AFFECTIVE, COGNITIVE, AND BEHAVIORAL MANIFESTATIONS OF BURNOUT IN PRIMARY CARE PHYSICIANS

Nargiza F. Yadgarova - Ph.D., associate professor Marina A. Kevorkova - assistant

Tashkent Medical Academy, Tashkent, Uzbekistan

Inara I. Khayredinova - Ph.D., Senior Teacher

Tashkent Medical Academy; Republican Specialized Scientific-Practical Medical Center of Mental Health (Tashkent, Uzbekistan)
inara.khayredinova@gmail.com

Abstract. The article discusses another contributing factor to emotional burnout syndrome-cognitive, behavioral, and emotional states. It also lists several factors influencing professional burnout observed in 120 family doctors, indicating their severity levels and the potential symptoms they may cause. The study outlines the participants' age, gender, and work experience, as well as the stages of stress, depersonalization, and burnout.

Keywords: emotional burnout, depersonalization, stages of stress.

Introduction. Emotional burnout is a professional syndrome characterized by emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment. Among medical professionals, family doctors exhibit the highest rates of burnout worldwide. According to a systematic review, the proportion of physicians experiencing high levels of emotional exhaustion ranges from 25% to 60%, depending on the country and the assessment tool used [8,10]. The most commonly used questionnaire is the Maslach-Strauss-Maslach Burnout Inventory (MBI-HSS MP), which includes 22 questions and evaluates three subscales: emotional exhaustion, depersonalization, and personal achievement [1]. Burnout among family doctors is associated with a decline in the quality of medical care, an increase in errors, and higher staff turnover, posing a serious problem both for the specialists themselves and for the healthcare system as a whole [2].

Our study aimed to assess the prevalence and severity of emotional exhaustion among family doctors in Tashkent region and to identify the main demographic and occupational factors associated with high levels of burnout.

Material and methods of research. Study Design and Organization: The study was conducted among primary healthcare family doctors in the Tashkent region. Of the 150 invited physicians with at least one year of experience, 120 participated in the study, yielding a response rate of 80%. The Russian version of the MBI-HSS MP, consisting of 22 statements rated on a frequency scale from 0 ("never") to 6 ("every day"), was used. The cutoff scores were as follows: emotional exhaustion \geq 27, depersonalization \geq 10, and personal accomplishment \leq 33 [11].

To achieve the stated goals and objectives, the method adapted by M.S. Zamipshyaeva et al., as well as the version of the test developed by C. Maslach and N.V. Vodopyanova (2001) for medical workers, were used [12]. Additionally, the "Emotional Burnout" questionnaire by V.V. Boyko (1996) and a specially developed scale were applied. All study participants were diagnosed under the F-40 category of the ICD-10, which includes stress-related, somatoform, and neurotic disorders.

Exclusion Criteria: Endogenous mental disorders, substance dependence, and decompensated organic and somatic diseases.

Data Collection: Information was collected on participants' age, gender, work experience, average weekly working hours, and responses to the MBI subscales.

Statistical Analysis: Data were processed using SPSS v.25.0. Means, standard deviations, and frequencies were calculated for descriptive statistics. The χ^2 test and t-tests were used to identify associations between the presence of high burnout (according to the emotional exhaustion subscale)

and factors such as gender, age, work experience, and workload. Multivariate logistic regression analysis was used to determine independent predictors of high emotional exhaustion.

Results and discussion. Of the 120 respondents in the study, 68 (56.7%) were women and 52 (43.3%) were men. The average age was 42.3 ± 8.1 years, with an average work experience of 17.6 \pm 7.4 years, and an average workload of 52 ± 10 hours per week. The participants included physicians with work experience ranging from 1 month to 29 years and aged between 27 and 59 years. The majority of participants were general practitioners. There was no statistically significant difference in age between male and female participants. Several researchers believe that emotional burnout syndrome is more pronounced in individuals with more than 15 years of work experience [1].

Prevalence of Stress:

A high level of emotional exhaustion was observed in 54 participants (45.0%), characterized by physical symptoms such as constant fatigue and unexplained weakness. Disturbed sleep patterns and daytime drowsiness were common. Participants also reported a sense of heaviness, headaches, muscle tension, and dyspeptic symptoms.

Cognitive symptoms included difficulties concentrating, memory decline, trouble making decisions, and thought blocking. Participants also experienced increasing difficulties in understanding and interacting with others.

Behavioral changes were also evident, including wasting time, indifference to the idea of resigning from work, withdrawal from social activities and engagement, and the emergence of harmful habits.

Depersonalization was present in 38 participants (31.7%), with an average score for emotional burnout syndrome of 9.6 ± 4.8 . Signs included a sense of detachment toward patients—viewing them not as individuals but as "tasks" or "problems"—as well as a decline in empathy: a diminished ability to perceive patients' needs and emotions appropriately. Emotional distancing from others during meetings or conversations was also observed.

Table 1.
Key Indicators of Emotional Burnout Among Family Doctors (n = 120)

Indicator	Value
Gender $(n = 120)$	
Number of women, n (%)	68 (56.7%)
Number of men, n (%)	54 (43.3%)
Average age, years (SD)	42.3 ± 8.1
Work experience, years (SD)	17.6 ± 7.4
Workload, hours/week (SD)	52 ± 10
High emotional exhaustion, n (%)	54 (45.0%)
Average depersonalization score (SD)	9.6 ± 4.8
Depersonalization (moderate/high), n (%)	38 (31.7%)
Average personal accomplishment score (SD)	32.1 ± 7.2
Low personal accomplishment, n (%)	48 (40.0%)
OR: High emotional exhaustion	
(workload > 50 hours/week)	2.1 (95% CI 1.1–4.2; p = 0.03)
(age < 40 years)	1.9 (95% CI 1.0-3.6; p = 0.048)

In the state of cognitive dissociation, the following patterns were observed: perceiving patients or clients as objects, focusing solely on their external behaviors rather than their internal emotional states; a loss of emotional responsiveness, where individuals behaved as if they were not personally engaged in ongoing conversations or therapeutic interventions; and a sensation of "watching life from

the sidelines," manifested by assuming the role of an observer rather than an active participant in surrounding events.

Behavioral changes included an unwillingness to communicate outside of work, reduced sense of humor and sincerity, loss of heartfelt conversations, and a tendency toward formal, emotionally detached interactions. Indifference toward external events and brief, monotonous responses to questions were also observed (see Table 1).

Among 48 respondents (40.0%), a low level of personal accomplishment was reported. The average score on the personal achievement subscale was 32.1 ± 7.2 . Emotional symptoms included feelings of ineffectiveness, dissatisfaction with one's results, persistent discontent, and inability to recognize personal achievements. Cognitive and behavioral manifestations were expressed through undervaluing one's own abilities and qualifications, fear of complex tasks, procrastination in completing them, lack of psychological resources for problem-solving and innovation, avoidance of expressing pride, and limitation of self-worth. There was also a failure to reconsider life and professional goals, along with the inability or refusal to recognize and acknowledge past accomplishments.

When analyzing work hours as one of the contributing factors to emotional burnout, it was found that physicians with a workload of more than 50 hours per week showed a higher level of emotional exhaustion (55% compared to 33%, p = 0.02). Physicians under the age of 40 were more likely to exhibit signs of burnout according to the Emotional Exhaustion Scale (52% compared to 39%, p = 0.048). The incidence of emotional burnout syndrome was observed to be similar among men and women.

However, gender-specific correlation analysis revealed significant differences: women more frequently experienced the stage of "resistance" with all its symptoms, especially due to "psychologically traumatic experiences," whereas in men, the symptoms were more characteristic of the initial "formation" stage of burnout. These included signs of "emotional deficiency," "psychosomatic and psycho-vegetative disorders," and "personal detachment or depersonalization."

In multivariate analysis, independent predictors of high emotional exhaustion were identified as working more than 50 hours per week (OR = 2.1; 95% CI 1.1–4.2; p = 0.03) and being under the age of 40 (OR = 1.9; 95% CI 1.0–3.6; p = 0.048).

As a result of assessing the influencing factors among the respondents in the study, individual personality traits were evaluated, and variability was observed across different professions. Among medical workers, professional growth typically follows a "horizontal" trajectory. An increase in workload, the monotony of tasks, and the rising demands of the profession were associated with a decline in interest toward the job, reduced motivation for professional development, and noticeable changes in personal characteristics (p < 0.05). These changes were also found to be linked to a decrease in participation in social and organizational activities.

A tendency toward anxiety and heightened affective states indicated the presence of neurotic disorders and a predisposition to fatigue throughout life. An increase in anxiety was associated with rapid fatigue, weakness, irritability, and a rise in psycho-vegetative disorders (p < 0.05). Anticipatory anxiety also contributed to difficulties in patient communication and the emergence of conflicts among colleagues. The interconnectedness of anxiety-related disorders was found to negatively influence personal ambition, self-esteem, professional motivation, and perseverance.

As a result of assessing the influencing factors among the respondents in the study, individual personality traits were evaluated, and variability was observed across different professions. Among medical workers, professional growth typically follows a "horizontal" trajectory. An increase in workload, the monotony of tasks, and the rising demands of the profession were associated with a decline in interest toward the job, reduced motivation for professional development, and noticeable changes in personal characteristics (p < 0.05). These changes were also found to be linked to a decrease in participation in social and organizational activities.

A tendency toward anxiety and heightened affective states indicated the presence of neurotic disorders and a predisposition to fatigue throughout life. An increase in anxiety was associated with rapid fatigue, weakness, irritability, and a rise in psycho-vegetative disorders (p < 0.05). Anticipatory anxiety also contributed to difficulties in patient communication and the emergence of conflicts among colleagues. The interconnectedness of anxiety-related disorders was found to negatively influence personal ambition, self-esteem, professional motivation, and perseverance.

Conclusion. The observed level of emotional exhaustion (45%) is comparable to the findings of Shanafelt et al., where emotional exhaustion among family doctors in the United States was reported to be 54% [3]. In a national study published by JAMA Network Open, over 10,000 physicians reported similar figures [5]. Working more than 50 hours per week is a significant modifiable risk factor, as workload has been shown to be associated with the severity of burnout [9]. A lower level of depersonalization among professionals with more than 20 years of experience, as reported by Buck, Van den Heuvel, and colleagues, suggests a protective effect of clinical experience [4,7].

Effective interventions should include both organizational measures (e.g., reducing administrative burden, introducing team-based care models) and individual approaches (e.g., mindfulness training, resilience-building programs) [6]. It is advisable to implement multidisciplinary teams and develop psychological support programs for healthcare staff.

Among family doctors in the Tashkent region, emotional, cognitive, and behavioral changes associated with emotional burnout syndrome were observed in nearly half of the respondents. The primary predictive factors were found to be high workload and age over 40.

REFERENCES

- 1. Abdel-Fattah MM, et al. Magnitude and risk factors for burnout among primary health care physicians in Asir province, Saudi Arabia. East Mediterr Health J. 2013;19(5):426–434.
- 2. Alenezi NK, et al. Prevalence and associated factors of burnout among Saudi resident doctors: A multicenter cross-sectional study. Alpha Psychiatry. 2022;23(4):173–183.
- 3. Jager AJ, Tutty MA, Kao AC. Association between physician burnout and identification with medicine as a calling. Mayo Clin Proc. 2017; 92:415–422.
- 4. Kosan Z, Aras A, Cayir Y, Calikoglu EO. Burnout among Family Physicians in Turkey: A Comparison of Two Different Primary Care Systems. Niger J Clin Pract. 2019; 22(8):1063–1069. doi:10.4103/njcp.njcp_355_17
- 5. Marques-Pinto A, et al. Burnout symptoms' prevalence among Portuguese physicians. Front Psychol. 2021;12:699974.
 - 6. Maslach C, Jackson SE. Burnout. Annu Rev Psychol. 1981; 52:397–422.
- 7. McCammon L, et al. Prevalence of burnout in family doctors: explaining the limitations of available data. J Psychiatr Res. 2023; 158:261–272.
- 8. Sakarya S, et al. Burnout in primary healthcare physicians and nurses in Turkey during COVID-19. Prim Health Care Res Dev. 2022; 23:e49.
- 9. Shanafelt TD, et al. Changes in burnout and satisfaction with work-life integration in physicians during the COVID-19 pandemic. Mayo Clin Proc. 2022; 97(11):2134–2145.
- 10. Silistraru I, et al. Unmasking Burnout in Romanian Primary Care: Implications for Healthcare Careers and Well-Being in Pandemic Times. Brain Broad Res Artif Intell Neurosci. 2024;15(1):444–458.
- 11. West CP, et al. Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. Lancet. 2016; 388(10057):2272–2281.