



Burnout Among Oncology Residents: From Individual Burden to Educational Responsibility

***Zahra Rezaei Borojerdi¹**

¹Medical Oncologist, Hematologist, and Stem Cell Transplantation Specialist, Department of Hematology and Oncology, Imam Reza Hospital, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.

Abstract

Burnout is a major occupational and educational challenge among medical residents, characterized by emotional exhaustion, cynicism, and reduced professional efficacy. Long working hours, frequent on-call duties, increasing clinical responsibilities, and assessment pressures place residents at considerable risk, with potential consequences for learning, clinical decision-making, patient safety, and workforce retention. Oncology and radiation oncology residents face additional emotional and ethical burdens due to repeated exposure to cancer-related suffering, treatment complications, poor prognoses, and death.

Individual-focused interventions alone often yield limited and short-lived effects. This letter argues that burnout among oncology residents should not be framed as an individual failure of resilience but as an indicator of the educational environment and a matter of educational accountability. In Iran, structural health-system constraints and the stigma surrounding mental health may further intensify this burden. Confidential burnout monitoring, accessible mental health support, Balint groups, and organizational reforms should be integrated into oncology residency training to safeguard both trainee well-being and the quality of cancer care.

Key Words: Burnout, Cancer care, Iran, Oncology residents, Medical education.

*Please cite this article as: Rezaei Borojerdi Z. Burnout Among Oncology Residents: From Individual Burden to Educational Responsibility. Med Edu Bull 2026; 7(1): 1253-56. DOI: **10.22034/meb.2026.598286.1139**

***Corresponding Author:**

Zahra Rezaei Borojerdi, MD, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.

Email: drzr358@gmail.com

Received date: May. 15, 2026; Accepted date: Jun.22, 2026

Dear Editor,

Burnout is one of the most prevalent and consequential occupational health challenges affecting medical residents. Residency is commonly characterised by long working hours, frequent on-call duties, sleep deprivation, substantial clinical responsibilities, evaluation pressures, academic competition, and limited opportunities for rest and personal life. During this period, residents must simultaneously develop clinical competencies and professional decision-making skills, assume responsibility for patient care, and undergo continual assessment by faculty. This combination of demands can lead to emotional exhaustion, cynicism or detachment from work, and a reduced sense of professional efficacy, ultimately contributing to burnout (1, 2). The consequences extend well beyond residents' individual well-being; burnout can adversely affect learning, engagement in educational activities, empathy, professional communication, clinical decision-making, and, ultimately, patient safety (3).

This structural challenge is particularly salient among oncology and radiation oncology residents. These trainees are repeatedly exposed to patients with life-threatening illnesses and routinely witness cancer diagnoses, disease progression, refractory pain, severe adverse effects of chemotherapy and radiotherapy, treatment failure, complex end-of-life decisions, and death. They must also communicate with patients and families experiencing fear, uncertainty, and grief in highly emotionally charged circumstances. In the absence of adequate organisational support, repeated exposure to such experiences may contribute to emotional exhaustion, moral distress, secondary traumatic stress, and the gradual erosion of empathic capacity (4, 5). The cumulative emotional burden of these encounters may make emotional detachment or depersonalisation appear to be a defensive mechanism for maintaining clinical functioning in high-pressure environments.

Recent international evidence has highlighted concerning levels of burnout among oncology professionals and trainees, with some studies reporting high rates among residents and fellows in oncology-related disciplines (5). Substantial levels of emotional exhaustion and depersonalisation have also been reported among radiation oncology residents (6). Importantly, conventional individual-focused interventions, such as mindfulness programmes and recommendations to engage in self-care, often have limited or short-lived effects when implemented without meaningful organisational and educational reforms (7).

Experiences from leading international centres suggest that effective responses require a systemic approach. In North America and Europe, professional organisations such as the American Society of Clinical Oncology (ASCO) and the European Society for Medical Oncology (ESMO) increasingly recognise professional well-being as an integral component of workforce competence and healthcare quality rather than as a peripheral concern (8, 9). Within these approaches, comprehensive well-being initiatives, resilience task forces, mentoring networks, and Balint groups for processing emotional pressures are integrated with clinical education (9, 10). In contrast, in many educational settings, including Iran, responsibility for coping with burnout remains largely with the individual resident. This difference represents more than a policy variation; it reflects a fundamental divergence in how high-quality medical education is conceptualized (11).

In Iran, the pressures associated with caring for patients with cancer may be compounded by structural challenges, including high patient volumes in public hospitals, shortages of medications and equipment that may generate moral distress among physicians, and limited access to regular psychological support for residents. Moreover, the stigma surrounding mental health within the medical profession may discourage residents who experience emotional distress following patient deaths from expressing their needs or seeking help. This gap between recommended approaches to trainee well-being and the current context may threaten both residents' welfare and the safety of patients with cancer (12).

From a medical education perspective, resident burnout should be understood not as a personal weakness but as a matter of educational accountability. Universities and teaching hospitals have a responsibility to create environments in which clinical learning, patient care, and care for the learner are not positioned in conflict with one another. Routine burnout monitoring, peer-support systems,

confidential access to mental health services, and formal training in coping with suffering, grief, and death should be incorporated into residency curricula as essential measures for sustaining a specialist workforce.

CONCLUSION

Burnout among medical residents is a serious concern, and its close association with patients' suffering and death can make the emotional burden of oncology training particularly intense. Addressing this problem requires a shift from approaches centred primarily on individual resilience to proactive strategies that promote organisational sustainability and educational accountability. In Iran, medical universities should prioritise confidential burnout-monitoring systems, Balint groups to help residents process grief and emotionally challenging clinical experiences, and measures to reduce unnecessary workloads among oncology residents. Sustaining high-quality cancer care requires structured institutional support for the physicians who provide it.

CONFLICT OF INTEREST: None.

REFERENCES

1. Maghbouli N, Sohrabpour A A, Fatehi F. The prevalence of burnout in Iranian residents: a cross-sectional study. *FUTURE MED EDUC J*. 2019;9(1):3-8. doi: 10.22038/fmej.2019.36985.1242.
2. Naji L, Singh B, Shah A, Naji F, Dennis B, Kavanagh O, Banfield L, Alyass A, Razak F, Samaan Z, Profetto J, Thabane L, Sohani ZN. Global prevalence of burnout among postgraduate medical trainees: a systematic review and meta-regression. *CMAJ Open*. 2021 Mar 8;9(1):E189-E200. doi: 10.9778/cmajo.20200068. PMID: 33688027; PMCID: PMC8034324.
3. Sobczuk P, Gawlik-Urban A, Sigorski D, Kiszka J, Osmola M, Machulska-Ciuraj K, Wilk M, Brodziak A. Prevalence and factors associated with professional burnout in Polish oncologists-results of a nationwide survey. *ESMO Open*. 2024 Feb;9(2):102230. doi: 10.1016/j.esmoop.2023.102230. Epub 2024 Jan 23. PMID: 38266421; PMCID: PMC10937194.
4. Martinez-Calderon J, Infante-Cano M, Casuso-Holgado MJ, García-Muñoz C. The prevalence of burnout in oncology professionals: an overview of systematic reviews with meta-analyses including more than 90 distinct studies. *Support Care Cancer*. 2024 Feb 27;32(3):196. doi: 10.1007/s00520-024-08400-x. PMID: 38411784.
5. Schenkel C, Levit LA, Kirkwood K, Shanafelt T, Subbiah IM. Ten-Year Trends in Clinician Well-Being and Burnout Among Oncology Fellows in Training: An ASCO State of Cancer Care in America Study. *JCO Oncol Pract*. 2025 Jul;21(7):1039-1044. doi: 10.1200/OP.24.00200. Epub 2025 Jan 29. PMID: 39879569.
6. Gomis Sellés E, Mingarro de León M, Montero Á, Arenas M. Burnout levels among radiation oncology residents in Spain: a cross-sectional survey. *Clin Transl Oncol*. 2025 Aug;27(8):3543-3549. doi: 10.1007/s12094-025-03862-9. Epub 2025 Feb 12. PMID: 39937361.
7. Kiratipaisarl W, Surawattanasakul V, Sirikul W. Individual and organizational interventions to reduce burnout in resident physicians: a systematic review and meta-analysis. *BMC Med Educ*. 2024 Oct 30;24(1):1234. doi: 10.1186/s12909-024-06195-3. PMID: 39478552; PMCID: PMC11523819.
8. Schenkel C, Levit LA, Kirkwood K, Spence R, Burke JM, Gallagher CM, Garrett-Mayer E, McGinnis M, Morgante JD, Page RD, Paice J, Tetzlaff E, Winer E, Hlubocky FJ, Shanafelt T. State of Professional Well-Being, Satisfaction, and Career Plans Among US Oncologists in 2023. *JCO Oncol Adv*. 2025 Jan 29;2(1):e2400010. doi: 10.1200/OA.24.00010. PMID: 39906334; PMCID: PMC11789616.
9. Lim KHJ, Kamposioras K, Élez E, Haanen JBAG, Hardy C, Murali K, et al. ESMO Resilience Task Force. ESMO Resilience Task Force recommendations to manage psychosocial risks, optimise well-being, and reduce burnout in oncology. *ESMO Open*. 2024 Oct;9(10):103634. doi: 10.1016/j.esmoop.2024.103634. Epub 2024

Sep 10. PMID: 39461774; PMCID: PMC11549518.

10. Hardy C, Thorne E, O'Connor M. Oncology professionals' perceptions and recommendations to improve well-being and health at work in times of crisis: qualitative thematic analysis from the ESMO Resilience Task Force survey series. *ESMO Open*, 2025; 10(3): 1-6.

11. Tabatabai S, Simforoosh N. A conceptual framework to incorporate fundamental values

in the health and medical education system in Islamic Republic of Iran. *East Mediterr Health J*. 2023 Aug 31;29(8):608-619. doi: 10.26719/emhj.23.089. PMID: 37698216.

12. Khodayari-Zarnaq R, Ghasemyani S, Mobasser K, Naghshi M, Kabiri N. Challenges for health workforce in the Iranian healthcare system: a scoping review. *BMC Health Serv Res*. 2025 Oct 14;25(1):1361. doi: 10.1186/s12913-025-13167-w. PMID: 41088117; PMCID: PMC12522801.