



THE PREVALENCE OF BURNOUT AND ITS ASSOCIATED RISK FACTORS AMONG INTENSIVE HEALTHCARE PROFESSIONALS: A SYSTEMATIC REVIEW

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Abstract

Burnout is a condition caused by prolonged stress, which may arise from having an excessive number of duties either at home or work, and is characterized by feeling drained physically, mentally, or emotionally. It is conceptualized as resulting from chronic workplace stress that has not been successfully managed. Though it can impact healthcare professionals of any kind, it is more commonly found among those who tend to the needs of critically ill patients. An imbalance between an employee's characteristics and issues within the workplace or other factors within the organization is responsible for increasing the risk of burnout among intensive healthcare professionals. In the intensive care unit, it is common for the staff to have extended and intense interactions with the patients. This ongoing stress can be emotionally taxing and damaging for the helping professionals who work continuously in such situations. The purpose of this article was to investigate past research that focused on the frequency and causes of burnout among highly skilled healthcare professionals. As soon as healthcare professionals show signs of the ailment, which is related to their work, it should be treated as an occupational disease. Doctors and nurses frequently experience this. Intensive healthcare professionals are individuals who specialize in medical care and provide support to patients who are at risk of immediate danger to their lives. In order to gain a better understanding of the potential hazards faced in the workplace, it is essential to explore the impact of burnout on healthcare workers who have frequent contact with extremely sick patients, their loved ones, and emergency incidents.

Keywords: Burnout, healthcare professionals, intensive care unit, predictors, prevalence

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DOI: 10.48047/ecb/2023.12.si10.00377

Introduction

Burnout results from a disruption of the equilibrium between the demands of the job that people are exposed to and the resources they have available. It is brought on by excessive and prolonged stress (Bakker and Demerouti, 2007). The syndrome's detrimental effects on workers providing people-oriented services, particularly those in the health care industry, are a key component (Allen and Mellor, 2002). Burnout was introduced to the mental health lexicon in the 1970s and has been found in a wide range of healthcare professionals. It is defined as the exhaustion of physical or emotional strength as a result of protracted stress or frustration. The phrase was first used in reference to the shutdown of a jet or rocket engine around 1940. Freudenberger (1974, 1975) applied the term to humans in the middle of the 1970s, partially replacing terms like "depression" and "nervous breakdown" that were used more loosely. It is believed that intensive care unit (ICU) staff members experience higher levels of burnout because of their busy work schedules.

A health care provider may become physically, mentally, and emotionally exhausted from providing intensive care (IC), which could turn into burnout. Doctors are under a lot of pressure to "keep up," especially given how quickly technology is developing today. Family obligations must be balanced against this effort. Additionally, there is actual exhaustion as a result of a busy practice; most practitioners share "on-call" duty, which requires contact with patients whose progress or treatment plan is unknown; heavy workloads; daily dealing with life-or-death situations; difficult decisions regarding the maintenance of impaired living vs. "do not resuscitate" orders; and, finally, there are the constant interruptions at the office, the hospital, and the home.

Most telling of the path to burnout is the expressed opinion of 30–50% of doctors who say they would encourage their offspring to pursue other career paths rather than enroll in medical school if they were to start their careers over (Bluestone, 1993). There is life after medicine, as many people who have retired have discovered. One person left medicine because it had been transformed from a noble profession into a pretentious business (Tepper, 1993). Similar to doctors, nurses are frequently and continuously exposed to the sick, the dying, and death. Nurses are present for their assigned patients throughout eight-hour and frequently twelve-hour shifts, in contrast to physicians, whose contacts are sporadic and shorter in duration. In this line of work, overwork has always been a problem, and in many rural hospitals, double shifts have become more common. Despite signs that most 12-hour nurses experience fatigue, extended shifts have become more and more popular (Lindborg and Davidhizer, 1993).

Stress and burnout are frequently confused. Despite the fact that the symptoms may be somewhat similar, there are a few significant variations. Stress can make burnout worse, but it is not the main cause of burnout (Burisch, 2006). Burnout is not always a possibility, even though long hours, a demanding workload, or other factors may cause stress in employees. Employee performance at work and patient outcomes suffer when they can't handle stressful situations (Howlett et al., 2015). The intensive care unit (ICU) is a difficult and demanding place to work. In addition to having to deal with the emotional impact of dying patients and their families, doctors and nurses are forced to make difficult decisions and break bad news to patients and their families. Among intensive care unit nurses and doctors, these factors undoubtedly contribute to stress and burnout (Divatia, 2014).

Table 1 indicating the prevalence of burnout among intensive healthcare professionals

Author / year	Variable	Sample	Place	Sampling Technique	Design	Statistics	Key findings
Imo (2017)	Mental Health and Burnout	Not mentioned (30 papers were reviewed)	United Kingdom	Not mentioned	Systematic review design	Data extraction tool was created in Microsoft word and the tables generated from here were used in the result section of the paper. Mean scores of different studies were taken	The results indicated a worrying high rate of burnout and psychiatric morbidity among the doctors. Factors significantly associated with increase in the prevalence of burnout and psychiatric morbidity include low job satisfaction, overload, increased hours worked and neuroticism.
Guntupalli et al. (2014)	Burnout	N=213	USA	Not mentioned	Experimental – pre and post analysis	Linear regression and univariate frequencies were performed	Gender, managerial position and years of experience, had no effect on burnout and no difference in burn out on the basis of shift rotation Surprisingly, no difference in

							burnout was identified between the staff working over-time and those with no over-time hours. Nursing staff had more burnout than respiratory therapists.
Guttormson et al. (2022)	Moral distress, burnout, PTSD, anxiety and depression	N=488	USA	Random Sampling	Descriptive study	Kruskal-Wallis, Mann Whitney U test, Spearman's correlation	Respondents had higher anxiety and depression than the general population and higher risk for having PTSD than recent veterans or patients after traumatic injury. High levels of reported burnout and moral distress increase the risk of nurses leaving ICU practice or the profession.
Mehta et al. (2022)	Burnout	N=58	USA	Phenomenologic Approach	Muticenter mixed-method study	Correlation and t test In qualitative method, interviews were taken	High levels of burnout were identified through the MBI, but participants did not self-report high levels of burnout, suggesting a lack of awareness. Drivers of burnout were highly interconnected, but factors related to team dynamics and hospital culture were most prominent and shared across provider types.
Elbarazi, Youney and Elias (2017)	Burnout and STROBE	19 studies were analysed	Arab countries	Random sampling	Systematic review design	Meta-Analysis	Findings indicated that gender, nationality, service duration, working hours, and shift patterns were all significantly associated with burnout.
Kumar et al. (2021)	Stress, co-worker support, work life balance, job satisfaction, turnover intention, affective organizational Commitment depression, psychosomatic symptoms	N=150	India	Not mentioned	Correlational design	Chi square test, Fischer's test, t test, regression analysis	Burnout was significantly prevalent (37.6%) among intensive care nurses. High frequency of physical symptoms could be early indicators of burnout. Burnout was also found to be lesser amongst nurses who were able to maintain work life balance. It was significantly higher in nurses who did extra duty in last month, and who had poor job satisfaction.
Myhren, Ekeberg and Stokland (2013)	Job satisfaction, job stress, burnout, personality	N=196	Norway	Not mentioned	Cross-sectional study	t-test, correlation, linear regression analysis	The results indicated that nurses were less satisfied with their jobs compared to the physicians. Females scored higher than males in vulnerability and experienced staff were less vulnerable than inexperienced staff. The personality dimension neuroticism (vulnerability), job satisfaction, and job stress were significantly associated with burnout (EE).
Grover et al. (2020)	Physical health, perceived stress, burnout, internet addiction and depression	N=445	India	Not mentioned	Cross-sectional study	Chi-square test, Spearman's rank correlation and t-test	Burnout was highly prevalent among medical professionals, especially in the domain of emotional exhaustion, and this was followed by depersonalization. Younger age, female gender, and longer working hours/week were significantly associated with emotional exhaustion and depersonalization and with low personal accomplishment. Perceived stress was one of the important predictors of

							burnout in medical professionals.
Saravan abavan, Sivakuma and Hisham (2019)	Job satisfaction, Perceived stress and burnout	N=264	India	Not mentioned	Cross-sectional study	Fisher's test, t-test, Pearson's correlation	The results indicated prevalence of high burnout (80%) which included 6% of doctors and 69% of nurses. The study revealed better job satisfaction among doctors than nurses. The results showed that as the level of job satisfaction decreased, the level of burnout increased.
Zihan et al. (2021)	Burnout	N=2411	China	Online survey	Cross-sectional study	Multivariable logistic regression, Chi square test, non-parametric tests	69.7% of the medical staff were experiencing severe burnout, with similar percentages between doctors and nurses. Medical workers in eastern China were most likely to experience burnout (77.46%). This could be explained by the rising demand for medical services and the fiercely competitive environment of the medical field.
Teixeira et al. (2013)	Burnout	N=300	Portugal	Not mentioned	Prospective observational transversal multicenter study	Fisher's exact test, Mann-Whitney-U test, Kruskal-Wallis test, multivariate analysis	No significant difference was found among doctors and nurses. This study highlighted some new risk factors for burnout (ethical decision making, temporary work contracts), and also protective ones (maintaining activity in other settings outside the ICU) that were not previously reported.
Carletto et al. (2022)	Moral Distress and Burnout	N=115	Italy	Not mentioned	Cross-sectional study	Linear Regression	Nurses/physiotherapists showed a statistically significant higher percentage of personal accomplishment burnout (32.9%) compared with physicians (8.6%; $p = 0.012$). Moral distress was associated with the emotional exhaustion dimension of burnout.
Shbeer and Ageel (2022)	Burnout	N=150	Saudi Arabia	Not mentioned	Cross-sectional study	t-test and ANOVA	The leading cause of burnout among ICU staff in the study was workload. ICU staff was at high risk of emotional exhaustion, depersonalization, and lack of personal accomplishment.
EI – Sherbin y, Khasaba and Abdel-Hady (2017)	Job stress, Burnout and psychosomatic symptoms	N=140	Saudi Arabia	Not mentioned	Cross-sectional study	Chi-squared test Monte Carlo approximation test, Fisher exact test were. Pearson's correlation coefficient, Spearman correlation linear regression	High stress levels were found among ICWs, however, these levels lead to moderate levels of burnout necessitating the immediate intervention to control predictors of burnout such as high job demand, poor relations at work and role ambiguity which can lead to prevention of burnout in different intensive care units. For associated factors with high stress, females had higher stress levels than males
Tarcan, Tarcan and Top (2016)	Job satisfaction and burnout	N=164	Turkey		Cross-sectional study	Descriptive statistics, correlation, and logistic regression analysis.	The results of this study indicated that there was a significant relationship between burnout and job satisfaction and education, marital status and occupation affected burnout and job satisfaction. However, gender was also determined to have a significant effect on job satisfaction.
Hossein i et al. (2019)	Burnout	N=210	Babol	Stratified random sampling	Cross-sectional study	Descriptive statistics and analytical tests	The results showed 22.2% employees had high emotional exhaustion, and 26.6% had high depersonalization. None of the respondents felt low personal accomplishment.

							Emotional exhaustion and depersonalization had a significant inverse relation with the staff's educational level. There was a significant direct correlation between emotional exhaustion with work experience and type of employment and also between depersonalization with work experience and type of employment
Fields et al.(1995)	Burnout	N=883	USA	Not mentioned	Population based survey	Descriptive Statistics	There was no association between burnout status and the following work conditions: having fellows; having protected time for research and publications; frequency of being called at home; frequency of returning to the hospital when called at home; or call schedule. Respondents classified as burned out were significantly more likely than respondents who were classified as not burned out to feel that their work was not valued by others.

CONCLUSION

There are many stressful situations that can arise in an intensive care unit (ICU) for patients, family members, and medical staff. According to a growing body of research, the demanding and consistently high-stress work environment has a notable impact on both ICU physicians (Embriaco et al., 2007) and nurses (Schaufeli et al., 1995). ICU staff members are under a lot of pressure from various environmental stressors. Due to the extremely vulnerable nature of their patients, for whom every choice and action taken is of the utmost importance, intensive care units (ICUs) are medical care environments where healthcare professionals are highly susceptible to experiencing MD. Conflicts among coworkers in an ICU are also likely to be highly charged, made worse by the pressure to act quickly, the need to make the best possible intervention decisions, the burden of making end-of-life decisions, and the uncertainty of treatment outcomes. (Larson et al, 2017; Meltzer and Huckabay, 2004). In order for nurses, respiratory therapists, and doctors to manage workplace stress, there needs to be effective management of workplace burnout. It will be crucial in this situation to specify the severity level to which the staff is exposed while performing their duties in the ICU. Because of the serious effects of burnout in healthcare professionals, it is critical to recognize and address this condition. Burnout is gaining a lot of attention since it has such a negative impact on physicians' well-being, institutions' performance, and patient outcomes (Morse et al., 2012) Medical errors, angry attitudes toward patients, and a challenging working environment can all result from burnout among healthcare

professionals. The presence of burnout in physicians and nurses is a complex problem that should be taken into consideration by providing interventions and if possible, combined and multidimensional interventions should be used. Critical care medical professionals should take an active role in promoting their own well-being because they have a significant voice. Each person working in critical care should be personally in charge of managing their own burnout symptoms and any related effects. They ought to be able to identify the symptoms of burnout and use the resources that are currently out there. Similar to this, friends and family of critical care medical professionals should be made aware of early signs and educated about BOS and its effects. One important tactic to combat stress and BOS in the ICU workplace may be to establish and maintain a healthy work environment that promotes respect.

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