneklem t-testi; eğitim durumu, meslekte toplam çalışma süresi, haftalık çalışma süresi ve çalışma düzeni için tek yönlü varyans analizi ile analiz edilmiştir. Analizlere 121 katılımcı ( $\geq 18$  yaş) dahil edilmiştir; çoğunluğu kadın (%66,1), evli (%52,1) ve lisans derecesine sahiptir (%61,2). Uzmanlaşmış birimlerde çalışan hemşirelerin duyarsızlaşma ve duygusal tükenme puanları, yataklı servislerde çalışan hemşirelerden anlamlı olarak daha yüksektir. Mesleki deneyimi 6-10 yıl arasında olan hemşirelerin duygusal tükenme ve duyarsızlaşma puanları, deneyimi 1-5 yıl arasında olanlara göre anlamlı düzeyde daha yüksektir. Bulgularımız, hemşirelerin mesleği isteyerek seçmediklerinde, mesleki deneyimleri ve haftalık çalışma saatleri arttığında daha fazla duygusal tükenme ve duyarsızlaşma yaşayabileceklerini göstermektedir.

**Anahtar Kelimeler:** Hemşirelik, hemşirelik bakımı, mesleki tükenmişlik.

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## 1. Introduction

Burnout is defined as a psychological syndrome that develops as a prolonged response to chronic interpersonal stressors in the workplace (Maslach & Leiter, 2016). The World Health Organization's International Classification of Diseases, 11th Revision (ICD-11), defines burnout as a syndrome resulting from chronic workplace stress that has not been successfully managed (World Health Organization, 2019).

Nurses represent a distinct professional group considering the diverse settings they work in and the occupational stressors they encounter (Chen & Meier, 2021). Given the pivotal role nurses play in the healthcare system, their burnout is important and has become a global public health concern (Friganović et al., 2017; Zhang et al., 2020). Factors contributing to this include nurses frequently facing emotionally distressing situations such as severe illness, poor prognosis, patient suffering and/or death, working in complex, critical, and high-stress environments, and experiencing secondary traumatic stress (Almeida & Poeira, 2023; Friganović et al., 2017; Jeong & Shin, 2023). Furthermore, role stress, lack of supervisor support, interpersonal conflicts, communication issues, misguided expectations, insufficient competence in knowledge and decision-making, occupational overload, and inadequate physical working conditions are specific job-related stressors within the nursing profession (Garrosa et al., 2010). The frontline care role of nurses assumes for the most vulnerable patients, and the physical and psychological stress stemming from comprehensive patient care makes nurses more susceptible to burnout (Woo et al., 2020). High levels of burnout among nurses (Almeida & Poeira, 2023; Hailay et al., 2020; Jeong & Shin, 2023; Johnson & Rainbow, 2023; Oyira et al., 2022) have been reported, with variables such as gender, age, marital status, work schedule and area, personality traits, lack of interest in the profession, work environment, prolonged workload, high patient numbers, and staff shortages influencing their burnout (Cañadas-De la Fuente et al., 2015; Dall'Ora et al., 2020; Hailay et al., 2020).

Burnout is known to negatively affect nurses' physical, mental, and social well-being. Burnout is a significant issue that diminishes nurses' professional and life satisfaction, and quality of life, increases the intention to leave the nursing profession, and actual turnover rates (Camci Baran & Kavuran, 2021; Friganović et al., 2017; Leiter & Maslach, 2009; Omidi et al., 2023; Shah et al., 2021). Apart from negatively affecting nurses' health, burnout also influences patient care, healthcare provision, and healthcare institutions (Friganović et al., 2017; Rehman, 2022). Evidence suggests that burnout adversely impacts nurses by causing work absenteeism, reduced work capability, and subsequently affecting care quality, patient safety, adverse events, error reporting, medication errors, infections, patient falls, patient dissatisfaction, and family complaints (Dall'Ora et al., 2020; Friganović et al., 2017). Identifying factors contributing to burnout is crucial as it not only aids nurses but also facilitates the delivery of appropriate healthcare services that will enhance the health of patients and the community (Rehman, 2022). Considering the important and great impact of burnout on nurses, this study was conducted to examine the levels of burnout and related factors of nurses working in a public hospital in Turkey.

## 2. Method

This study employed a cross-sectional descriptive research design and followed the STROBE checklist for reporting.

### 2.1. Aim

The aim of this study was to examine levels of burnout among nurses and the individual and professional factors affecting burnout.

### 2.2. Research Questions

The research questions are as follows:

- What are the levels of burnout among nurses?
- Is there a significant relationship between the sociodemographic characteristics of nurses and their levels of burnout?
- Is there a significant relationship between nurses' professional experience and their levels of burnout?

### 2.3. Population and Sample of the Research

The study was conducted among nurses working in a specialized public hospital in Turkey. Inclusion criteria required participants to be 18 years or older and to have been employed as a nurse in the hospital for at least one year. Using a simple random sampling method, a total of 121 nurses who met these criteria and provided voluntary consent participated in the study and completed the data collection instruments.

### 2.4. Data Collection and Data Collection Tools

Data were collected between March and April 2023 using the Nurse Information Form and the Maslach Burnout Inventory. After obtaining written informed consent through face-to-face interviews with participants, they were provided with the data collection instruments to complete. The data were collected by the researchers.

#### 2.4.1. Nurse Information Form

The Nurse Information Form was constructed based on the literature (Aksoy, 2021; Zengin, 2021) by researchers. It consists of 10 questions aimed at gathering sociodemographic information about nurses (age, gender, educational level, marital status, etc.) and professional experience characteristics.

#### 2.4.2. Maslach Burnout Inventory

The adaptation of the Maslach Burnout Inventory (MBI) for doctors and nurses was carried out by Ergin (1993), based on the original version developed by Maslach and Jackson (1986). The Maslach Burnout Inventory was developed to assess the theoretical components of the burnout syndrome. The MBI comprises a total of 22 items, categorized into three subscales. The subscales include Emotional Exhaustion (9 items), Depersonalization (8 items), and Personal Achievement (5 items). Scoring is conducted separately for each subscale. The scale employs a 5-point Likert format, prompting participants to mark the most suitable option for themselves from the following choices: Never (0 points),

Rarely (1 point), Sometimes (2 points), Often (3 points), and Always (4 points). Reverse-scored items are present in the Personal Achievement subscale. The scoring procedure for these subscales is conducted independently, and no explicit cutoff scores are delineated within the scale's original framework. The original version of the scale exhibits internal consistency values of 0.90 for Emotional Exhaustion, 0.79 for Depersonalization, and 0.71 for Personal Achievement subscales. However, in Ergin's (1993) adaptation study, these values were 0.83, 0.65, and 0.72, respectively. Moreover, the original version of the scale demonstrates test-retest reliability values of .82 for Emotional Exhaustion, 0.60 for Depersonalization, and 0.80 for Personal Achievement subscales, whereas in Ergin's (1993) adaptation study, these values were 0.83, 0.72, and 0.67, respectively (Ergin, 1993). In this study, the obtained Cronbach's alpha values were 0.83 for Emotional Exhaustion, 0.58 for Personal Achievement, and 0.72 for Depersonalization subscales.

### *2.5. Ethical Considerations*

Ethical approval for the study was obtained from a university's ethics committee (decision number 2022/129 dated 14.10.2022). Permission was obtained from the public hospital where the research was conducted and the corresponding provincial health directorate. Permission was also secured via email from the owner of the scale used in the study. Written and verbal informed consent was obtained from all participants, with voluntary participation being the guiding principle. The present study was conducted in accordance with the Helsinki Declaration.

### *2.6. Limitations*

Limitations of this study includes the small sample size. In addition, the study sample was drawn from nurses working in the same hospital where the research was conducted, the willingness of nurses to participate was relatively low, and the study was limited to a single public hospital. These factors restrict the generalizability of the findings.

### *2.7. Data Analysis*

The data were analyzed using SPSS 24 (Statistical Package for Social Sciences) program. Determining analysis techniques considered variables 'skewness and kurtosis values, and normal distribution was assumed if values were  $\pm 1.5$  (Tabachnick & Fidell, 2013). The skewness and kurtosis values of the Maslach Burnout Inventory subscale scores are between  $\pm 1.5$ , indicating a normal distribution (Table 2). Comparison of Maslach Burnout Inventory Subscale Scores by gender, marital status, and willingly choosing the profession was conducted using an independent sample t-test. Educational status, total working time in the profession, weekly working time, and working order were analyzed by one-way analysis of variance and post hoc tests, specifically the Tukey HSD test. Pearson correlation analysis was conducted to examine the correlation between continuous variables.

## **3. Results**

### *3.1. Participant Characteristics*

Participating nurses had a mean age of  $30.54 \pm 6.73$  years, with the majority being female (66.1%), married (52.1%), and had a bachelor's degree (61.2%). Furthermore, most nurses worked in specialised

units such as intensive care and operating theatres (52%), followed a mixed work schedule (65.3%), worked between 41-45 hours per week (28.9%), had 1-5 years of professional experience (45.5%), and chose nursing willingly (81%) (Table 1).

**Table 1.** Demographic and professional characteristics of nurses (n=121)

	M ± SD / n	Range / %
Age	30.54 ± 6.73	22-49
Gender		
Woman	80	66.1
Male	41	33.9
Marital Status		
Single	58	47.9
Married	63	52.1
Education		
High school	12	9.9
College	13	10.7
Bachelor's Degree	74	61.2
Graduate	22	18.2
Working Unit		
Specialised Unit <sup>1</sup>	63	52.1
Inpatient Service	42	34.7
Other	16	13.2
Duration of Professional Experience		
1-5 years	55	45.5
6-10 years	44	36.4
11 years and above	22	18.1
Working Schedule		
Daytime	28	23.1

**Table 1 (continued).** Demographic and professional characteristics of nurses (n=121)

Night	14	11.6
Mixed/hybrid	79	65.3
Choosing the Profession Willingly		
Yes	98	81.0
No	23	19.0
Duration of Weekly Working Time		
40 hours	28	23.1
41-45 hours	35	28.9
46-50 hours	26	21.5
51 hours and above	32	26.4
Total	121	100.0

*M= Mean, SD= Standard deviation, n= number, %= percent, 1= intensive care, emergency departments, and operating theatres*

### 3.2. Findings Regarding Nurses' Maslach Burnout Inventory Scores

Among participating nurses, the average scores were  $20.62 \pm 6.88$  for Emotional Exhaustion,  $11.90 \pm 4.23$  for Personal Achievement, and  $7.89 \pm 4.34$  for Depersonalization (Table 2).

**Table 2.** Maslach Burnout Inventory sub-dimension scores (n=121)

	M $\pm$ SD	Range	Skewness	Kurtosis
MBI sub-dimension				
Emotional Exhaustion	$20.62 \pm 6.88$	3-36	0.15	-0.30
Personal Achievement	$11.90 \pm 4.23$	0-23	0.02	0.45
Depersonalization	$7.89 \pm 4.34$	0-20	0.48	0.03

*M= Mean, SD= Standard deviation, MBI= Maslach Burnout Inventory*

### 3.3. Maslach Burnout Inventory Scores According to Nurses' Descriptive Characteristics

Statistically significant relationships between nurses' age, gender, marital status, educational level, work schedule, and MBI scores were not found ( $p > 0.05$ ) (Table 3).

When examining MBI scores based on the units where nurses worked, it was determined that nurses in specialized units had significantly higher depersonalization ( $F=4.847$ ,  $p=0.009$ ) and emotional exhaustion ( $F=6.837$ ,  $p=0.002$ ) scores compared to nurses working in inpatient wards. Nurses working

in other units, such as outpatient clinics and administrative departments, had significantly higher personal achievement scores ( $F=3.297$ ,  $p=0.04$ ) than those in specialized and inpatient wards (Table 3).

Nurses with 6-10 years of professional experience had significantly higher emotional exhaustion ( $F=4.199$ ,  $p=0.02$ ) and depersonalization scores ( $F=5.062$ ,  $p=0.01$ ) compared to nurses with 1-5 years of experience. Nurses with more than 11 years of professional experience had statistically significantly higher depersonalization scores ( $F=5.062$ ,  $p=0.01$ ) compared to those with 1-5 years of experience (Table 3).

Nurses' MBI scores were examined based on their voluntary choice of their profession; a statistically significant difference in emotional exhaustion scores was observed. Nurses who did not choose the nursing profession voluntarily had higher emotional exhaustion scores ( $t=-3.285$ ,  $p=0.001$ ) compared to those who chose the profession willingly (Table 3).

When evaluating the relationship between nurses' weekly working hours and MBI scores, it was found that nurses working 51 hours or more per week had statistically significantly higher emotional exhaustion scores compared to nurses working 40 hours per week and nurses working 41-45 hours per week. Additionally, nurses working 46-50 hours per week had statistically significantly higher emotional exhaustion scores compared to those working 40 hours per week ( $F=7.048$ ,  $p=0.00$ ) (Table 3).

**Table 3.** Demographic and professional characteristics of nurses and Maslach Burnout Inventory scores (n=121)

		Maslach Burnout Inventory		
		Emotional Exhaustion	Personal Achievement	Depersonalization
Age	r	0.00	-0.03	0.04
	p	0.99	0.77	0.64
	n	M ± SD	M ± SD	M ± SD
Gender				
Woman	80	19.88 ± 7.09	11.50 ± 3.88	7.50 ± 4.08
Male	41	22.07 ± 6.28	12.68 ± 4.80	8.66 ± 4.77
Test statistic, p value		t=1.677, p=0.10	t=1.464, p=0.15	t=1.395, p=0.17
Marital Status				
Single	58	19.97 ± 7.67	11.48 ± 4.36	7.43 ± 5.11
Married	63	21.22 ± 6.05	12.29 ± 4.10	8.32 ± 3.48

**Table 3 (continued).** Demographic and professional characteristics of nurses and Maslach Burnout Inventory scores (n=121)

Test statistic, p value	t=-1.004, p=0.32	t=-1.044, p=0.30	t=-1.123, p=0.26
<b>Education</b>			
High school	12 19.00 ± 3.93	11.00 ± 2.86	6.25 ± 3.08
College	13 23.77 ± 9.31	11.15 ± 4.63	10.31 ± 5.75
Undergraduate	74 21.14 ± 6.61	12.16 ± 4.45	7.95 ± 4.04
Graduate	22 17.91 ± 6.68	11.95 ± 3.98	7.18 ± 4.64
Test statistic, p value	F=2.500 p=0.06	F=0.406, p=0.75	F=2.176, p=0.10
<b>Working Unit</b>			
Specialised Unit <sup>1</sup>	63 22.27±7.08 <sup>a</sup>	11.59±3.95 <sup>a</sup>	8.71±4.69 <sup>a</sup>
Inpatient Service	42 17.60±6.07 <sup>b</sup>	11.43±4.23 <sup>b</sup>	6.26±3.92 <sup>b</sup>
Other <sup>2</sup>	16 22.06±5.54 <sup>c</sup>	14.38±4.68 <sup>c</sup>	8.94±2.48 <sup>c</sup>
Test statistic, p value	F=6.837 p=0.002** b<a	F=3.297 p=0.04* a<c, b<c	F=4.847 p=0.009** b<a
<b>Working Schedule</b>			
Daytime	28 19.18 ± 7.85	12.04 ± 4.07	6.93 ± 4.38
Night	14 20.79 ± 6.29	13.14 ± 5.38	10.00 ± 3.86
Mixed/hybrid	79 21.10 ± 6.62	11.63 ± 4.07	7.86 ± 4.33
Test statistic, p value	F=0.810, p=0.45	F=0.774, p=0.46	F=2.397, p=0.10
<b>Duration of Professional Experience</b>			
1-5 years	55 18.69 ± 6.66 <sup>a</sup>	11.53 ± 4.02 <sup>a</sup>	6.56 ± 4.62 <sup>a</sup>
6-10 years	44 22.11 ± 6.74 <sup>b</sup>	12.70 ± 4.22 <sup>b</sup>	8.93 ± 4.18 <sup>b</sup>
11 years and above	22 22.45 ± 6.70 <sup>c</sup>	11.23 ± 4.67 <sup>c</sup>	9.14 ± 2.92 <sup>c</sup>
Test statistic, p value	F=4.199, p=0.02* b>a	F=1.295, p=0.28	F=5.062, p=0.01* b>a, c>a
<b>Choosing the Profession Willingly</b>			
Yes	98 19.66 ± 6.40	12.00 ± 4.17	7.85 ± 4.45

**Table 3 (continued).** Demographic and professional characteristics of nurses and Maslach Burnout Inventory scores (n=121)

No	23	24.70 ± 7.46	11.48 ± 4.53	8.09 ± 3.92
Test statistic, p value		t=-3.285, p=0.001*	t=0.531, p=0.60	t=-0.238, p=0.81
Duration of Weekly Working Time				
40 hours	28	17.36 ± 7.03 <sup>a</sup>	11.46 ± 4.19	6.39 ± 4.44
41-45 hours	35	18.86 ± 5.49 <sup>b</sup>	11.91 ± 4.10	7.51 ± 3.17
46-50 hours	26	22.15 ± 5.76 <sup>c</sup>	12.04 ± 3.66	8.73 ± 4.20
51 hours and above	32	24.16 ± 7.23 <sup>d</sup>	12.16 ± 4.94	8.94 ± 5.16
Test statistic, p value		F=7.048, p=0.00** a<c, a<d, b<d	F=0.145, p=0.93	F=2.208, p=0.09

*n*= number, *M*= Mean, *SD*= Standard deviation, 1= intensive care, emergency departments, and operating theatres, 2= outpatient clinics and administrative departments, *r*= Pearson Correlation, *F*= One-Way Analysis of Variance, *t*= Independent Sample T-Test, \**p*< .05= Significant at Level, \*\**p*< .01= Significant at Level

#### 4. Discussion

The study revealed that nurses' gender, age, marital status, education, and working schedule did not significantly affect their emotional exhaustion scores, depersonalization, and personal achievement. Numerous studies have reported no significant relationship between nurses' age, gender, education, marital status, working schedule, emotional exhaustion, depersonalization, and personal achievement scores (Almeida & Poeira, 2023; Camci Baran & Kavuran, 2021; Can & Hisar, 2019; Durmus et al., 2018). Moreover, some studies in the literature indicate a higher level of burnout associated with the female nurses (Oyira et al., 2022) and increased age (Camci Baran & Kavuran, 2021). The differences among research findings could be attributed to the cross-sectional nature of the studies, variations in units and regions of study, differences in healthcare systems and policies, and the cultural characteristics of nurses.

Emotional exhaustion stands as the fundamental component and most evident manifestation of burnout. It prompts individuals to engage in actions of emotional and cognitive detachment as a means of coping with excessive workloads. Depersonalization involves an attempt to create distance from individuals by disregarding their uniqueness (Maslach et al., 2001). In this study, when nurses' scale subscale scores were evaluated, it can be interpreted that they have a high level of emotional exhaustion and personal achievement, and a moderate level of depersonalization. Similar findings have been reported in studies conducted in various countries, where nurses experience high emotional exhaustion and moderate depersonalization (Gallagher & Gormley, 2009; Xie et al., 2011). Personal achievement is defined as success and productivity in the workplace (Maslach et al., 2001). This study revealed that nurses

reported a high level of personal achievement. Similar levels of personal achievement have been reported in studies with different nurse samples (Cybulska et al., 2019; Gallagher & Gormley, 2009).

Within the dimensions of burnout, nurses have the highest emotional exhaustion, and the low depersonalization scores align with findings from other studies, indicating a similar pattern (Can & Hisar, 2019; Durmus et al., 2018; Kebapçı & Akyolcu, 2011). Based on the combination of high emotional exhaustion and personal achievement, and moderate depersonalization scores, the overall levels of burnout among nurses in this study can be considered moderate. This classification is given that, despite experiencing high emotional exhaustion, nurses reported low depersonalization and high personal achievement, which mitigate the overall severity of burnout. Similar moderate levels of burnout have also been reported in other studies (Baran Camci & Kavuran, 2021; Cybulska et al., 2019; Yilmaz & Arslan, 2017). A systematic review indicates that nurses experience varying but widespread levels of burnout (Velando-Soriano et al., 2020). Conversely, some studies report high levels of burnout among nurses, which differs from the findings of this study (Durmus et al., 2018). The moderate levels of burnout observed in this study may be associated with factors such as the predominantly young age and limited professional experience of the participants.

Gaining more work experience can lead to increased emotional exhaustion and depersonalization (Lahana et al., 2017). For health professionals, working for more than 10 years increases depersonalization significantly (Baruah et al., 2019). In the present study, nurses with 6–10 years of professional experience reported higher levels of emotional exhaustion and depersonalization than those with 1–5 years of experience. Moreover, nurses with more than 11 years of experience exhibited higher depersonalization compared to their colleagues with 1–5 years of experience. These results are consistent with previous research. A study exploring burnout and coping strategies among emergency department staff, which includes nurses, indicated that those working between 6 and 10 years reported higher emotional exhaustion and depersonalization compared to those working less than 5 years, and those working between 11 and 20 years reported higher emotional exhaustion and depersonalization compared to those working less than 5 years (Howlett et al., 2015). Similarly, Baldonado-Mosteiro et al. (2019) found that emotional exhaustion increased with experience among Brazilian nurses, but not among Spanish nurses. Together, these findings support the present study and suggest that increased professional experience is associated with greater emotional exhaustion and depersonalization, although cultural and contextual differences may play a role (Baldonado-Mosteiro et al., 2019). These results emphasize that, in addition to the number of years spent in the profession, the length of exposure to stress factors specific to nursing is also important. Beyond professional experience, nurses frequently report stressors such as high responsibility, excessive demands, shift work, task overload, and being accountable for patients' health (Grochowska et al., 2022). The cumulative effect of these stressors may contribute to long-term emotional exhaustion and depersonalization, highlighting the complex interplay between job demands and professional experience in shaping levels of burnout.

The literature also includes studies indicating that nurses with less professional experience tend to experience higher levels of burnout (Hayes et al., 2015; Jeong & Shin, 2023; Kim & Yeom, 2018). When evaluating the discrepancies between these studies, the complex and multidimensional nature of

burnout should be considered (Zhang et al., 2020), along with the variations in nurse roles and responsibilities across different cultures and work environments, as well as differences in nurse-patient ratios and disparities in professional experience and remuneration rates. Additionally, the potential influence of the measurement instrument used should not be overlooked, and caution should be applied when evaluating research findings.

Individuals working in a profession they do not desire can experience growing unhappiness and a state of frustration, leading to emotional exhaustion over time. When a solution is not provided to this situation, signs of desensitization may emerge, such as reluctance towards work, arriving late, and eventually leaving the job. It is indicated that not choosing the nursing profession willingly can hinder adaptation to challenging working conditions, and conversely, willingly selecting the profession affects caregiving behavior and burnout (Efil et al., 2022). Indeed, nurses who choose and love their profession voluntarily report lower levels of emotional exhaustion and depersonalization, as well as higher levels of personal achievement and self-realization (Cetinkaya & Gunes, 2022). Nurses who do not choose the nursing profession or the unit they work in have a higher tendency towards emotional exhaustion and greater overall burnout (Caliskan & Akbal Ergun, 2012; Durmus et al., 2018; Tekindal et al., 2012; Yilmaz & Arslan, 2017). Consistent with these studies, the present findings indicate that nurses who entered the profession unwillingly reported higher levels of emotional exhaustion than nurses who chose the profession voluntarily. This suggests that the lack of intrinsic motivation in career choice may increase vulnerability to burnout, particularly when nurses face adversities and demanding working conditions. Furthermore, the fact that nurse employment in Turkey is often driven by hospital needs rather than personal interest or preference may further exacerbate emotional exhaustion and depersonalization among those who did not willingly choose the profession (Topcu et al., 2016). Nurses who do not willingly choose the profession, are dissatisfied with their workplace, perceive the transition to the profession after graduation as very challenging, and feel that their professional expectations are not being met, tend to have low job satisfaction and personal achievement, alongside high levels of burnout (Caliskan & Akbal Ergun, 2012; Efil et al., 2022; Tuncel et al., 2014). Such nurses report more negative attitudes towards the nursing profession compared to nurses who choose willingly, as well as lower job satisfaction and quality of life and more challenges related to their work (Kilic Barmanpek et al., 2022; Pekince & Aslan, 2020; Sabancioglu & Dogan, 2017).

Not choosing the nursing profession voluntarily can lead to difficulties in transitioning into the profession after graduation and may negatively affect job satisfaction, quality of life, and attitudes towards the profession. Moreover, nurses who do not willingly choose the profession tend to experience a decline in quality of life, along with an increased intention to leave the job and higher levels of burnout when their professional expectations are not met. Although the present study did not directly assess factors such as job satisfaction, quality of life, or intention to leave, previous research has demonstrated that these factors can contribute to higher levels of burnout among nurses (Doleman et al., 2025; Lukas et al., 2025; Wang et al., 2019).

In the present study, nurses working 51 hours or more per week had higher emotional exhaustion than nurses working 40 hours and 41-45 hours per week; nurses working 46-50 hours per week had higher

emotional exhaustion than nurses working 40 hours per week. In large-scale research conducted by Shah et al. (2021) involving approximately 4 million nurses, an increase in weekly working hours was associated with a higher prevalence of burnout as a reason for considering leaving or leaving the job (Shah et al., 2021). These findings align with the results of the present study. Various studies indicate that as nurses' daily and monthly working hours, as well as night shift counts, increase, they report higher levels of emotional exhaustion and depersonalization, coupled with a greater susceptibility to burnout (Kebapçı & Akyolcu, 2011; Shi et al., 2023). The lengthening of shift durations leads to more nurses reporting burnout, job dissatisfaction, and intentions to leave their positions. Prolonged shifts, compounded by extra shifts, alternating between night and day shifts, and consecutive shifts, augment the risk of nurse burnout and fatigue, which can jeopardise patient care (Stimpfel et al., 2012). Considering that nurses function within complex and stressful work environments, the correlation between increased working hours and elevated burnout is understandable. It is crucial to regulate extended working hours, thereby mitigating nurse burnout to preserve patient health and the quality of nursing care.

Previous studies report that the unit in which nurses work affects their level of burnout, with units such as intensive care and emergency departments leading to increased fatigue, desensitization, and reduced personal satisfaction (Vargas et al., 2014). Furthermore, it is known that working in specialized units such as intensive care, emergency departments, and operating theatres, as well as in complex or negative work environments, is associated with nurses' intentions to leave their jobs due to emotional exhaustion (Topcu et al., 2016).

In the present study, nurses in specialized units such as intensive care, emergency departments, and operating theatres reported higher levels of depersonalization and emotional exhaustion than nurses in inpatient services. Additionally, nurses working in other units, like outpatient clinics and administrative roles, reported higher levels of personal achievement than those in specialized units and general wards. The risk of nurses experiencing emotional exhaustion increases when caring for patients in severe pain, those near death, or those with multiple needs, as well as when deciding to discontinue life-sustaining treatments (Dall'Ora et al., 2020).

In the literature, it is reported that nurses working in specialized units such as intensive care and emergency departments experience high levels of emotional exhaustion and depersonalization (Adriaenssens et al., 2015; Gómez-Urquiza et al., 2017; Matsuishi et al., 2021; Papazian et al., 2023; Ramírez-Elvira et al., 2021; Tekindal et al., 2012). Among the reasons for this are the unique factors within intensive care units, such as high mortality and morbidity rates, caring for critically ill patients with life-threatening conditions, inconsistency in work demands, excessive responsibilities and workload, a sense of futility, ethical dilemmas, and potential sources of interpersonal conflict (Papazian et al., 2023; Ramírez-Elvira et al., 2021). Emergency departments, on the other hand, are associated with emotional exhaustion and depersonalization due to their rushed, unpredictable, and constantly changing environment, diverse range of diseases, injuries, and issues, presence of high-risk patients due to unpredictable medical conditions, demanding working conditions and overcrowding, higher frequency

of attacks on healthcare workers, rapid transitions between emergencies, and frequent exposure to traumatic events (Adriaenssens et al., 2015; Gómez-Urquiza et al., 2017).

High-acuity clinical settings are characterized by high levels of stress. These settings involve life-threatening risk and emotional tension between life and death, decisions involving ethical dilemmas, heavy workloads, and various diseases and traumatic experiences. This environment can contribute to nurses experiencing higher levels of emotional exhaustion and depersonalization.

## 5. Conclusion

This study revealed that nurses experienced emotional exhaustion and personal achievement, in addition to a moderate level of depersonalization. The levels of burnout experienced by nurses were found to be influenced by several factors, including the nursing unit in which they worked, the years of professional experience they had accumulated, the number of hours they worked on a weekly basis, and the voluntary nature of their choice of profession. The findings of this study indicate that the phenomenon of burnout is shaped by both individual and organizational factors.

From a practical standpoint, the findings underscore the necessity for targeted organizational strategies. The improvement of staffing levels, the optimization of shift schedules, and the creation of supportive work environments have the potential to reduce emotional strain, particularly for nurses who work long weekly hours or in specialized units. Furthermore, the enhancement of orientation and mentoring programs may assist nurses with substantial professional experience, or those who did not initially enter the profession voluntarily. At the individual level, the development of programs that focus on coping skills, self-care, resilience, and peer support may further contribute to the mitigation of burnout. To protect the well-being of nurses and improve the overall quality of nursing care, it is important to integrate burnout prevention initiatives into institutional policies and action plans.

The present study is subject to several limitations. The data were collected from a single hospital, which limits the generalizability of the results. The cross-sectional design of the study limits the ability to ascertain the direction of causality between the associated factors and burnout. It is important to note that self-reported measures may also introduce response bias.

It is recommended that future studies employ multicenter or longitudinal designs in order to enhance comprehension of causal relationships and to accurately record changes in burnout over time. Furthermore, an exploration of the interaction between organizational culture, leadership styles and individual coping mechanisms may provide a more comprehensive understanding of burnout among nurses. The development and evaluation of intervention programmes tailored to different nurse groups and clinical settings will also be valuable.

The findings of this study offer useful insights for clinicians, nurse managers, administrators, and policymakers in designing and implementing effective interventions to prevent and reduce burnout among nurses.

## Authors Contributions

Subject selection: CKÖ, AB; Design: CKÖ, AB; Planning: CKÖ, AB; Data collection and analysis: CKÖ, AB; Writing the article: CKÖ; Critical revision: CKÖ.

## Conflict of Interest

There is no conflict of interest for the study.

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