

Burnout among intensive care nurses and the role of social support: A narrative review

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Abstract

Introduction: Burnout is a growing phenomenon in the healthcare sector, particularly affecting nurses working in Intensive Care Units (ICUs).

Purpose: To identify burnout among Intensive Care Nurses and the role of social support.

Methodology: This narrative review was based on a bibliographic search of reviews and research studies drawn from international databases. The language other than English and Greek was the exclusion criterion for the articles.

Results: This literature review explores the causes and consequences of burnout among ICU nurses, the importance of social support, and recommended interventions drawn from the literature. Factors such as work intensity, time pressure, crisis management, and exposure to human suffering increase the vulnerability of these intensive care unit nurses. Research indicates that social support is a vital protective factor that can alleviate burnout symptoms and bolster the mental resilience of healthcare professionals.

Conclusion: Burnout is a critical issue for ICU nurses, leading to serious consequences for their personal well-being and the quality of care they provide. Appropriate measures, such as social support for ICU nurses, are urgently needed to mitigate the effects of burnout and ensure optimal patient care,

Keywords: Burnout; Intensive Care Unit; ICU nurses; Social support; Patient Quality of Care

1. Introduction

Occupational burnout was first identified in the 1970s by Herbert Freudenberger and systematically studied by Christina Maslach. It is a syndrome that results from prolonged work stress and encompasses three main characteristics: emotional exhaustion, depersonalization, and a diminished sense of personal agency [1-2]. A commonly accepted term for the phenomenon is Maslach (1982), which states that employees' emotional exhaustion leads to a diminished feeling of sympathy and/or respect toward customers and patients. This exhaustion affects every employee who comes into contact with others daily. Individuals perceive situations negatively; this is an internal psychological experience involving attitudes, motivations, expectations, and emotions, linked to various physical and psychological problems. It can occur even in people without a history of mental health issues, resulting in decreased productivity and performance [1-2].

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The phenomenon of burnout occurs at higher rates among healthcare professionals, particularly nurses and physicians, due to their daily direct contact with human suffering. Numerous studies have been conducted on the burnout of nurses working in hospitals, and it appears that this issue has been and continues to be a scourge with a negative impact on nurses [3-4]. In healthcare settings, especially in intensive care units, the nature of the work makes professionals vulnerable to burnout [5]. ICU nurses care for critically ill and unstable patients, involving intense physical and mental strain, along with the responsibility for immediate care. Frequent exposure to death, constant vigilance, and demanding shifts adversely affect well-being and job satisfaction in these professions [6].

2. Methodology

The methodology followed was based on the bibliographic search of reviews and research studies drawn from the international databases Medline, Pubmed, and Google Scholar. The keywords used were burnout, intensive care unit, ICU nurses, social support, and patient quality of care. The exclusion criterion of the articles was the language other than English and Greek.

3. Factors contributing to burnout and global data

According to Maslach, burnout is caused by the prolonged relationship between individuals and various dimensions such as workload, control, reward, social relevance, justice, and values [7]. In particular, excessive workload and numerous demands to deliver optimal care result in unbearable pressure, making it easier for health professionals to make mistakes and often neglect aspects of patient care. This negligence leads to ineffective care for patients, despite numerous studies highlighting the importance of providing holistic care aimed at improving the quality of life for patients, including those suffering from cardiovascular diseases [8-9]. Another dimension is control, as health professionals are often not provided with sufficient resources to complete their work safely, including personal protective measures and antiseptics. Financial constraints frequently prevent hospitals from supplying essential equipment, such as hand hygiene tools, which are of utmost importance [10]. Additionally, hospitals often fail to offer health professionals specific incentives, such as financial rewards for their contributions, resulting in underpayment, particularly among nurses. Consequently, the issue of injustice emerges as health professionals recognize the disparity between workload and remuneration. Furthermore, regarding social relevance, health professionals frequently feel disconnected from the interdisciplinary team, leading to feelings of isolation, disappointment, and diminished social support. Moreover, health professionals may experience limitations when their actions contradict their own aspirations and values [7].

The nature of work in ICUs is characterized by intensity, complexity, and emotional stress. Nurses must manage complex cases, respond immediately to emergencies, and collaborate with medical teams under time pressure. Staff shortages, overtime, frequent shift changes, and limited rest opportunities increase work-related stress [11-14]. Moreover, interpersonal conflicts in the workplace, insufficient support from management, and the lack of substantial recognition for their work exacerbate feelings of professional frustration [15-16]. These factors, combined with personal challenges and a lack of external social support, lead to gradual mental exhaustion and professional detachment [16-18]. According to international studies, the burnout rate among ICU nurses is alarmingly high. In the United States, 60% of ICU nurses display symptoms of burnout. The situation is similarly alarming in Europe, with rates exceeding 45% in several countries [19]. In Greece, the COVID-19 pandemic has underscored and worsened this phenomenon, with studies showing a rapid increase in the relevant indicators. Additionally, with the onset of the pandemic, numerous patients were admitted to intensive care units, pushing the workload to its maximum capacity, many of whom exhibited post-intensive care syndrome due to long-term hospitalization, frailty syndrome, and other related issues. Furthermore, the course of the pandemic also contributed to the emergence of post-COVID-19 syndrome, which, in turn, led to significant changes in the health landscape [19-23].

4. Consequences of burnout

Burnout has significant consequences for both nurses and patients. On an individual level, it is associated with increased rates of anxiety, depression, and job dissatisfaction, which poses a major issue if no solutions are found, as all of these negatively impact health professionals, particularly nurses working in hospitals, making them feel apathetic about their work and consequently reducing the optimal provision of care [18,24]. Burnout in nurses can also lead to physical symptoms such as fatigue, sleep disturbances, gastrointestinal problems, and circadian rhythm disturbances. At the organizational level, burnout results in reduced performance, increased absenteeism, and early departures from work [24-26]. Furthermore, the quality of patient care suffers, as attention to detail decreases, errors increase, and both patient and family satisfaction decline [24-26]. Burnout in ICU nurses is closely linked to serious psychological

consequences. Repetitive stress, constant exposure to crises, and the inability to effectively relieve stress gradually lead to emotional exhaustion. Many nurses report losing their ability to respond emotionally to patients and begin to act coldly and distantly as a defense mechanism. Therefore, the negative impact of burnout on healthcare professionals is evident and is inextricably connected to the reduced provision of quality care [27].

5. The role of social support and strategies to address burnout

Social support is a vital means of protection against burnout. It encompasses emotional support, practical assistance, and a sense of belonging in a nurturing environment [3]. Studies indicate that fostering positive relationships with colleagues, supervisors, and friends significantly reduces stress and burnout levels. Nurses who perceive support from their social and work environments exhibit greater resilience to psychological stress and enjoy higher job satisfaction [28-29]. The integration of social support and workplace support systems plays a crucial role in tackling burnout among nurses in intensive care units. Specifically, organized workplace interventions are critical for preventing and managing burnout. Implementing employee support programs, offering psychological counseling, and encouraging participative management enhance job satisfaction. Furthermore, bolstering leadership and cultivating a culture of positive feedback can further promote the well-being of nurses [28-29].

Additionally, strategies like continuing education, professional training, and lifelong learning serve as effective measures to tackle the issue. More specifically, ongoing education and professional development are essential components in managing and preventing burnout. When nurses feel competent and adequately trained to handle challenging and demanding clinical situations, their stress levels decrease significantly, and their self-confidence improves. Educational programs that focus on developing emotional intelligence, recognizing and managing stress, as well as enhancing communication skills among nurses working in ICUs, positively influence the resolution of the issue [28-30].

6. Interventions and Recommendations

Implementing targeted interventions—including psychoeducation, individual counseling, communication skills enhancement, wellness initiatives, and leadership development—has been shown to play a pivotal role in reducing occupational burnout. These multidimensional strategies go beyond alleviating surface-level symptoms and address the underlying psychosocial factors contributing to burnout. Psychoeducational programs raise awareness of stress mechanisms and psychological well-being, while counseling provides structured support for processing emotional distress. Improvements in communication skills promote clearer interpersonal interactions, thus minimizing conflict and misunderstanding in professional settings. At the same time, wellness programs encourage holistic health practices that mitigate the long-term effects of stress. Leadership development further enhances organizational capacity by equipping leaders with the emotional intelligence and managerial skills necessary to foster supportive team dynamics [31-34].

Moreover, sustained investment in professional training, evidence-based stress management techniques, and organizational culture reform is essential for preventing and effectively managing burnout. Educational initiatives to build competencies in emotional regulation, time management, and conflict resolution enhance individual and collective resilience. Stress management strategies, such as mindfulness practices, workload restructuring, and relaxation techniques, enable employees to navigate occupational demands more effectively. Critically, the promotion of a psychologically safe, inclusive, and values-driven workplace culture reduces stigma associated with mental health concerns and facilitates open, constructive dialogue. Collectively, these interventions contribute to developing a resilient workforce and an organizational climate in which individuals are empowered not merely to endure, but to flourish [31-34].

7. Conclusion

Burnout among ICU nurses is a complex, multifactorial issue that requires a coordinated approach. Enhancing social support, both within and outside the workplace, along with organizational reforms, can significantly mitigate the effects of this phenomenon and contribute to building professional resilience. Additionally, strategies and measures such as psychoeducation, counseling, communication enhancement, wellness programs, and leadership can further reduce burnout and assist ICU nurses in managing it.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Maslach C, Jackson SE. The measurement of experienced burnout. *Journal of organizational behavior*. 1981 Apr;2(2):99-113
- [2] Embriaco N, Papazian L, Kentish-Barnes N, Pochard F, Azoulay E. Burnout syndrome among critical care healthcare workers. *Current opinion in critical care*. 2007 Oct 1;13(5):482-8
- [3] Theofilou P, Rousta E, Alefragkis D, Zyga S, Tzavella F, Tsironi M, Alikari V. Burnout syndrome and social support in Greek nursing professionals. *Int J Adv Res Nurs*. 2020 Jan;3(1):18-23
- [4] Chastali-Sitara M, Alikari V, Platis CH, Tsironi M, Zyga S, Alefragkis D, Theofilou P. Association between perceived social support and occupational burnout in Greek nurses: A preliminary study. *Progress in Health Sciences*. 2020 Dec 7;10(2):22-8
- [5] Mealer M, Jones J, Moss M. A qualitative study of resilience and posttraumatic stress disorder in United States ICU nurses. *Intensive care medicine*. 2012 Sep;38:1445-51
- [6] Maslach C, Leiter MP. Understanding the burnout experience: recent research and its implications for psychiatry. *World psychiatry*. 2016 Jun;15(2):103-11
- [7] Dall’Ora C, Ball J, Reinius M, Griffiths P. Burnout in nursing: a theoretical review. *Human resources for health*. 2020 Dec;18:1-7
- [8] Alefragkis D, Tousoulis D, Toutouzas K, Kyritsi E, Papageorgiou D, Polikandrioti M. Quality of life in patients with coronary heart disease before and six months after coronary artery bypass grafting (CABG). *Nosileftiki*. 2024 Jul 1;63(3)
- [9] Giournta AM, Alikari V, Platis C, Oikonomopoulou G, Alefragkis D, Theofilou P. Assessing the quality of life and depression among patients with heart failure and heart attack. *Health Psychology Report*. 2020 Jun 1;8(3):211-8.
- [10] Alefragkis D, Alikari V, Kelesi M. The importance of hand hygiene in health care settings Dimitrios Alefragkis. *International Journal of Midwifery and Nursing Practice*. 2019;2(1):102-105
- [11] Gómez-Urquiza JL, De la Fuente-Solana EI, Albendín-García L, Vargas-Pecino C, Ortega-Campos EM, Canadas-De la Fuente GA. Prevalence of burnout syndrome in emergency nurses: A meta-analysis. *Critical care nurse*. 2017 Oct 1;37(5):e1-9
- [12] Van Mol MM, Kompanje EJ, Benoit DD, Bakker J, Nijkamp MD. The prevalence of compassion fatigue and burnout among healthcare professionals in intensive care units: a systematic review. *PloS one*. 2015 Aug 31;10(8):e0136955
- [13] Moss M, Good VS, Gozal D, Kleinpell R, Sessler CN. An official critical care societies collaborative statement: burnout syndrome in critical care health care professionals: a call for action. *American Journal of Critical Care*. 2016 Jul 1;25(4):368-76
- [14] Rushton CH, Batcheller J, Schroeder K, Donohue P. Burnout and resilience among nurses practicing in high-intensity settings. *American journal of critical care*. 2015 Sep 1;24(5):412-20
- [15] Poncet MC, Toullic P, Papazian L, Kentish-Barnes N, Timsit JF, Pochard F, Chevret S, Schlemmer B, Azoulay É. Burnout syndrome in critical care nursing staff. *American journal of respiratory and critical care medicine*. 2007 Apr 1;175(7):698-704
- [16] Adriaenssens J, De Gucht V, Maes S. Causes and consequences of occupational stress in emergency nurses, a longitudinal study. *Journal of nursing management*. 2015 Apr;23(3):346-58
- [17] Shanafelt TD, Mungo M, Schmitgen J, Storz KA, Reeves D, Hayes SN, Sloan JA, Swensen SJ, Buskirk SJ. Longitudinal study evaluating the association between physician burnout and changes in professional work effort. In *Mayo clinic proceedings* 2016 Apr 1 (Vol. 91, No. 4, pp. 422-431). Elsevier

- [18] Halbesleben JR. Sources of social support and burnout: a meta-analytic test of the conservation of resources model. *Journal of applied Psychology*. 2006 Sep;91(5):1134
- [19] Bergquist S, Otten T, Sarich N. COVID-19 pandemic in the United States. *Health policy and technology*. 2020 Dec 1;9(4):623-38.
- [20] Giannopoulou I, Tsobanoglou GO. COVID-19 pandemic: challenges and opportunities for the Greek health care system. *Irish journal of psychological medicine*. 2020 Sep;37(3):226-30
- [21] Alefragkis D. Post intensive care syndrome prevention and impact of COVID 19. *Progress in Health Sciences*. 2021 Jun 14;11:112-7
- [22] Papageorgiou D, Kosenai K, Gika E, Alefragkis D, Keskou D, Mandila C. Quantification of frailty syndrome in ICU patients with clinical frailty scale. *Folia Medica*. 2020 Dec 31;62(4):655-61
- [23] Alefragkis D, Kaba E, Mastorakis G, Narliotis G, Evgenikos K, Biagkis N, Papageorgiou D. Post COVID – 19 syndrome. *Rostrum of Asclepius/Vima tou Asklipiou*. 2023 Jan 2;22
- [24] Uchino BN. Social support and health: a review of physiological processes potentially underlying links to disease outcomes. *Journal of behavioral medicine*. 2006 Aug;29:377-87.
- [25] Bakker AB, Demerouti E. The job demands-resources model: State of the art. *Journal of managerial psychology*. 2007 Apr 3;22(3):309-28
- [26] West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. *The lancet*. 2016 Nov 5;388(10057):2272-81
- [27] Salyers MP, Bonfils KA, Luther L, Firmin RL, White DA, Adams EL, Rollins AL. The relationship between professional burnout and quality and safety in healthcare: a meta-analysis. *Journal of general internal medicine*. 2017 Apr;32:475-82
- [28] Kim B, Jee S, Lee J, An S, Lee SM. Relationships between social support and student burnout: A meta-analytic approach. *Stress and Health*. 2018 Feb;34(1):127-34
- [29] Velando-Soriano A, Ortega-Campos E, Gómez-Urquiza JL, Ramírez-Baena L, De La Fuente EI, Cañadas-De La Fuente GA. Impact of social support in preventing burnout syndrome in nurses: A systematic review. *Japan Journal of Nursing Science*. 2020 Jan;17(1):e12269
- [30] Ruisoto P, Ramírez MR, García PA, Paladines-Costa B, Vaca SL, Clemente-Suárez VJ. Social support mediates the effect of burnout on health in health care professionals. *Frontiers in Psychology*. 2021 Jan 13;11:623587
- [31] Theofilou P, Matalliotakis A, Alefragkis D. Investigation of the quality of life among mental health professionals: The contribution of counseling. *World Journal of Advanced Research and Reviews*. 2022;15(2):417-2
- [32] Lee HF, Kuo CC, Chien TW, Wang YR. A meta-analysis of the effects of coping strategies on reducing nurse burnout. *Applied nursing research*. 2016 Aug 1;31:100-10
- [33] Jun J, Costa DK. Is it me or you? A team approach to mitigate burnout in critical care. *Critical Care Nursing Clinics*. 2020 Sep 1;32(3):395-406
- [34] Zhang Y, Wang C, Pan W, Zheng J, Gao J, Huang X, Cai S, Zhai Y, Latour JM, Zhu C. Stress, burnout, and coping strategies of frontline nurses during the COVID-19 epidemic in Wuhan and Shanghai, China. *Frontiers in psychiatry*. 2020 Oct 26;11:565520