

Keep Beating: Handling Burnout in Cardiothoracic Surgery

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Cardiothoracic surgery is a demanding field that requires technical skills, mental agility, and emotional resilience. Performing operations on vital organs in high-stress situations carries significant risks for patients and providers alike. Despite the rewards of saving lives and improving patients' quality of life, cardiothoracic surgeons are vulnerable to burning out, wherein they feel emotionally, mentally, and physically exhausted. Burnout has far-reaching consequences for individual surgeons, their teams, and the broader healthcare system, yet it remains an under-recognized and under-addressed challenge in the field. Therefore, we examined the prevalence and impact of cardiothoracic surgeon burnout, by exploring potential contributing factors and discussing strategies for prevention and intervention.

Recent studies have shed light on the prevalence and impact of burnout among cardiothoracic surgeons. A 2021 survey of members of the Society of Thoracic Surgeons found that 55% of respondents met the criteria for burnout, with higher rates among younger surgeons and those in academic positions [1]. Another study by Chow et al. found that cardiothoracic surgeons had higher rates of burnout than other surgical specialties and that burnout was associated with poorer quality of life, decreased job satisfaction, and increased intention to leave the profession [2]. Burnout also has implications for patient care, as it can lead to medical errors, reduced patient satisfaction, and increased healthcare costs [3]. Cardiothoracic surgery has become so competitive that residents cite the perpetual pressure to perform at a high level as a significant factor in their burnout [4].

The causes of burnout among cardiothoracic surgeons are multifactorial. Some factors are related to the nature of the field, such as long hours, high workload, and exposure to traumatic events. Others are related to the work environment, such as lack of support from colleagues and administrators, insufficient resources, and a culture that values productivity over self-care. Finally, some factors are related to individual characteristics, such as perfectionism, anxiety, and difficulty coping with stress. It is important to recognize that burnout is not solely the responsibility of individual surgeons but is also influenced by systemic and organizational factors that require collective action to address. Cardiothoracic surgery is a highly specialized and complex field that requires extensive training and experience. Surgeons often work long hours, including weekends and holidays, and are frequently on call. This can lead to a sense of overwhelming responsibility and a lack of work-life balance, contributing to burnout. Studies have shown that long working hours and increased workload are associated with higher levels of burnout among surgeons

[5]. In a 2022 cross-sectional study of over 27,000 surgeons, Al-Ghunaim et al. calculated that burnout was associated with a 2.5-fold increased risk of medical error [6]. Burned out surgeons are more likely to cogitate on their errors, blame themselves, and be unable to extrapolate themselves from the issue at hand [6]. This leads to a perpetual spiral of self-doubt, blame, and exhaustion. Another contributing factor to burnout among cardiothoracic surgeons is the high-stakes nature of the work. Cardiothoracic surgery is often performed on patients with life-threatening conditions, and there is a high level of stress associated with the potential for adverse outcomes. Surgeons may feel a sense of guilt or failure when a patient does not have a positive outcome, and this can contribute to emotional exhaustion and depersonalization [7]. A 2021 review by Johnson et al. also highlights how surgeons who aren't included in the decisions made by the program, have fewer social events, and a lack of gratitude and acknowledgment from senior staff are all contributing factors to persistent burnout [4].

When a valve becomes obstructed, the heart must work twice as hard to supply blood to the organs that depend upon it. Similarly, the burnt out cardiac surgeon will have to work twice as hard to provide the same quality of care to their patients. Preventing and addressing burnout among cardiothoracic surgeons requires a multifaceted and collaborative approach. At the individual level, strategies such as mindfulness, exercise, and social support can help mitigate the effects of stress and promote resilience. In analyzing the Society of Thoracic Surgeons' 2019 workforce report, Ikonomidis et al. state it is best to celebrate the little victories daily and find the meaning of their life's work [8]. Surgeons can also prioritize self-care by setting boundaries and seeking help from mentors and seniors in their field. At the team and organizational level, interventions such as peer support, mentorship, and regular debriefings can promote a culture of support and teamwork that values the well-being of all members. A 2015 study with 3,896 surgeons highlighted how a 3.3% decrease in burnout and a 9% increase in life satisfaction occurred when organizations followed these initiatives [9]. French hospitals that have senior staff partaking in weekly rounds, staff meetings, and monthly acknowledgments of residents had lower levels of burnout amongst their residents [10]. Systemic changes such as reducing administrative burden, increasing staffing, and optimizing work processes can also help alleviate burnout. With only 239 cardiothoracic fellowship positions available in the United States, and a shortage of associated surgeons, there must be an increase in the positions available to dilute the workload of current surgeons [11, 12]. Finally, advocacy at the policy level is needed to address the root causes of burnout, such as inadequate reimbursement, high student debt, and regulatory burdens.

Burnout is a significant and under-recognized challenge facing cardiothoracic surgeons. The high prevalence and impact of burnout on individual surgeons, teams, and patients highlight the need for proactive and collaborative efforts to prevent and address burnout. By recognizing the complex interplay of individual, environmental, and systemic factors that contribute to burnout and implementing evidence-based strategies to promote well-being, we can ensure that cardiothoracic surgeons are able to continue to provide high-quality care for patients.

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