



**EVALUATING THE CONTRIBUTION OF PHYSICIANS IN THE  
MULTIDISCIPLINARY RESPONSE TO THE COVID-19 PANDEMIC: A  
COMPREHENSIVE REVIEW**

**Ali Abdulrahman Ali Refaei, Amer Omar Nasser Alali, Abdulaziz Mohamed Qasim Safhi,  
Akram Ahmed Wafi, Abdullah Saad Alsaleem, Abdullah Saad Alsaleem, Faisal Abdullah  
Alamri, Saleh Gazai Alotaibi, Fahad Khulyf Alaenezi, Yahya Omar Ali Hazazi ,Salem  
Nasser Salem Al-Qahtani, Basem Saud Ahmed Farhan, Abdulrahman Mohammed  
Abdulaziz Alarifi, Amjad Naji M Almotiri, Maali Eidan Mufdi Aldhafeeri, Dr Abdul Aziz  
Dobyan Alfaim**

**Abstract**

The COVID-19 pandemic has posed a significant threat to healthcare systems globally, affecting several levels of operation. Available research indicates that the moral challenges encountered by doctors during these extraordinary times have positioned them at the crossroads of ethical and unethical issues. This occurrence has raised concerns about the ethical principles of doctors and how it has influenced their behavior. The objective of our study is to explore the range of changes in the field of patient care optics during the epidemic and how these changes have affected the mental well-being of doctors. We conducted a search in databases such as PubMed/Medline, Web of Science, Scopus, Science Direct, CINAHL, and PsycInfo using a predetermined search query. The titles and abstracts that were obtained were examined. Subsequently, a comprehensive examination of the papers that met our specific criteria for inclusion was conducted. This scoping research reveals a concerning increase in psychological suffering, moral harm, cynicism, doubt, fatigue, and bereavement among doctors during the epidemic. Allocation of resources and provision of medical treatment were primarily governed by the principles of rationing, triaging, taking into account factors such as age, gender, and life expectancy. Inadequate professional controls and institutional services may have contributed to the decline in doctors' well-being. This study emphasizes the need to address the declining mental health and to reinstate the medical profession's commitment to promoting fairness and equal treatment.

**Keywords:** COVID-19, doctor, mental health, individual wellness, professional conduct

**1. Introduction**



All the articles published by Chelonian Conservation and Biology are licensed under a [Creative Commons Attribution-NonCommercial4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/) Based on a work at <https://www.acgpublishing.com/>

The COVID-19 epidemic has caused significant grief among the general public and especially among frontline doctors (1). The World Health Organization (WHO) has expressed serious concerns over the increasing emotional burden and declining mental and physical health of doctors globally during the COVID-19 epidemic. Furthermore, the National Health Service in the United Kingdom has shown a significant increase in the psychological stress and anxiety experienced by doctors. This might potentially have negative consequences on their ability to make decisions and their overall professional behavior (3). The healthcare systems, which were already strained, overworked, and lacking resources, have been overwhelmed by the mounting pressure and public demands to maintain optimum functioning within the epidemic.

The epidemic has posed significant challenges to the psychological well-being and work-life balance of doctors, due to increased work hours, heavy workload, and concerns about contracting the virus in healthcare settings (5). Alongside the difficulties faced by doctors in terms of their mental and physical health, a combination of variables such as stress, anxiety, depression, and burnout during the COVID-19 pandemic have led to a decline in their psychological well-being (6). These factors include personal concerns, ambiguity, restrictions on movement and business operations, and decreased interpersonal interactions (7). Simultaneously, the increase in demand for all aspects of medical treatment and the redistribution of limited healthcare resources by reducing the level of care for other patients have generated several ethical questions about fairness and social equality (8).

Amidst the extraordinary crisis, the intricate network of personal, professional, and social demands placed on doctors has significantly eroded their self-assurance and effectiveness. The doctors are encountering challenges with professional responsibility and moral duties, mostly as a result of insufficient guidance and legal regulations that would have empowered them to make choices among several options (9). From this standpoint, the literature has documented a growing increase in several manifestations of psychological discomfort in doctors, including moral damage, which arises from acts or omissions that contravene an individual's moral or ethical principles (10, 11). Moral harm encompasses a variety of sensations, including feelings of guilt, humiliation, disgust, and hatred.

## **2. The role of doctors**

The cumulative effect of psychological disconnection, frustration, impaired decision-making, resource reallocation, and working under stress is thought to have negatively impacted the personal and professional well-being of doctors during the COVID-19 pandemic (12). Furthermore, both engaging in physical activity during leisure time and being physically inactive might contribute to a sedentary lifestyle. There is an urgent need for collaborative actions to reduce the influence of controllable risk factors that might possibly harm the well-being of doctors and hinder their capacity to handle the unprecedented situation (13). Regrettably, despite the presence of previous research indicating some indications of problems with the mental strain experienced by doctors and the challenges they face in their personal and professional lives,

there is still a lack of comprehensive knowledge on this subject. The aim of this study was to assess the influence of COVID-19 on the mental, individual, and occupational welfare of doctors. Furthermore, the objective of this study was to establish a distinct course of action that has the ability to guide the professional and personal welfare of frontline doctors.

This scoping review has shown that COVID-19 has had a significant effect on the mental health of doctors, as well as their individual problems, decision-making abilities, and patient care. The existing corpus of research has shown that frontline doctors experienced considerable stress as a result of their responsibilities, which included direct interaction with COVID-19 infected patients. Physicians are experiencing mental and physical burnouts due to their dread of transmitting diseases to their families, worries about their own health and the health of their loved ones, the fear of being stigmatized and prohibited, and the intense demands they face in their profession. The limited availability of resources and the reallocation of priorities by healthcare authorities resulted in organizational discord and mental anguish, as well as moral harm, among the practicing doctors.

The key finding of our scoping assessment is that the reallocation of resources and objectives has shifted the fiduciary character of medical professionals' employment towards a more utilitarian approach (14). Throughout history, medical practitioners have been acknowledged as moral actors who possess an innate duty of upholding justice and accountability (15). The enduring obligation and responsibility of medical professionals cannot be altered or halted when resources become limited, since the fundamental principle of medical professionalism revolves on the care and welfare of patients and society. Research has shown that, during the pandemic, a significant majority of doctors experienced a decline in confidence and professional authority, mostly as a result of non-medical variables such as economic and political choices (16,17).

### **3. The mental health of doctors**

One of the most often reported changes in the mental health of doctors was moral anguish, which refers to persons' emotional responses when they are aware of the correct path of action but are unable to carry it out (18). Amidst the COVID-19 issue, doctors encountered moral anguish when their individual and occupational principles clashed with the standards or expectations set by their institutions. Moral harm, a negative consequence of moral anguish, was shown to be widespread among frontline doctors who were treating patients infected with the coronavirus (19). Moral harm has many components, including: moral dissonance, which refers to a discrepancy between one's moral beliefs and actions; feelings of guilt, humiliation, and existential dilemmas; and the existence of sadness, wrath, and anxiety (20). Physicians encountered moral injury during the COVID-19 pandemic as a result of unintentional mistakes that resulted in death or illness. This was due to their inability to prevent harm or death, conflicts with colleagues, supervisors, or institutions that went against their personal beliefs, or dealing with leaders who did not fully accept responsibility for negative clinical outcomes (21).

According to Lu et al. (22), doctors had significantly higher levels of dread, despair, and psychological impairments in comparison to hospital managers. This discovery provides insight into the differing levels of stress and strain experienced by various hierarchical levels within the same institution. Maftai and Holman (20) conducted a survey-based investigation utilizing the moral injury events scale to assess the levels of self-reported negative physical and emotional stress in doctors treating COVID-19 and non-COVID-19 patients. The study found that both groups of physicians had similarly high levels of stress. The authors contend that medical professionals experience comparable workplace stress, perform identical operations, and adhere to medical instructions with equal diligence and commitment, regardless of whether they are assigned to COVID-19 or non-COVID-19 duties. This assessment emphasizes the need for immediate, specialized rehabilitation and remedial programs for medical professionals who have been harmed, in order to address and support their emotional and professional needs.

The perceived ambiguity and lack of control experienced by clinicians during the epidemic has resulted in the adoption of subjective decision-making approaches (23). The decision-making topic in our scoping study has clearly shown that challenges in determining priorities, changing expectations, and unmet requirements have resulted in doubt and skepticism among doctors (24). In a study conducted by Idilbi et al., researchers surveyed physicians to determine their preferences regarding the allocation of a ventilator to one of three COVID-19 patients: an 80-year-old man without cognitive impairment, a 50-year-old man with Alzheimer's disease (AD), or an 80-year-old man with AD (25).

Approximately 75% of the participants ranked the 80-year-old man with Alzheimer's disease as their least preferred option, whereas they were evenly split in their opinions on the choices of other patients. Research has shown that medical care priorities have significantly shifted, with critical choices being influenced by factors such as age, gender, ethnicity, life expectancy, and associated comorbidities (26). Similarly, the examined literature found that rationing, triaging, redeployment of knowledge, deferral of non-urgent cases, inferior replacements, and a lack of shared decision-making were often seen. Neves et al. (27) have referred to this shift in practice as "the process of determining who survives and who perishes?" The deferral of elective procedures across several medical and surgical fields resulted in unanticipated problems from an alternative standpoint (28).

#### **4. Conclusion**

This scoping study emphasizes the increase in mental anguish, moral harm, and other psychopathological occurrences among practicing doctors during the COVID-19 epidemic. There was a significant shift in the quality of patient treatment. Several reasons, such as heavy workload, stress, ambiguity, loss of morality, absence of professional advocacy and authority, and inadequate institutional resources, all contributed to the declining health of doctors. Professional advocacy and equality were undermined due to a perceived lack of professional and legislative constraints. This study emphasizes the need to identify and address unfavorable

working circumstances in the workplace, as well as provide mental and physical rehabilitation for doctors who have been harmed by these conditions. Additionally, it highlights the need of developing strategies to enhance individual resilience and promoting collaborative decision-making. Finally, medical practitioners should have the freedom to assist the suffering humanity autonomously, without being subjected to any commercial or political coercion.

## References

1. Barzilay R, Moore TM, Greenberg DM, DiDomenico GE, Brown LA, White LK, et al.. Resilience, COVID-19-related stress, anxiety and depression during the pandemic in a large population enriched for healthcare providers. *Transl Psychiatry*. (2020) 10:1–8. 10.1038/s41398-020-00982-4
2. Wu M, Han H, Lin T, Chen M, Wu J, Du X, et al.. Prevalence and risk factors of mental distress in China during the outbreak of COVID-19: a national cross-sectional survey. *Brain Behav*. (2020) 10:e01818. 10.1002/brb3.1818
3. Cipolotti L, Chan E, Murphy P, van Harskamp N, Foley JA. Factors contributing to the distress, concerns, and needs of UK Neuroscience health care workers during the COVID-19 pandemic. *Psychol Psychothe Theor Res Prac*. (2021) 94:536–43. 10.1111/papt.12298
4. Guraya SY. Transforming laparoendoscopic surgical protocols during the COVID-19 pandemic; big data analytics, resource allocation and operational considerations. *Int J Surg*. (2020) 80:21–5. 10.1016/j.ijso.2020.06.027
5. Mosheva M, Hertz-Palmor N, Dorman Ilan S, Matalon N, Pessach IM, Afek A, et al.. Anxiety, pandemic-related stress and resilience among physicians during the COVID-19 pandemic. *Depress Anxiety*. (2020) 37:965–71. 10.1002/da.23085
6. Viertiö S, Kiviruusu O, Piirtola M, Kaprio J, Korhonen T, Marttunen M, et al.. Factors contributing to psychological distress in the working population, with a special reference to gender difference. *BMC Public Health*. (2021) 21:1–17. 10.1186/s12889-021-10560-y
7. Shechter A, Diaz F, Moise N, Anstey DE, Ye S, Agarwal S, et al.. Psychological distress, coping behaviors, and preferences for support among New York healthcare workers during the COVID-19 pandemic. *Gen Hosp Psychiatry*. (2020) 66:1–8. 10.1016/j.genhosppsy.2020.06.007
8. Curković M, Košec A, Curković D. Medical professionalism in times of COVID-19 pandemic: is economic logic trumping medical ethics? *Intern Emerg Med*. (2020) 15:1585–6. 10.1007/s11739-020-02446-5
9. Arora A, Arora A. Ethics in the age of COVID-19. *Intern Emerg Med*. (2020) 15:889–90. 10.1007/s11739-020-02368-2

10. Greenberg N, Docherty M, Gnanapragasam S, Wessely S. Managing mental health challenges faced by healthcare workers during covid-19 pandemic. *BMJ*. (2020) 368:m1211. 10.1136/bmj.m1211
11. Dean W, Jacobs B, Manfredi RA. Moral injury: the invisible epidemic in COVID health care workers. *Ann Emerg Med*. (2020) 76:385–6. 10.1016/j.annemergmed.2020.05.023
12. Roca J, Canet-Vélez O, Cemeli T, Lavedán A, Masot O, Botigué T. Experiences, emotional responses, and coping skills of nursing students as auxiliary health workers during the peak COVID-19 pandemic: a qualitative study. *Int J Ment Health Nurs*. (2021). 10.1111/inm.12858
13. Elhadi M, Msherghi A, Elgzairi M, Alhashimi A, Bouhuwaish A, Biala M, et al.. The mental well-being of frontline physicians working in civil wars under coronavirus disease 2019 pandemic conditions. *Front Psychiatry*. (2020) 11:720. 10.3389/fpsyt.2020.598720
14. Lai J, Ma S, Wang Y, Cai Z, Hu J, Wei N, et al.. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Network Open*. (2020) 3:e203976-e. 10.1001/jamanetworkopen.2020.3976
15. 50. López L, Dyck AJ. Educating physicians for moral excellence in the twenty-first century. *J Relig Ethics*. (2009) 37:651–68. 10.1111/j.1467-9795.2009.00406.x
16. Mion G, Hamann P, Saleten M, Plaud B, Baillard C. Psychological impact of the COVID-19 pandemic and burnout severity in French residents: a national study. *Eur J Psychiatry*. (2021) 35:173–80. 10.1016/j.ejpsy.2021.03.005
17. 51. Robert R, Kentish-Barnes N, Boyer A, Laurent A, Azoulay E, Reignier J. Ethical dilemmas due to the Covid-19 pandemic. *Ann Intensive Care*. (2020) 10:1–9. 10.1186/s13613-020-00702-7
18. 52. Doka K, Rushton CH, Thorstenson TA. Healthcare ethics forum'94: caregiver distress: if it is so ethical, why does it feel so bad? *AACN Adv Crit Care*. (1994) 5:346–52. 10.4037/15597768-1994-3017
19. 53. Zhizhong W, Koenig HG, Yan T, Jing W, Mu S, Hongyu L, et al.. Psychometric properties of the moral injury symptom scale among Chinese health professionals during the COVID-19 pandemic. *BMC Psychiatry*. (2020) 20:1–10. 10.1186/s12888-020-02954-w
20. Maftai A, Holman AC. The prevalence of exposure to potentially morally injurious events among physicians during the COVID-19 pandemic. *Eur J Psychotraumatol*. (2021) 12:1898791. 10.1080/20008198.2021.1898791
21. Williamson V, Murphy D, Greenberg N. *COVID-19 and Experiences of Moral Injury in Front-Line Key Workers*. Oxford: Oxford University Press UK. (2020).

22. Lu W, Wang H, Lin Y, Li L. Psychological status of medical workforce during the COVID-19 pandemic: a cross-sectional study. *Psychiatry Res.* (2020) 288:112936. 10.1016/j.psychres.2020.112936
23. Rajan D, Koch K, Rohrer K, Bajnoczki C, Socha A, Voss M, et al.. Governance of the Covid-19 response: a call for more inclusive and transparent decision-making. *BMJ Global Health.* (2020) 5:e002655. 10.1136/bmjgh-2020-002655
24. Miljeteig I, Forthun I, Hufthammer KO, Englund IE, Schanche E, Schaufel M, et al.. Priority-setting dilemmas, moral distress and support experienced by nurses and physicians in the early phase of the COVID-19 pandemic in Norway. *Nurs Ethics.* (2021) 28:66–81. 10.1177/0969733020981748
25. Brooke J, Jackson D. Older people and COVID-19 isolation, risk and ageism. *J Clin Nurs.* (2020) 29:1–13. 10.1111/jocn.15274
26. Razai MS, Kankam HK, Majeed A, Esmail A, Williams DR. Mitigating ethnic disparities in covid-19 and beyond. *BMJ.* (2021) 15:372. 10.1136/bmj.m4921
27. Neves NM, Bitencourt FB, Bitencourt AG. Ethical dilemmas in COVID-19 times: how to decide who lives and who dies? *Rev Assoc Méd Brasileira.* (2020) 66:106–11. 10.1590/1806-9282.66.s2.106
28. Guraya S. Combating the COVID-19 outbreak with a technology-driven e-flipped classroom model of educational transformation. *J Taibah Univ Med Sci.* (2020) 15:253. 10.1016/j.jtumed.2020.07.006