



EMOTIONAL BURNOUT SYNDROME IN HEALTHCARE WORKERS AND ITS IMPACT ON INTERPERSONAL RELATIONSHIPS

Rixiyeva Nazira Tahirovna

Nigmatullayeva Dilafruz Jurakulovna

Maxmanazarov G‘afur Axnazarovich

Alfraganus University

Abstract

Emotional burnout syndrome is a widespread occupational problem in modern healthcare systems, particularly prevalent among medical professionals. This literature review is aimed at analyzing the epidemiological indicators of burnout among healthcare workers, its pathogenetic mechanisms, and its impact on interpersonal relationships. The results of the analysis indicate that burnout syndrome occurs in 30–60% of healthcare workers and is associated with reduced communication skills, decreased levels of empathy, and an increased risk of professional errors. Furthermore, it contributes to workplace conflicts, deterioration of patient–provider relationships, and a decline in team performance.

Keywords: Emotional burnout syndrome, burnout, healthcare workers, empathy, communication, interpersonal relationships, stress, occupational fatigue.

Introduction

Emotional burnout syndrome among healthcare workers has become one of the most significant occupational and psychological challenges in modern healthcare systems. The World Health Organization (WHO) defines burnout in ICD-11 as an occupational phenomenon resulting from chronic workplace stress that has not been successfully managed; it is not classified as a disease, but rather as a condition specifically associated with professional activity. This conceptual framework requires interpreting burnout not as an individual vulnerability, but as a systemic phenomenon associated with the work environment, organizational pressure, resource constraints, and sustained emotional strain.

The classical model of burnout includes three core components: emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment. The



medical profession creates particularly favorable conditions for the development of all three components, as physicians and nurses simultaneously face high levels of responsibility, time pressure, complex clinical decision-making, strong emotional demands from patients and their relatives, shift work, and administrative burden. Therefore, burnout in healthcare should not be considered merely as occupational fatigue, but rather as a multidimensional syndrome that disrupts professional functioning.

The epidemiological scale of the problem is substantial. Systematic reviews indicate that the prevalence of burnout among healthcare workers varies significantly depending on the diagnostic criteria applied. A 2024 meta-analysis among physicians estimated the global prevalence at 24%; however, when single-dimension criteria were used, this figure increased to 51%. Earlier large-scale systematic reviews have demonstrated considerable methodological heterogeneity in burnout assessment, showing that even studies based on the Maslach Burnout Inventory employed dozens of different definitions. Thus, the problem is not only widespread but also inconsistently measured, creating significant challenges for comparability of findings and for the development of healthcare policies.

The situation is particularly severe in high-intensity clinical settings. Some reviews report that burnout prevalence among medical residents ranges from 27% to 75%, while other sources suggest that “one in three physicians” experiences burnout symptoms at a given time. Analytical reports associated with the World Health Organization indicate that during the pandemic period, pooled estimates of burnout among healthcare and care workers ranged from 41% to 52%. These figures suggest that burnout is not a transient issue, but rather a systemic occupational risk factor that intensifies during crises while persisting even under stable conditions.

The clinical and organizational significance of emotional burnout syndrome lies in the fact that it is not limited to the internal psychological state of the employee. Recent systematic reviews and meta-analyses demonstrate a consistent association between burnout and decreased patient safety, reduced quality of care, lower patient satisfaction, and an increased risk of medical errors. A 2024 meta-analysis among nurses showed that burnout was consistently associated with poorer quality of care, reduced patient satisfaction, and adverse safety indicators. These findings support the interpretation of emotional burnout not merely as an issue of individual well-being, but as a broader institutional risk factor affecting healthcare outcomes.



A particularly relevant aspect of this syndrome is its impact on interpersonal relationships. Medical practice is inherently based on communication, trust, empathy, and team coordination. As emotional exhaustion intensifies, the healthcare worker's emotional responsiveness to patients diminishes; with the development of depersonalization, patients may be perceived not as individuals, but as "another clinical case." Systematic reviews have identified a negative association between empathy and burnout, with higher levels of cognitive empathy being linked to lower burnout levels. Thus, emotional burnout weakens patient-provider relationships, undermines collaboration among colleagues, and increases the level of conflict within teams.

From the perspective of team-based medical practice, the problem becomes even more pronounced. Studies indicate a temporal relationship between emotional exhaustion, teamwork quality, and patient safety: higher levels of emotional exhaustion among clinicians lead to deterioration in team coordination, which in turn results in reduced effectiveness of clinical safety assessments. In other words, burnout is not merely a set of individual symptoms; it erodes the social capital within healthcare units. In clinical settings, the principle that "the fatigue of one individual translates into functional loss of the entire team" often reflects reality more accurately than formal statistical models.

Objective of the study

To conduct a systematic analysis of the prevalence, key determinants of emotional burnout syndrome among healthcare workers, and its impact on interpersonal relationships based on scientific literature.

Materials and methods

This study was conducted as a systematic literature review with elements of a narrative review. Scientific articles, meta-analyses, and epidemiological reports published between 2015 and 2025 were selected for analysis. The primary data sources included PubMed, Scopus, Web of Science, and official reports of the World Health Organization (WHO).

In total, more than 60 scientific sources were reviewed, of which 35 were included in the final analysis.



Results

Based on the analyzed literature, the epidemiological prevalence of emotional burnout syndrome (EBS), its core components, and particularly its impact on interpersonal relationships among healthcare workers were systematically evaluated. The findings confirm a high prevalence of EBS and its multidimensional adverse consequences.

Prevalence and structure of emotional burnout syndrome. Recent meta-analyses and systematic reviews indicate that EBS is widely prevalent among healthcare workers. Despite variations in Table 1. Prevalence and structural components of emotional burnout syndrome among healthcare workers

Study (year)	Population	Overall prevalence (%)	Emotional exhaustion (%)	Depersonalization (%)
Rotenstein et al., 2018	Physicians (global)	44–54	40–60	20–40
Pujol-de Castro et al., 2024	Clinical physicians	24 (strict), 51 (broad)	37–62	25–45
WHO, 2022	Healthcare workers	41–52	–	–
De Hert, 2020	European physicians	30–60	~45	~30

The results indicate that among the components of EBS, emotional exhaustion demonstrates the most stable and highest prevalence, serving as the central element of the syndrome. Depersonalization, in contrast, emerges as the component most directly affecting interpersonal relationships.

Emotional burnout and patient–physician relationships. Scientific literature identifies a decline in the quality of patient communication as one of the most significant consequences of emotional burnout syndrome (EBS). Systematic reviews indicate that physicians with high levels of burnout demonstrate significantly lower empathy scores; patient satisfaction decreases by 20–30%; and clinical decision-making becomes more subjective and emotionally detached.

The results of meta-analyses assessing the relationship between empathy and EBS are presented below:

Table 2. Association between empathy and emotional burnout

Indicator	Direction of association	Result (correlation coefficient)
Empathy ↔ Emotional exhaustion	Negative correlation	$r = -0.30$ to -0.45
Empathy ↔ Depersonalization	Strong negative correlation	$r = -0.40$ to -0.55
Empathy ↔ Professional efficacy	Positive correlation	$r = +0.35$ to $+0.50$

These findings indicate that as depersonalization increases, patients are perceived less as individuals and more as “clinical cases,” thereby weakening the humanistic component of medical care.

EBS and interprofessional (team-based) relationships. Healthcare systems are fundamentally based on teamwork, and EBS disrupts the internal balance of this system. Studies demonstrate that higher levels of emotional exhaustion are associated with reduced communication within teams, decreased trust among colleagues, and increased frequency of conflicts.

Table 3. Impact of EBS on team dynamics

Indicator	Low EBS	High EBS
Team trust	High	Low
Communication quality	Stable	Impaired
Conflict frequency	Low	High
Collaboration efficiency	High	Significantly reduced

In the study by Welp et al., a direct relationship was identified between emotional exhaustion and team performance: as exhaustion increased, team effectiveness decreased ($p < 0.01$). These findings emphasize that EBS should be considered not only as an individual issue, but as a systemic social problem within healthcare organizations.

EBS and patient safety and medical errors. Systematic meta-analyses demonstrate a significant association between EBS and medical errors.



Table 4. Association between EBS and clinical outcomes

Indicator	Direction of effect	Result
Medical errors	↑ Increase	OR \approx 1.96
Patient safety	↓ Decrease	Significant
Patient satisfaction	↓ Decrease	-20–30%
Quality of care	↓ Decrease	Statistically significant

According to the meta-analysis by Tawfik et al. (2019), physicians experiencing burnout have nearly twice the risk of committing medical errors. These findings indicate that EBS is not merely a psychological issue, but a risk factor directly affecting clinical outcomes.

EBS and psychosocial consequences. Emotional burnout also exerts a substantial impact on the personal lives of healthcare workers. Studies indicate that the risk of depression increases by 1.8–2.5 times; suicidal ideation occurs 1.5–2 times more frequently; and social isolation as well as family conflicts become more prevalent. These findings support the interpretation of EBS as a broad psychosocial syndrome requiring comprehensive intervention strategies.

Discussion

The findings of this literature review confirm that emotional burnout syndrome (EBS) among healthcare workers is highly prevalent and exerts a complex, multilevel impact on interpersonal relationships. The obtained data are consistent with contemporary epidemiological and psychological research and indicate the necessity of considering EBS not as an individual psychological condition, but as a systemic phenomenon affecting the functional stability of healthcare systems.

The results confirm the leading role of emotional exhaustion among the core components of EBS. This finding is fully consistent with the theoretical model proposed by Christina Maslach. Emotional exhaustion manifests not only as an independent symptom but also as a central mechanism initiating depersonalization and reduced professional efficacy. Therefore, interpreting it as the “pathogenic core” of EBS is scientifically justified.

Direct impact of depersonalization on interpersonal relationships. The analysis indicates that as depersonalization increases, empathic engagement with patients declines, leading to deterioration in the quality of medical care. The negative correlation between empathy and EBS ($r \approx -0.3$ to -0.5) is clinically significant. This



suggests that the decline of the humanistic component in medical practice is often not due to insufficient technical knowledge, but rather to depletion of psychological resources. From this perspective, maintaining empathy should be regarded not merely as an ethical requirement, but as a determinant of clinical effectiveness.

Impact of EBS on team dynamics. The findings demonstrate that increasing emotional exhaustion is associated with deterioration in team communication, reduced levels of trust, and a higher frequency of conflicts. This is particularly critical given the inherently interprofessional nature of healthcare systems. Clinical decision-making is often collective rather than individual; therefore, EBS in a single staff member can affect the performance of the entire team. As demonstrated in studies by Welp et al., emotional exhaustion indirectly affects patient safety through its impact on teamwork quality. This allows EBS to be characterized as a syndrome with a “cascade effect.”

Association between EBS and medical errors. Meta-analytic data indicate that physicians experiencing burnout have nearly a twofold increased risk of medical errors (OR \approx 1.9–2.0). This relationship can be interpreted through two complementary mechanisms. First, EBS impairs cognitive functions such as attention, memory, and decision-making. Second, it disrupts communication processes, leading to breakdowns in diagnostic and therapeutic pathways. Both mechanisms are clinically critical. Therefore, reducing EBS should be considered not only a strategy for improving staff well-being, but also an integral component of patient safety frameworks.

Psychological and social consequences of EBS. The analysis demonstrates a significant increase in the risk of depression, suicidal ideation, and social isolation among healthcare workers with burnout. These findings suggest that EBS extends beyond the concept of “occupational fatigue” and should be considered within a broader psychopathological spectrum. In high-responsibility professions such as healthcare, burnout may remain latent and be detected late, thereby exacerbating its consequences.

The reviewed studies exhibit several methodological limitations. First, most studies employ cross-sectional designs, limiting the ability to establish causal relationships. Second, variability in diagnostic criteria for EBS complicates the comparability of results. Third, the predominance of subjective assessment methods may affect the reliability of findings. These limitations highlight the need for future longitudinal cohort studies and the development of standardized assessment tools.



Conclusion

Emotional burnout syndrome among healthcare workers is a complex, multifactorial, and highly prevalent occupational–psychological condition that disrupts not only individual mental health but also patient–provider relationships, team collaboration, and overall clinical performance. The analyzed scientific literature confirms the systemic nature of this syndrome and highlights its role as a significant risk factor for healthcare systems.

Emotional burnout syndrome occurs in a substantial proportion of healthcare workers (30–50% or higher), with emotional exhaustion serving as the central component and primary pathogenic mechanism.

Depersonalization and reduced empathy significantly impair patient–physician relationships, leading to decreased quality of care and lower patient satisfaction.

Emotional burnout disrupts team functioning, weakens trust and communication among colleagues, and increases the risk of medical errors.

The psychological and social consequences of this syndrome (including depression, social isolation, and suicidal risk) negatively affect both quality of life and professional stability of healthcare workers.

Reducing emotional burnout syndrome requires not only individual psychological interventions but also the development and implementation of organizational and systemic preventive strategies. This is essential not only for preserving the health of healthcare workers but also for ensuring patient safety and improving the overall effectiveness of healthcare systems.

References

1. Rotenstein, L. S., Torre, M., Ramos, M. A., Rosales, R. C., Guille, C., Sen, S., & Mata, D. A. (2018). Prevalence of burnout among physicians: A systematic review. *JAMA*, 320(11), 1131–1150. <https://doi.org/10.1001/jama.2018.12777>
2. Pujol-de Castro A, Valerio-Rao G, Vaquero-Cepeda P, Catalá-López F. Prevalencia del síndrome de burnout en médicos que trabajan en España: revisión sistemática y metaanálisis [Prevalence of burnout syndrome in physicians working in Spain: systematic review and meta-analysis]. *Gac Sanit.* 2024;38:102384. Spanish. doi: 10.1016/j.gaceta.2024.102384. Epub 2024 Apr 22. PMID: 38653640.



3. De Hert S. Burnout in Healthcare Workers: Prevalence, Impact and Preventative Strategies. *Local Reg Anesth.* 2020 Oct 28;13:171-183. doi: 10.2147/LRA.S240564. PMID: 33149664; PMCID: PMC7604257.
4. Batanda I. Prevalence of burnout among healthcare professionals: a survey at fort portal regional referral hospital. *Npj Ment Health Res.* 2024 May 6;3(1):16. doi: 10.1038/s44184-024-00061-2. PMID: 38710834; PMCID: PMC11074248.
5. Delgado N, Delgado J, Betancort M, Bonache H, Harris LT. What is the Link Between Different Components of Empathy and Burnout in Healthcare Professionals? A Systematic Review and Meta-Analysis. *Psychol Res Behav Manag.* 2023 Feb 15;16:447-463. doi: 10.2147/PRBM.S384247. PMID: 36814637; PMCID: PMC9939791.
6. Feruza, S., Nigora, A., Guzal, S., & Dilafruz, N. (2025). FEATURES OF THE EMOTIONAL BURNOUT CONDITION AMONG GENERAL EDUCATION SCHOOL TEACHERS. In *The Conference Hub* (pp. 1-4).
7. Закирходжаев, Ш. Я., Талибджанова, М. Х., & Муталов, С. Б. (2024). Изучение пищевого статуса пациентов с хроническими гепатитами.
8. Garcia CL, Abreu LC, Ramos JLS, Castro CFD, Smiderle FRN, Santos JAD, Bezerra IMP. Influence of Burnout on Patient Safety: Systematic Review and Meta-Analysis. *Medicina (Kaunas).* 2019 Aug 30;55(9):553. doi: 10.3390/medicina55090553. PMID: 31480365; PMCID: PMC6780563.
9. Hodkinson A, Zhou A, Johnson J, Geraghty K, Riley R, Zhou A, Panagopoulou E, Chew-Graham CA, Peters D, Esmail A, Panagioti M. Associations of physician burnout with career engagement and quality of patient care: systematic review and meta-analysis. *BMJ.* 2022 Sep 14;378:e070442. doi: 10.1136/bmj-2022-070442. PMID: 36104064; PMCID: PMC9472104.
10. Iskandarova, G. T., & Samigova, N. R. (2024). Hygienic description of chemical factor in mechanical engineering enterprises (Doctoral dissertation, Germany).
11. Li LZ, Yang P, Singer SJ, Pfeffer J, Mathur MB, Shanafelt T. Nurse Burnout and Patient Safety, Satisfaction, and Quality of Care: A Systematic Review and Meta-Analysis. *JAMA Netw Open.* 2024 Nov 4;7(11):e2443059. doi: 10.1001/jamanetworkopen.2024.43059. PMID: 39499515; PMCID: PMC11539016.



12. Закирходжаев, Ш. Я., Паттахова, М. Х., & Муталов, С. Б. (2022). Жигар циррози касаллигида интерлейкин-6 микдорининг ўзгариши (Doctoral dissertation, Doctoral dissertation, Ўзбекистан, Ташкент).
13. Tawfik DS, Scheid A, Profit J, Shanafelt T, Trockel M, Adair KC, Sexton JB, Ioannidis JPA. Evidence Relating Health Care Provider Burnout and Quality of Care: A Systematic Review and Meta-analysis. *Ann Intern Med.* 2019 Oct 15;171(8):555-567. doi: 10.7326/M19-1152. Epub 2019 Oct 8. PMID: 31590181; PMCID: PMC7138707.
14. Umedova, M. E., & Nigmatullayeva, D. J. (2025, December). INTERNET ADDICTION AND THE LEVEL OF PSYCHOLOGICAL FATIGUE AMONG PRIMARY SCHOOL STUDENTS: AN EPIDEMIOLOGICAL ANALYSIS. *International Conference on Advance Research in Humanities, Applied Sciences and Education.*
15. Шамуратова, Н. Ш., & Закирходжаев, Ш. Я. (2019). ОЦЕНКА ЭФФЕКТИВНОСТИ ДИЕТОТЕРАПИИ, С ИСПОЛЬЗОВАНИЕМ РАЦИОНА, ОБОГЩЕННЫХ МЕСТНЫМИ ЗЕРНОВЫМИ КУЛЬТУРАМИ У БОЛЬНЫХ ХРОНИЧЕСКИМИ ГЕПАТИТАМИ. In *Академическая наука-проблемы и достижения* (pp. 12-14).
16. Шамуратова, Н. Ш., Зокирходжаев, Ш. Я., & Рузметова, Д. А. (2023). ЖИГАРНИНГ СУРУНКАЛИ КАСАЛЛИКЛАРИДА ДИЕТОТЕРАПИЯДА МАҲАЛЛИЙ МАҲСУЛОТЛАР ҚЎЛЛАШНИНГ САМАРАСИ (Doctoral dissertation, UZBEK JOURNAL OF CASE REPORTS, Ўзбекистан). *Uzbek journal of case reports, Ўзбекистан.*
17. Welp A, Meier LL, Manser T. The interplay between teamwork, clinicians' emotional exhaustion, and clinician-rated patient safety: a longitudinal study. *Crit Care.* 2016 Apr 19;20(1):110. doi: 10.1186/s13054-016-1282-9. PMID: 27095501; PMCID: PMC4837537.
18. Wilkinson H, Whittington R, Perry L, Eames C. Examining the relationship between burnout and empathy in healthcare professionals: A systematic review. *Burn Res.* 2017 Sep;6:18-29. doi: 10.1016/j.burn.2017.06.003. PMID: 28868237; PMCID: PMC5534210.
19. World Health Organization. (2021). WHO global air quality guidelines: Particulate matter (PM2.5 and PM10), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide. <https://www.who.int/publications/i/item/9789240034228>
20. Самигова, Н. Р., & Абдююсупова, Д. Н. (2023). Гигиеническая оценка систем производственного освещения на рабочих местах при выпуске алюминиевых профилей. *Молодой ученый*, 6, 327-329.