# Assessment of Burnout and its Related Factors in the Faculty Members and Medical Staff of Neyshabur University of Medical Sciences, Iran, in 2022

#### **Abstract**

Background: Faculty members and medical staff are prone to burnout syndrome. Burnout has harmful consequences for the organization, society, and individual life. Therefore, this study was conducted to determine burnout and its related factors among faculty members and medical staff at Neyshabur University of Medical Sciences, Iran. Materials and Methods: This cross-sectional study was conducted on 410 medical faculty members and medical staff at Neyshabur University of Medical Sciences in 2022. Stratified sampling was conducted. Data were collected using the Maslach Burnout Inventory and interpreted using the t-test, Pearson correlation coefficient, and one-way ANOVA at a significance level of  $\alpha = 0.05$ . **Results:** The total burnout score of medical staff and faculty members was 53.78 (15.43) and 50.85 (13.18) out of 135, respectively, with no significant difference between them (p = 0.192). The majority of faculty members had moderate Emotional Exhaustion (EE) (46.64%), high depersonalization (DP) (71.67%), and low Personal Accomplishment (PA) (56.67%), while the majority of medical staff had high EE (49.71%), high DP (60.0%), and low PA. The workload factor in medical staff and faculty members, which had the highest score, showed a direct and significant relationship with the burnout score. The communication factor among medical staff and faculty members had an inverse and significant relationship with the burnout score. Conclusions: Faculty members and medical staff experienced an average level of burnout, which is worth considering. According to the results, university administrators should take appropriate actions to reduce burnout.

Keywords: Burnout, faculty member, midwife, nurse, physician

# Introduction

The speed of scientific growth has brought many social and economic transformations, causing profound changes in human life and employment. Moreover, there is greater attention to humans as complex beings, their adaptation to their environment, meeting their needs, and the equipment and work environment, which they have become very different from the past. As a result, individuals must endure limitations and pressures in the process of adapting to the social and occupational environment.[1] One of the consequences of long-term occupational pressures is burnout, which has gained important in recent years. Burnout is a syndrome characterized by three symptoms dimensions: Emotional Exhaustion (EE), Depersonalization (DP), and reduced Personal Accomplishment (PA).[2] EE is the main symptom of burnout and is defined as the feeling of being under pressure and

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losing emotional resources, characterized by exhaustion, lack of motivation, and a sense of depleted energy. DP is defined as exhibiting a negative response toward those who receive services from the individual, which can increase pessimistic feelings when dealing with colleagues and service recipients. PA refers to a reduced sense of sufficiency and competence in performing personal tasks.<sup>[3]</sup> These symptoms contribute to a negative self-concept, a negative attitude towards one's job, and a lack of connection with others, potentially leading to mental and physical illnesses.

Although burnout exists in all professions, it is more significant and prevalent in occupations related to human health. Studies indicate a high prevalence of burnout among medical staff.<sup>[4]</sup> According to a 2017 study, 49% of nurses in the United States suffer from burnout.<sup>[5]</sup> Job burnout among midwives in the United States has been

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reported at 40.6%.[6] A survey conducted by the Association of American Medical Colleges (AAMC) in 2018 found that 54% of physicians reported symptoms of burnout.<sup>[7]</sup> Chemali et al. [8] reported a burnout rate of 40%-60% among doctors. nurses, and other healthcare professionals. Faculty members at medical universities are also prone to stress, depression, and burnout due to the multiplicity and conflict of their various roles, including instructor, clinician, researcher, and manager.[9,10] The AAMC study on burnout among faculty members in U.S. medical schools found that 29% of faculty members experience job burnout.[11] A few studies have also examined burnout among faculty members in Iran. A study by Dargahi et al.[12] found that faculty members had high EE, average DP, and below-average AP. Another study by Rezaei et al.[13] reported that faculty members had low EE scores (28.12), moderate PA scores (36.38), and low DP scores (5.00). These studies indicate that faculty members experience varying degrees of burnout syndrome.

Burnout among medical staff in the healthcare system leads to considerable financial losses. According to a 2018 report, American hospitals and health systems incur \$17 billion in annual turnover costs related to burnout. [7] Job burnout poses risks to medical staff, patients, and hospitals, including increased medical errors, higher infection rates, patient falls, [14] reduced time dedicated to clinical services, adverse effects on patient safety, and a higher mortality rate. Burnout among faculty members can also reduce the quality of student education and patient care. [15]

One way to deal with burnout is to identify its related factors. Although studies have examined burnout in the healthcare system, research on its contributing factors remains limited. Factors such as long working hours, low work experience, sex, and insufficient rewards play a role in burnout. [16,17] A comprehensive identification of these factors can aid in managing burnout. Identifying these factors can provide valuable insights for managers and planners, enabling them to implement necessary changes, create a suitable framework to mitigate burnout, improve the performance of medical staff, and enhance service delivery. Therefore, this study was conducted to determine burnout and its related factors among faculty members and medical staff at Neyshabur University of Medical Sciences, Iran.

#### **Materials and Methods**

This descriptive-analytical study with a cross-sectional approach was conducted at Neyshabur University of Medical Sciences. The study began in June 2021 and concluded in August 2023. The statistical population included all faculty members of Neyshabur University of Medical Sciences and medical staff (physicians, nurses, and midwives) working in the university's two teaching hospitals, 22 Bahman and Hakim. The inclusion criteria were being a faculty member at the university, being employed as a nurse, midwife, or physician in educational hospitals, and having at least 1 year

of work experience. The exclusion criterion was unwillingness to participate in the research. Sampling was carried out using a stratified method. Faculty members and clinical staff were divided into two main groups. Within the clinical group, physicians, nurses, and midwives were categorized into three separate groups. The sample size was calculated based on their respective numbers. The characteristics of the staff and faculty members were entered into Excel software, and samples were randomly selected using the software. The research population consisted of 452 nurses, 144 midwives, 105 physicians, and 60 faculty members, from which 226 nurses, 72 midwives, 52 physicians, and 60 faculty members were randomly selected.

To calculate the sample size among medical staff, previous studies were considered along with  $\alpha = 0.05$ , d = 5%, and a 35% prevalence of burnout among medical workers<sup>[18,19]</sup>. Based on these parameters, the sample size was calculated as 350. The data collection tool included three questionnaires. The first questionnaire included demographic information such as age, sex, level of education, marital status, number of children, work experience, employment status, interest in one's job, and income satisfaction. The second questionnaire was the Maslach Burnout Inventory (MBI) for measuring burnout. It consists of 22 items that assess all three dimensions of burnout. The validity and reliability of this questionnaire have been confirmed in previous studies. The content validity index (CVI) of the questionnaire was calculated and confirmed based on the Waltz and Bausell index in the study by Rahimi-Dadkan and Nastiezaie (CVI > 0.79).[20] The reliability coefficient was also calculated and confirmed as 0.79 by Rahimi-Dadkan and Nastiezaie.[20] The third questionnaire was a researcher-made questionnaire assessing factors related to job burnout. It included 79 items covering social, organizational, economic, and cultural factors. To assess its validity, the third questionnaire was sent to 10 experts, and its content validity was confirmed based on the Waltz and Bausell index (CVI > 0.79). These experts included five general and clinical psychologists (three associate professors and two professors), three faculty members with more than 20 years of experience who had an understanding of and experience with burnout factors (two associate professors and one professor), two psychiatrists (one assistant professor and one associate professor). The questionnaires were completed by faculty members and medical staff. Data were entered into the Statistical Package for the Social Sciences (SPSS) (version 26; IBM Corp. Armonk, NY, USA). Descriptive statistics (mean, percentage, and standard deviation) and inferential statistics (t-test, Pearson's correlation coefficient, and one-way ANOVA) were used to analyze the data at a significance level of  $\alpha = 0.05$ .

## **Ethical considerations**

Informed consent was obtained from all participants, and they were provided with explanations regarding the anonymity of the questionnaires and the confidentiality

of their information. The Ethics Committee of Neyshabur University of Medical Sciences approved and funded this study with the code 9801135 (IR.NUMS.REC.1400.015).

# **Results**

The participants in the study included 350 (85.37%) medical staff and 60 (14.63%) faculty members. The total burnout scores of medical staff and faculty members were 53.78 (15.43) and 50.85 (13.18) out of 135, respectively, with no significant difference between them (p = 0.192). According to the three-level burnout calculation using the MBI (0-44: low, 45-88: medium, and 89-132: high), both medical staff and faculty members exhibited an average level of job burnout. Regarding demographic characteristics, academic rank (p = 0.019) in both medical staff and faculty members, as well as the number of children (p = 0.038) and job type (nurse, midwife, and physician) among medical staff (p = 0.010), significantly affected burnout scores. No relationship was observed between the age of faculty members (r = 0.042; p = 0.504) and medical staff (r = 0.02; p = 0.883) and their burnout scores [Table 1].

Based on the results, the workload factor, which had the highest score among medical staff (15.02) and faculty members (12.64), had a direct and significant relationship with the burnout score (medical staff: r=0.42 and p=0.001; faculty members: r=0.37 and p=0.011). The communication factor had the highest score among medical staff (12.68) and faculty members (11.84) and had an inverse and significant relationship with the burnout score (medical staff: r=-0.15 and p=0.015; academic staff: r=-0.37 and p=0.010). Among the examined factors, the effect of salary (p=0.044), workload (p=0.001), nature of work (p=0.040), and interaction with colleagues (p=0.005) differed between medical staff and faculty members.

The effect of environmental policy (r = 0.17; p = 0.005), management and supervision (r = 0.20; p = 0.001), nature of work (r = 0.28; p = 0.001), and job status (r = 0.18; p = 0.003) on burnout was significant and direct among medical staff but not significant among faculty members [Table 2].

An examination of job burnout dimensions showed that 30.0% of faculty members and 49.71% of medical staff had high EE. In terms of DP, 71.67% of faculty members and 60.0% of medical staff had high DP. In terms of PA, 56.67% of faculty members and 86.0% of medical staff were at a low level [Table 3].

The results regarding demographic characteristics are presented in Table 1. As shown, among medical staff, the total burnout score had a significant relationship with the job type, medical staff rank, and the number of children. Among faculty members, the total burnout score had a significant relationship with academic rank. In Table 4, these characteristics are analyzed across different dimensions. The

result indicate that in EE, the burnout score had a significant relationship with job type, rank, and number of children in both faculty members and medical staff (p < 0.05). Job type among medical staff affected all aspects of burnout. Academic rank had a statistically significant effect on EE and DP among medical staff and on EE and PA among faculty members. The number of children had a statistically significant relationship only with the EE dimension [Table 4].

# **Discussion**

The present study was conducted to determine burnout and its related factors among faculty members and medical staff at Neyshabur University of Medical Sciences. Regarding faculty members, the results showed that they were at an average level of burnout. In the dimension of EE, the findings indicated the presence of moderate EE in the majority of faculty members. This result is consistent with the research by Mahdizadeh et al.,[21] who investigated burnout and the factors affecting it in the nursing faculty of Khorasan province, Iran. Moreover, our results align with the research by Seo et al. in South Korea.[22] However, the results of the present study are not consistent with some studies in this field. For example, the research findings of Dargahi et al.,[12] who investigated the burnout syndrome among faculty members at one of the faculties of Tehran University of Medical Sciences, indicate high EE among faculty members. Regarding medical staff, the results of the present study showed that they were at an average level of burnout. In the dimension of EE, the findings showed the presence of high EE among medical staff. This result is consistent with the research findings of Shaikh et al.[23] In some studies, such as Malekzade et al.,[24] the level of EE among midwives was reported as average. The central and individual aspect of burnout is EE, which is defined as the experience of stress and tension, especially the feeling of chronic fatigue caused by excessive work. The results of the present study showed that the most important factors related to burnout among faculty members and medical staff included job responsibility, job position, and workload. Research indicates that the unique roles of faculty members in universities of medical sciences are stressful. Most faculty members at medical sciences universities have different roles, including teacher, clinician, researcher, and manager. The diversity of roles and the resulting workload place extra pressure on faculty members, which can lead to problems. Studies show that multiple roles lead to EE.[9,25] EE is the feeling of fatigue and the depletion of emotional resources resulting from work. This dimension of burnout highlights the fundamental impact of the stress component in burnout.

All of these are critical issues for faculty members and medical staff and can lead to a decrease in the quality of health care, [15] an increase in absenteeism, [26,27] a reduction in the time devoted to providing clinical services, and a higher mortality rate. [28]

In the dimension of DP, the findings indicate high DP among both faculty members and medical staff. The results

	Type of work Characteristic	Faculty member n (%)	Burnout score Mean (SD)	p**	Staff n (%)	Burnout Score Mean (SD)	p*
Academic rank	Instructor	25 (41.66)	56.34 (11.43)	0.019			0.019
	Assistant Professor	35 (58.34)	47.31 (13.33)				
	Without rank				35 (10.00)	47.76 (13.14)	
	Expert				224 (64.00)	53.37 (15.13)	
	Senior expert				45 (12.86)	60.53 (17.65)	
	Connoisseur				23 (6.57)	53.76 (12.63)	
	Excellent				23 (6.57)	51.84 (15.35)	
Type of	Non-tenure	28 (46.67)	54.48 (13.34)	0.342	45 (12.86)	54.26 (15.76)	0.136
employment	Probationary-tenured	5 (8.33)	43.63 (16.02)		21 (6.0)	53.86 (14.38)	
	Tenured	7 (11.67)	48.14 (9.17)		145 (41.43)	55.73 (16.33)	
	Temporary	20 (33.333)	49.86 (13.52)		94 (26.86)	49.94 (14.13)	
	Contractual				45 (12.86)	55.85 (13.74)	
Level of	Associate			0.067	15 (4.29)	56.71 (17.18)	0.066
education	BS				277 (79.14)	53.85 (15.53)	
	MSc	25 (41.67)	56.34 (11.38)		26 (7.43)	60.19 (13.88)	
	Ph.D.	33 (55.0)	47.23 (13.42)		2 (.57)	36.04 (4.23)	
	Specialization and sub-specialization	2 (3.33)	48.0 (17.0)		30 (8.57)	49.04 (13.29)	
Years of	Less than 10 years	39 (65.0)	50.65 (15.42)	0.989	185 (52.86)	53.86 (15.63)	0.491
employment	Between 10 and 20 years	11 (18.33)	51.19 (10.23)		116 (33.14)	54.45 (15.24)	
	More than 20 years	10 (16.67)	51.44 (6.37)		49 (14.0)	50.32 (14.87)	
Gender	Male	32 (53.33)	50.87 (11.14)	0.983	80 (22.86)	52.21 (13.04)	0.984
	Female	28 (46.67)	51.03 (15.37)		270 (77.14)	54.17 (16.04)	
Marital status	Single	18 (30.0)	50.21 (13.57)	0.803	51 (14.57)	52.52 (14.73)	0.664
	Married	42 (70.0)	51.34 (13.15)		299 (85.43)	53.86 (15.52)	
Executive	Yes	36 (60.0)	51.21 (13.04)	0.833	75 (21.43)	56.04 (13.53)	0.199
position	No	24 (40.0)	50.36 (14.04)		275 (78.57)	53.11 (16.03)	
Number of	0	27 (45.0)	51.18 (15.14)	0.375	103 (29.43)	54.38 (14.87)	0.038
children	1	13 (21.67)	56.87 (9.53)		92 (26.29)	49.33 (15.24)	
	2	15 (25.0)	46.85 (12.14)		105 (30.0)	56.68 (15.34)	
	3	5 (8.33)	47.76 (11.43)		52 (14.86)	56.14 (16.63)	
	≥ 4	,	,		8 (2.29)	44.17 (6.65)	
Shift work	Yes	17 (28.33)	56.87 (14.03)	0.086	297 (84.86)	53.83 (15.68)	0.897
	No	43 (71.67)	49.14 (12.56)		53 (15.14)	53.43 (13.48)	
Housing	Yes	38 (63.33)	53.33 (13.58)	0.096	182 (52.0)	52.87 (16.02)	0.367
110451115	No	22 (36.67)	46.73 (11.68)		168 (47.0)	54.68 (14.83)	
Car	Yes	52 (86.67)	51.08 (13.34)	0.790	198 (56.57)	52.69 (14.44)	0.202
	No	8 (13.33)	49.36 (14.33)		152 (43.43)	55.23 (16.72)	
Computer	Yes	45 (75.0)	50.86 (14.14)	0.982	178 (50.86)	52.14 (15.38)	0.084
Computer	No	15 (25.0)	51.04 (10.18)	****	172 (49.14)	55.35 (15.34)	
Smart phone	Yes	45 (75.0)	50.48 (14.03)	0.674	305 (87.14)	53.33 (15.14)	0.182
	No	15 (25.0)	52.47 (10.13)		45 (12.86)	57.24 (17.16)	o <b>_</b>
Job	Nurse	10 (20.0)	-2 (10.13)	< 0.001	226 (64.57)	52.53 (15.19)	0.010
300	Midwife			0.001	72 (20.57)	58.32 (14.07)	0.010
	Physician				52 (14.86)	48.72 (13.18)	
Physician  Mean (standard deviation) of age		38.53 (6.42)		(r=0.02,	35.24 (6.82)		(r=0.04)
Mean (standard deviation) of job burnout		50.85 (13.18)		p=0.883	53.78 (15.43)		p=0.504
Mean (standard deviation) of job burnout Total (%)		50.85 (13.18) 60 (14.63)		p (.005)	35.78 (13.43)		P 3.331

<sup>\*</sup>Pearson Correlation. \*\*t-test and one-way ANOVA test

regarding faculty members align with the findings of studies by Seo  $\it et~al.^{[22]}$  and Zargar and Daneshvar, $^{[29]}$  but

in some studies, such as that by Dargahi  $\it et~al.,^{[12]}$  DP levels have been reported as low. Regarding medical staff, our

Table 2: Factors related to burnout						
Score out of 20	Faculty	members	Medic	p**		
Factors	Mean (SD)	r (p)*	Mean (SD)	r (p)*		
Salary	7.54 (1.87)	-0.19 (0.211)	6.43 (1.59)	-0.07 (0.293)	0.044	
Environment policy	10.58 (2.66)	0.01 (0.925)	11.12 (2.77)	0.17 (0.005)	0.201	
Communication	11.84 (2.94)	-0.37 (0.010)	12.68 (3.17)	-0.15 (0.015)	0.111	
Job security	10.03 (2.49)	-0.17 (0.252)	10.03 (2.51)	-0.02 (0.783)	0.882	
Workload	12.64 (2.69)	0.37 (0.011)	15.02 (3.21)	0.42 (0.001)	0.001	
Welfare conditions	9.28 (2.33)	0.32 (0.027)	9.76 (2.45)	0.11 (0.074)	0.234	
Management and supervision	10.68 (2.67)	-0.06 (0.681)	10.88 (2.73)	0.20 (0.001)	0.530	
Recognition and appreciation	9.04 (2.26)	-0.32 (0.029)	9.43 (2.35)	-0.12 (0.046)	0.579	
Career Advancement	10.13 (2.54)	-0.33 (0.024)	9.52 (2.37)	-0.11 (0.076)	0.198	
Nature of work	11.26 (3.11)	0.16 (0.285)	12.24 (3.37)	0.28 (0.001)	0.040	
Job Responsibility	13.36 (3.34)	-0.2 (0.187)	13.67 (3.41)	0.02 (0.775)	0.541	
Job-Status	12.87 (3.23)	0.16 (0.277)	13.59 (3.40)	0.18 (0.003)	0.114	
Interaction with colleagues	10.04 (2.50)	0.35 (0.017)	11.53 (2.88)	0.29 (0.003)	0.005	

<sup>\*</sup>Pearson Correlation. \*\*Paired t-test

Table 3: Dimensions of burnout in medical staff and faculty members							
<b>Burnout dimensions</b>	Categories of answers		n (%	(o)	Mean (SD)		
			Faculty members	Medical staff	Faculty members	Medical staff	
Emotional exhaustion	High moderat	27 or more	18 (30.0)	174 (49.71)	33.04 (4.23)	33.64 (5.12)	
	low	17-26	28 (46.67)	129 (36.86)	21.83 (3.14)	22.03 (2.76)	
		0-16	14 (23.33)	47 (13.43)	13.56 (2.87	12.68 (3.46)	
Depersonalization	High moderate	13 or more	43 (71.67)	210 (60.0)	15.85 (1.78)	15.43 (2.22)	
	low	7-12	17 (28.33)	129 (36.86)	10.24 (1.63)	10.47 (1.38)	
		0-6	0	11 (3.14)	0	3.78 (2.16)	
Reduced personal	High moderate	0-31	34 (56.67)	301 (86.0)	22.28 (5.53)	21.86 (5.43)	
accomplishment	low	32-38	23 (38.33)	42 (12.0)	34.12 (1.58)	33.14 (1.32)	
		39 or more	3 (5.0)	7 (2.0)	39.52 (0.73)	41.32 (0.58)	

SD: Standard deviation

Table 4: Relationship between the demographic characteristics of medical staff and faculty members with burnout dimensions

		unitensions		
Characteristic		Faculty members		
<b>Burnout dimensions</b>	Type of job p*	Rank p*	Number of children p*	Academic rank p*
Emotional exhaustion	0.016	0.042	0.029	0.004
Depersonalization	0.028	0.006	0.182	0.076
Personal accomplishment	0.044	0.148	0.175	0.005

<sup>\*</sup>One-way ANOVA

findings are in line with the study by Farsi *et al.*,<sup>[30]</sup> but they contradict the results of the research by Uchmanowicz *et al.*,<sup>[31]</sup> which reported low DP among medical staff. The differences observed across universities may be attributed to variations in demographic characteristics, institutional contexts, university type and size, or differences in motivational systems. DP is defined as a person's false and distorted perception of themselves, their colleagues, and their work environment. It is a response to stressful and challenging daily situations in medical science professions. Mental workload and lack of support contribute to feelings of apathy and isolation, ultimately leading to DP.<sup>[32]</sup> High DP

can lead to indifferent and callous behavior toward service recipients. This issue can negatively impact faculty-student relationships, affect the quality of educational services, and influence how medical staff provide health care to patients, ultimately reducing service recipient satisfaction.<sup>[33]</sup>

The findings of the current study on the PA dimension indicate that 56.7% of faculty members reported a low sense of PA. Some studies have reported even higher rates, such as those by Dargahi *et al.* (95%)<sup>[12]</sup> and Seo *et al.* (92.4%).<sup>[22]</sup> Among medical staff, 86% exhibited low PA, which aligns with the findings of Grover *et al.*<sup>[26]</sup> and Sadeghi *et al.*,<sup>[34]</sup> but our contrasts with Piko's study, which reported a high

sense of individual success among medical staff.<sup>[35]</sup> A decrease in PA indicates a decline in perceived competence, productivity, and self-efficacy beliefs.<sup>[36]</sup> Individual success plays a crucial role in enhancing job satisfaction, reducing feelings of failure and inadequacy, and boosting overall productivity. Variations in burnout levels across studies may be attributed to differences in working conditions across universities and healthcare centers. Factors such as leadership styles, communication quality, and promotion systems influence medical staff's perceptions and job satisfaction. Higher levels of job and life satisfaction are key protective factors against burnout.<sup>[31,34]</sup>

Based on the results of the study, the factors of workload and communication among medical staff and faculty members had a significant relationship with the burnout score. Research shows that a heavy workload can cause feelings of demotivation and isolation, which ultimately lead to greater job burnout by increasing EE and DP among medical staff.[37] When the medical staff's workload is high, they have little time to rest, recover, and find balance. Correct workload management provides opportunities that help medical staff feel effective in their work.[38] A high workload on medical staff can negatively impact the quality of services provided. Regarding the importance of the communication factor in the job burnout of faculty members and medical staff, the existence of good relationships with colleagues and supervisors increases motivation and job satisfaction, which can be effective in reducing job burnout. The research results of Moghadam et al.[39] emphasize the importance of communication in the job satisfaction of faculty members. The nature of the faculty job is such that some tasks, such as multidisciplinary research or teaching certain courses, are collaborative, so it is important to have good communication with colleagues. Having appropriate and friendly relationships helps create a stress-free work environment and can reduce job burnout by increasing job satisfaction. In other studies, factors such as high workload, shift work, communication, observing the suffering and death of patients, professional responsibilities, issues related to the administrative system, weak supervisor support, conflict with colleagues and patients, and high job demands have been reported to be related to job burnout in nurses and midwives.[37] In our study, burnout was higher among midwives and nurses than among faculty members and physicians. In this regard, in the city of Neyshabur, according to the researcher's observations, several factors can cause medical staff burnout through increased workload. These factors include the negative effects caused by the geographical location of the city (one of the most important and busiest roads), the limited number of hospitals relative to the population and patient demand, the overcrowding of patients in medical settings (due to the referral of patients from numerous cities and villages under coverage and the transfer of intercity accident victims to medical centers), and the disproportionate number of nurses compared to hospital beds. According to the results of the

present study, in the EE, the burnout score had a significant relationship with job type, rank, and number of children in both faculty members and medical staff. In the study by Monsef Kasmaei et al., [16] there was also a significant relationship between having a child and burnout in emergency medicine doctors. In other words, not having children had a protective role against burnout. Having children, the responsibilities of parenting, and the creation of a new role as a father or mother is stressful, especially, as we see increasing pressure on parents today to raise healthy, safe, and successful children. At the same time, the increasing demands and needs of children, along with other background factors such as economic problems within families, have caused emotional and behavioral reactions in parents. If these stressors persist without adequate support and coping mechanisms, they can lead to uncontrolled stress, fatigue from parenting duties, and interference with job responsibilities and roles. Studies show that a higher number of children increases parental burnout.[17] Due to the small size of Neyshabur University of Medical Sciences, the small sample size of faculty members is one of the limitations of this research.

#### Conclusion

According to the burnout score, faculty members and staff were at an average level of burnout. The findings showed that the majority of faculty members had moderate EE, high DP, and low PA, while the majority of medical staff had high EE, high DP, and low PA, indicating burnout in both groups. Burnout was higher among midwives and nurses than among faculty members and physicians. The workload factor in medical staff and faculty members, with the highest score, had a direct and significant relationship with the burnout score. The communication factor among medical staff and faculty members had an inverse and significant relationship with the burnout score. The effects of environmental policy factors, supervision, the nature of work, and job status on burnout were significant and direct in medical staff but not significant in faculty members.

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#### **Conflicts of interest**

Nothing to declare.

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