



Faculty Members Burnout in COVID-19 Pandemic Period; Shiraz Medical School as a Sample

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Dear Editor,

Burnout is defined as exhaustion and fatigue due to exposure to intense emotional stress, pessimistic and cynical attitudes toward others, and lack of personal accomplishment feeling (1). Owing to the emergency condition of the COVID-19 pandemic, the burnout prevalence has increased among healthcare professionals (2, 3), and some new aspects are revealed. As burnout can cause inefficiency, increase the risk of medical errors, and reduce physicians' ability to care for patients (4), identifying the priority of factors that lead to burnout is essential for planning a beneficial and urgent management program.

In this way, after explaining the burnout meaning to the clinical faculty members of Shiraz University of Medical Sciences, they were asked to prioritize items of a valid and reliable questionnaire that resulted in burnout based on their opinions. Thirty-eight clinical faculty members without burnout signs completed the questionnaire. The results showed that the most critical factors that led to burnout were the specialty field, accompanying the executive agents of the university in the COVID-19 pandemic, and the impact of the decisions of COVID-19 management headquarters, respectively. Also, the least important factors from faculty members' view were the disturbance caused by COVID-19 pandemic on education and research activities, the difficulty and stress caused by work overload, and the low amount of hazard pay, respectively (Table 1).

As shown in Table 1, the specialty of clinical faculty members can be related to burnout severity. Other studies showed different levels of burnout based on specialty, so that the highest rate of burnout was related to surgeons

(5) and emergency medicine physicians (6). Also, for the first time, we show that wrong decisions of COVID-19 management headquarters are one of the most important factors of burnout from clinical faculty members' viewpoint. This may be due to the impact of the COVID-19 management headquarters decisions on faculty members' uncertainty in the COVID-19 era (7). In addition, we found revenue reduction and irregular payments to clinical faculty members as another underlying problem that results in their burnout. This finding is in line with Bauer et al.'s study results, showing the role of irregular payments in mental health (8).

As job burnout is accompanied by a high rate of absence and turnover among healthcare professionals (9), it seems that a burnout preventive strategy could reduce work overload. Organizational approaches such as improving workflow management, organizing services focused on reducing workload, improving interoperability, organization of discussions, and exchanging opinions could cause better decision-making and management of high overloading. In addition to providing personal protective equipment, creating some places for rest, places for listening to stories and exchange feelings, and providing food and daily supplies could decrease the stressful effect of the work environment and increase the sense of security (10).

Using mental health experts in the healthcare team, training the health care professionals about symptoms of post-traumatic stress and depression could help them identify these symptoms in themselves and their colleagues in the early stages. Moreover, as some health care

Table 1. Mean \pm SD of Main Burnout Factors from Faculty Members' View

Priority	Variable	Mean \pm SD	Priority	Variable	Mean \pm SD
1	Specialty field	10.08 \pm 5.164	9	Worried about being infected	8.26 \pm 5.426
2	Wrong decisions of COVID-19 Management Headquarters	10.03 \pm 4.050	10	The effect of medical professional performance on personal life	8.00 \pm 3.288
3	Accompanying the executive agents of the university in COVID-19 pandemic	10.03 \pm 4.682	11	The impact of COVID-19 pandemic on relationships with family, relatives, and friends	7.92 \pm 3.928
4	Non-payment of insurance premiums	9.74 \pm 5.113	12	Existence of facilities and equipment in clinical, educational, and research environment	7.97 \pm 3.795
5	Revenue reduction and irregular payments	9.42 \pm 4.335	13	Board exam or new student admission	7.55 \pm 4.536
6	Access to personal protective equipment and facilities in the work environment	9.34 \pm 4.115	14	Low amount of hazard pay	7.32 \pm 5.590
7	Neglecting health protocols by people, which has led to medical staff mortality increase	8.71 \pm 4.330	15	Stress which was caused by work overload	7.24 \pm 3.900
8	Personal interpretation of the rules by the authorities	8.63 \pm 4.940	16	Disturbance caused by COVID-19 pandemic on education and research activities	5.50 \pm 3.992

professionals prefer not to directly connect with a mental health professional, existing telehealth services and web-based resources are essential. Some other ways to control and manage stress include being update about COVID-19, ignoring fake news and reduce non-reliable social media, mindfulness and promoting self-care, and doing exercise (11).

Regarding our findings, we concluded that the main factors affecting Shiraz Medical School faculty members' burnout in COVID-19 pandemic are the specialty field and accompanying the executive agents of the university in COVID-19 pandemic. It appears that reducing overload, providing personal protective equipment, creating some places for rest, using mental health experts in the health-care team, and training the healthcare professionals on burnout reasons, signs, and symptoms are the main intervention to prevent clinical faculty members burnout.

Footnotes

Authors' Contribution: Study concept and design: K.M.B, Z.F, and A.M; Acquisition of data: K.M.B, Z.F, H.A, and T.S.M; Analysis and interpretation of data: A.E, A.M, and Z.F; Drafting of the manuscript: A.E; Critical revision of the manuscript for important intellectual content: A.M; Statistical analysis: A.E; Administrative, technical, and material support: A.M; Study supervision: K.M.B, and A.M.

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References

- Koutra K, Mavroeides G, Triliva S. Mental health professionals' attitudes towards people with severe mental illness: Are they related to professional quality of life? *Community Ment Health J*. 2021. doi: [10.1007/s10597-021-00874-x](https://doi.org/10.1007/s10597-021-00874-x). [PubMed: [34251575](https://pubmed.ncbi.nlm.nih.gov/34251575/)]. [PubMed Central: [PMC8273846](https://pubmed.ncbi.nlm.nih.gov/PMC8273846/)].
- Jalili M, Niroomand M, Hadavand F, Zeinali K, Fotouhi A. Burnout among healthcare professionals during COVID-19 pandemic: a cross-sectional study. *Int Arch Occup Environ Health*. 2021;**94**(6):1345–52. doi: [10.1007/s00420-021-01695-x](https://doi.org/10.1007/s00420-021-01695-x). [PubMed: [33864490](https://pubmed.ncbi.nlm.nih.gov/33864490/)]. [PubMed Central: [PMC8052946](https://pubmed.ncbi.nlm.nih.gov/PMC8052946/)].
- Elghazally SA, Alkarn AF, Elkhayat H, Ibrahim AK, Elkhayat MR. Burnout impact of COVID-19 pandemic on health-care professionals at Assiut University Hospitals, 2020. *Int J Environ Res Public Health*. 2021;**18**(10). doi: [10.3390/ijerph18105368](https://doi.org/10.3390/ijerph18105368). [PubMed: [34069955](https://pubmed.ncbi.nlm.nih.gov/34069955/)]. [PubMed Central: [PMC8157591](https://pubmed.ncbi.nlm.nih.gov/PMC8157591/)].
- Elhadi M, Msherghi A, Elgzairi M, Alhashimi A, Bouhuwaish A, Biala M, et al. Burnout syndrome among hospital healthcare workers during the COVID-19 pandemic and civil war: A cross-sectional study. *Front Psychiatry*. 2020;**11**:579563. doi: [10.3389/fpsyg.2020.579563](https://doi.org/10.3389/fpsyg.2020.579563). [PubMed: [33362600](https://pubmed.ncbi.nlm.nih.gov/33362600/)]. [PubMed Central: [PMC7759513](https://pubmed.ncbi.nlm.nih.gov/PMC7759513/)].
- Nituica C, Bota OA, Blebea J. Specialty differences in resident resilience and burnout - A national survey. *Am J Surg*. 2021;**222**(2):319–28. doi: [10.1016/j.amjsurg.2020.12.039](https://doi.org/10.1016/j.amjsurg.2020.12.039). [PubMed: [33431168](https://pubmed.ncbi.nlm.nih.gov/33431168/)].
- Stehman CR, Testo Z, Gershaw RS, Kellogg AR. Burnout, drop out, suicide: Physician loss in emergency medicine, part I. *West J Emerg Med*. 2019;**20**(3):485–94. doi: [10.5811/westjem.2019.4.40970](https://doi.org/10.5811/westjem.2019.4.40970). [PubMed: [31123550](https://pubmed.ncbi.nlm.nih.gov/31123550/)]. [PubMed Central: [PMC6526882](https://pubmed.ncbi.nlm.nih.gov/PMC6526882/)].
- Di Trani M, Mariani R, Ferri R, De Berardinis D, Frigo MG. From resilience to burnout in healthcare workers during the COVID-19 emergency: The role of the ability to tolerate uncertainty. *Front Psychol*. 2021;**12**:646435. doi: [10.3389/fpsyg.2021.646435](https://doi.org/10.3389/fpsyg.2021.646435). [PubMed: [33935905](https://pubmed.ncbi.nlm.nih.gov/33935905/)]. [PubMed Central: [PMC8085585](https://pubmed.ncbi.nlm.nih.gov/PMC8085585/)].
- Bauer A, Garman E, McDaid D, Avendano M, Hessel P, Díaz Y, et al. Integrating youth mental health into cash transfer programmes in response to the COVID-19 crisis in low-income and middle-income countries. *Lancet Psychiatry*. 2021;**8**(4):340–6. doi: [10.1016/s2215-0366\(20\)30382-5](https://doi.org/10.1016/s2215-0366(20)30382-5).
- Talaei N, Varahram M, Jamaati H, Salimi A, Attarchi M, Kazempour Dizaji M, et al. Stress and burnout in health care workers during COVID-19 pandemic: validation of a questionnaire. *Z Gesundh Wiss*. 2020;1–6. doi: [10.1007/s10389-020-01313-z](https://doi.org/10.1007/s10389-020-01313-z). [PubMed: [32837840](https://pubmed.ncbi.nlm.nih.gov/32837840/)]. [PubMed Central: [PMC7275852](https://pubmed.ncbi.nlm.nih.gov/PMC7275852/)].

10. Shanafelt T, Ripp J, Trockel M. Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. *JAMA*. 2020;**323**(21):2133-4. doi: [10.1001/jama.2020.5893](https://doi.org/10.1001/jama.2020.5893). [PubMed: [32259193](https://pubmed.ncbi.nlm.nih.gov/32259193/)].
11. Callus E, Bassola B, Fiolo V, Bertoldo EG, Pagliuca S, Lusignani M.

Stress reduction techniques for health care providers dealing with severe coronavirus infections (SARS, MERS, and COVID-19): A rapid review. *Front Psychol*. 2020;**11**:589698. doi: [10.3389/fpsyg.2020.589698](https://doi.org/10.3389/fpsyg.2020.589698). [PubMed: [33362654](https://pubmed.ncbi.nlm.nih.gov/33362654/)]. [PubMed Central: [PMC7758192](https://pubmed.ncbi.nlm.nih.gov/PMC7758192/)].