



10.5281/  
zenodo.7936848

# Burnout syndrome and medical doctors: A-mini review

Carlo Mauceri<sup>1</sup>

1. Sassari University, Department of General Medicine, Sassari, Italy

## Abstract

Burnout syndrome is a prevalent issue among professionals in high-stress occupations, particularly healthcare workers. The syndrome, characterized by emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment, arises primarily from prolonged exposure to work-related stress. Medical professionals, including general practitioners, are particularly susceptible, with a significant proportion experiencing burnout at different stages of their careers, beginning from medical school to active practice. This syndrome not only affects the mental health and job satisfaction of the affected individuals but may also compromise the quality of patient care provided. Addressing burnout requires a multifaceted approach that includes improved workplace policies, stress management training, and potentially, mental health services. Furthermore, additional research is needed to better understand the syndrome and develop more effective preventative and interventional strategies.

**Cite as:** Mauceri C. Burnout syndrome and medical doctors: A-mini review. Unicos Rev. 2023;2(1):19-22

### Correspondence

Mauceri C. Sassari University,  
Department of General Medicine,  
Sassari, Italy

### e-mail

[carlomauceri12@gmail.com](mailto:carlomauceri12@gmail.com)

**Received:** 20 January 2023

**Revised:** 25 February 2023

**Accepted:** 1 March 2023

**Published:** 30 April 2023

### Keywords

- ⇒ Burnout syndrome
- ⇒ Doctors
- ⇒ Work

### ORCID ID of the author(s):

CM: 0009-0007-9830-0325

## Introduction

Burnout is a complex syndrome predominantly seen in caregiving professions such as social workers, teachers, and health workers, as well as in other high-pressure jobs. Healthcare workers, particularly doctors, are often exposed to high stress levels, leading to continuous strain that can manifest as both physical and psychological distress. This stress-induced burnout syndrome can increase the chances of medical errors and decrease job satisfaction (1).

## Understanding burnout

Burnout, as described by Maslach et al., consists of three interconnected dimensions: emotional exhaustion, depersonalization, and a sense of low personal accomplishment. Emotional exhaustion typically arises from sustained stress and is characterized by feelings of being overwhelmed, helpless, trapped, and defeated, often resulting in a diminished enthusiasm for work. Depersonalization involves a shift towards indifference, where doctors may objectify patients, develop negative attitudes towards colleagues, and feel disconnected from their profession. The third dimension, a sense of low personal accomplishment, is characterized by withdrawal from responsibilities, inefficiency, and disengagement from work (2,3).

## Prevalence among medical professionals

Numerous studies indicate a high prevalence of burnout among General Practitioners (GPs), with about one-third of physicians experiencing burnout at some stage of their careers. Burnout tends to start as early as medical school, continues through residency, and often peaks during the daily practice of general practitioners (3,4). Research shows that between 31% to 49.6% of medical students, 50% to 76% of surgical and internal medicine residents, and about one-third of Canadian doctors across different specialties experience symptoms of burnout. Interestingly, the prevalence of burnout appears to be even more significant among GPs, with a recent US study revealing that 45.8% of physicians reported at least one symptom of burnout (1,3,4).

## Impacts of chronic stress on doctors

Chronic exposure to high levels of stress can lead to far-reaching effects on physicians. For instance, doctors dealing with traumatized patients may experience "compassion fatigue," which can result in intervention, avoidance, and arousal even after exposure to a traumatic event. Chronic stress can also predispose doctors to various mental health issues, including depression, anxiety, sleep disturbances, broken

relationships, substance abuse, early retirement, and even suicide. It's noteworthy that doctors have a higher prevalence of depression and burnout than the general population and many other occupational groups (5).

## Interconnection of stress-related issues

There's a potential interconnectedness between compassion fatigue, burnout, and other forms of mental illness that may emerge from chronic stress exposure. A recent study found a strong correlation between compassion fatigue and burnout among family physicians. Understanding these patterns and their interrelationships is crucial for developing effective strategies to support doctors and other healthcare workers in managing stress and preventing burnout (5,6).

## Risk factors and variations in burnout

There seem to be specific professions and circumstances within the medical field that are more susceptible to burnout. For instance, Shanafelt found that trauma surgeons, urologists, otolaryngologists, vascular and general surgeons, and young healthcare professionals—especially those with children and those who work more than 60 hours per week or are on-call more than two nights per week—are at a heightened risk of experiencing burnout (6).

Moreover, the prevalence of burnout seems to differ across regions and healthcare systems. European research including 1,400 family physicians from 12 countries revealed that 43% of participants scored high for emotional exhaustion, 35% for depersonalization, and 32% for a low sense of personal accomplishment. Twelve percent of these physicians experienced high levels of burnout across all three dimensions. In contrast, a study in the United Kingdom involving over 500 physicians showed that at least one-third of the participants exhibited signs of burnout (7).

Strikingly, even higher rates of burnout were reported in certain Arab countries such as Yemen, Qatar, and Saudi Arabia, indicating the global nature of this problem. On the other hand, the prevalence of burnout varies even within the same profession, with 12.5% of medical assistants scoring high in all three dimensions in a study (1,8).

## Consequences of chronic stress exposure

Chronic exposure to stress can lead to severe consequences for healthcare professionals. They may develop compassion fatigue, where they experience

intense emotional responses and arousal even after the traumatic event has passed. Prolonged exposure to traumatic materials, traumatic memories, and life disturbances can lead to the development of compassion fatigue (9).

Additionally, chronic stress can lead to burnout, a term first coined by Freudenberger in 1974 to describe the emotional exhaustion experienced by those in people-oriented professions. Chronic and severe stressors can predispose physicians to a range of mental illnesses and dysfunctions, including depression, anxiety, sleep disturbances, strained relationships, substance abuse, marital dysfunction, early retirement, and in the most severe cases, suicide (10).

Interestingly, many of the risk factors associated with depression in the general population, such as low socioeconomic status, low education level, unemployment, and being female, do not apply to physicians. However, physicians experiencing burnout are reported to be at a greater risk of making poor decisions or mistakes in patient care, withdrawing from work, demonstrating hostility towards patients, reducing commitment to safe and optimal patient care, and having difficult relationships with co-workers (9,10).

Moreover, compassion fatigue, burnout, and various other forms of mental illness in the face of chronic stress exposure might be part of a spectrum and their manifestations could be interrelated (11). This concept is supported by a recent study that found a strong correlation between compassion fatigue and burnout among family physicians. Understanding these patterns and their interrelationships is crucial for developing effective strategies to support doctors and other healthcare workers in managing stress and preventing burnout (12).

## Conclusions

Burnout is a widespread issue that significantly affects healthcare workers, particularly those in high-stress roles such as surgeons and general practitioners. This syndrome, characterized by emotional exhaustion, depersonalization, and a low sense of personal accomplishment, can manifest due to the high-stress nature of the medical profession and persistently challenging work conditions.

## Conflict of interest

The authors report no conflict of interest.

## Funding source:

No funding was required.

## Ethical approval:

No need for reviews

## Acknowledgment:

No

## Contributions

Research concept and design: **CM**

Data analysis and interpretation: **CM**

Collection and/or assembly of data: **CM**

Writing the article: **CM**

Critical revision of the article: **CM**

Final approval of the article: **CM**

## References

1. Vasconcelos EM, Martino MMF. Predictors of burnout syndrome in intensive care nurses. *Rev Gaucha Enferm.* 2018;38(4):e65354.
2. Güler Y, Şengül S, Çaliş H, Karabulut Z. Burnout syndrome should not be underestimated. *Rev Assoc Med Bras* (1992). 2019 Nov;65(11):1356-60.
3. Maslach C, Schaufeli WB, Leiter MP. Job burnout. *Annu Rev Psychol.* 2001;52:397-422.
4. Groenewal PH, Putrino D, Norman MR. Burnout and Motivation in Sport. *Psychiatr Clin North Am.* 2021;44(3):359-72.
5. Thun-Hohenstein L, Höbinger-Ablasser C, Geyerhofer S, Lampert K, Schreuer M, Fritz C. Burnout in medical students. *Neuropsychiatr.* 2021;35(1):17-27.
6. Rodrigues H, Cobucci R, Oliveira A, Cabral JV, Medeiros L, Gurgel K, et al. Burnout syndrome among medical residents: A systematic review and meta-analysis. *PLoS One.* 2018;13(11):e0206840.
7. Rothenberger DA. Physician Burnout and Well-Being: A Systematic Review and Framework for Action. *Dis Colon Rectum.* 2017;60(6):567-76.
8. West CP, Dyrbye LN, Sinsky C, Trockel M, Tutty M, Nedelec L, et al. Resilience and Burnout Among Physicians and the General US Working Population. *JAMA Netw Open.* 2020;3(7):e209385.
9. Panagioti M, Geraghty K, Johnson J, Zhou A, Panagopoulou E, Chew-Graham C, et al. Association Between Physician Burnout and Patient Safety, Professionalism, and Patient Satisfaction: A Systematic Review and Meta-analysis. *JAMA Intern Med.* 2018;178(10):1317-31.

10. De Simone S, Vargas M, Servillo G. Organizational strategies to reduce physician burnout: a systematic review and meta-analysis. *Aging Clin Exp Res.* 2021;33(4):883-94.
11. Moukarzel A, Michelet P, Durand AC, Sebbane M, Bourgeois S, Markarian T, et al. Burnout Syndrome among Emergency Department Staff: Prevalence and Associated Factors. *Biomed Res Int.* 2019;2019:6462472.
12. Lou NM, Montreuil T, Feldman LS, Fried GM, Lavoie-Tremblay M, Bhanji F, et al. Nurses' and Physicians' Distress, Burnout, and Coping Strategies During COVID-19: Stress and Impact on Perceived Performance and Intentions to Quit. *J Contin Educ Health Prof.* 2022;42(1):e44-e52.

**Publisher's Note:** Unico's Medicine remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.