



Brief Review of Burnout Syndrome in Emergency Department Physicians

Alhandi Omar Helal M^{1,2*}, Al Thani SN³, Al Amri A⁴ and Kadhim Al khawaja FF⁴

¹Department of Pediatrics, Al Wakra Hospital, Al Wakra, Qatar

²Department of Pediatrics, Aleppo University, Faculty of Medicine, Aleppo, Syria

³Faculty of Medicine, Weill Cornell University, Doha, Qatar

⁴Department of Pediatrics, Hamad General Hospital, Doha, Qatar

Mini Review

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***Corresponding author:** Dr Mahmoud Alhandi Omar Helal, MD: Department of Pediatrics, Alwakra Hospital, HMC, PO Box 3050, Doha, Qatar; Tel: +974 50074001; Email: Mhelal1@hamad.qa

Abstract

In the late 1960s, the term burnout was first used in healthcare, which describes the psychological and emotional stress experienced by medical staff in free clinics. Since then, idiom burnout has been used to describe job-related stress in any health facility from hospitals to health centers. The Maslach Burnout Inventory, developed by Maslach and Jackson, was used to measure burnout and is an applied tool to diagnose burnout among physicians. It evaluates the presence of burnout using three subscales: emotional exhaustion, depersonalization, and sense of personal accomplishment.

The objective of this brief review was to assess the prevalence, risk factors, and definitions of burnout among emergency physicians in the literature.

The prevalence of burnout in medical literature ranges from 25% to 77.8%. Consequently, many causes can be determined to explain the differences in burnout prevalence, such as different countries, health systems, and populations. Several risk factors associated with the occurrence of burnout include work-related burnout, balancing work and private life, number of years in the job, anxiety, depression, sex, and lifestyle.

The methods of dealing with burnout varied, such as talking with others, crying, making alternate plans, daydreaming, preparing for the worst, using food or coffee, and sleeping.

Finally, the authors noticed a steady association between developing of burnout and the war environment, so, physicians who come from war countries suffer from burnout more than others, which returns to several reasons.

Keywords: Burnout; Emergency Physicians; Risk Factors

Abbreviations: MBI: Maslach Burnout Inventory; EE: Emotional Exhaustion; DEP: Depersonalization; PA: Personal Accomplishment; ED: Emergency Department; EM: Emergency Medicine.

Introduction

The late 1960s was the first time to use the term burnout in healthcare, which describes the psychological

and emotional stress experienced by medical staff in free clinics [1]. Since that date, idiom burnout has been used to describe job-related stress in any health facility, from hospitals to health centers [2,3]. According to foundational performance by Maslach, et al. [4] in the 1980s, burnout was described as a combination of depersonalization, emotional exhaustion, and low personal accomplishment caused by chronic stress of medical practice. In the medical literature, they measured “overall” burnout based on the combination of the three subcomponents. Several studies have mentioned that increased medical errors, longer post-discharge recovery times, lower patient satisfaction, and decreased professional work effort are associated with burnout [5-7]. Consequently, researchers, and physicians, are interested to know the prevalence and risk factors of burnout in physicians. Burnout is a syndrome in which a reduced sense of personal accomplishment, depersonalization, and emotional exhaustion develop in response to prolonged stress. Usually, emergency physicians have high rates of burnout compared to physicians in other specialties, such as dermatology. Pediatric emergency physicians are on the frontline; therefore, they have a high risk of burnout. The Maslach Burnout Inventory (MBI), developed by Maslach, et al. [8], is an applied tool to diagnose burnout among physicians. It evaluates the presence of burnout using three subscales: emotional exhaustion (EE), depersonalization (EP), and sense of personal accomplishment (PA).

Prevalence

The prevalence of burnout in the medical literature varies from 77.8% in a study of American Emergency trainees [9] to 25% in pediatric emergencies [10]. Many causes can be determined to explain the difference in burnout prevalence, such as different countries, health systems, and populations, where most of the studies were performed by EM physicians, without determining the ratio of residents to specialists.

In a systematic review study, Boutou, et al. from 27 studies found that differences in the availability of emergency physicians, limitation of health resources, accessibility of emergency departments, dissimilarities in the number, available subspecialties, and level of experience of the rest of the emergency department personnel, which could be seen between countries, are some factors that could produce significant differences in the overall working environment of emergency departments. Consequently, there is less or more psychological burden on the medical staff [11].

The incidence of burnout ranged from 53.4% to 77.8% in six studies on EM emergency medicine residents and trainees [9,12-16]. In another study by Soltanifar, et al. [17] the prevalence of EE among female physicians working in EM in Iran was up to 84.5%. On the other hand,

Patterson et al reported a low level of 25% burnout among physicians working in an emergency pediatric department [1]. Thus, when evaluating the prevalence of burnout, the characteristics of the studied population and the definitions used for diagnosis have to be considered.

Some studies have reported the prevalence of each subscale of the MBI [17-22], thus, burnout prevalence was calculated as medium-high EE or medium-high DEP [10,22,23].

A systematic review of 182 studies involving 109 628 participants in 45 countries from 1991 to 2018. They found that 85.7% (156/182) of the studies used the MBI to assess burnout. Either overall burnout (0% to 80.5%) or burnout subcomponents, (0% to 86.2%) on EE, (0% to 89.9%) on DEP, or (0% to 87.1%) on PA. The differences return to inconsistencies in definitions and assessment methods.

In a study of 139 Pediatric Emergency fellows, where (65%) female, the burnout prevalence was 30.9% (95% CI, 24%–39%), men (13%), women (39.8%), single (50%), divorced (66.7%), and married (27%). In addition, the major risk factors of burnout were work environment (52.5%), fellowship academic responsibilities (36%), schedule (35.3%), work-life balance (33.8%), and career/occupational stress (33.1%) [24].

Another study included 16 666 physicians (1584 emergency physicians, 12 103 surgeons and 2979 radiologists/ pathologists) between 1997 and 2010. They found that emergency physicians have a higher range of specialties than surgeons and radiologists/pathologists due to the high stress of emergency medicine [25].

Risk Factors

Work environment related burnout: Several risk factors associated with the occurrence of work-related burnout have been reported. In a large study of 1272 EM physicians in the USA [22], the predictors of burnout were increased number of shifts per month, lack of job involvement, dissatisfaction with career, low self-assessment of productivity and effectiveness, dissatisfaction with specialty services, and intent to leave practice within 10 years. Similarly, in another study of 160 EM physicians, Jalili et al. found that shortage of equipment, problems with the work's physical environment, relationship with other services, work overload, and feeling of insecurity for future careers were risk factors for burnout [19]. Other study by Golberg, et al., in a 4-year study among 1272 EM physicians, found that job involvement, workload (number of shifts per month), and career satisfaction are risk factors [22]. Several studies found that the problematic coworker's relationship was the most frequent risk factor of

burnout in the literature [19,22,26,27]. Emergency staff in different departments have to present facilitated teamwork with other hospital services, despite the difficulty in being fulfilled.

In a Turkey study of 167 EM residents, they found that the presence of a consultant and his appreciation for the EM resident was a good predictor of DEP and EE scores [28]. However, the presence of violence (physical and verbal) in the emergency department increases both EE and DEP [21,26].

Balancing work and private life: The difficulty in balancing work and private life due to high job demands is another factor that has been associated with burnout. In a study by Jalili et al, among 160 EM physicians, difficulties in balancing professional and family life were the strongest predictors of EE [19]. In addition, Estryn-Bahar, et al. reported that the clash between work and family, which is more dominant among emergency physicians than other specialties, is strongly associated with burnout [27]. Work-life balance decreases burnout in the study of Ben-Itzhak et al. on 70 EM physicians. Consequently, the presence of a supportive family and sufficient time with family are two factors that can reduce the severity of burnout [20].

The number of years in the job: The association between the number of years in the job and the risk of burnout has also been studied. In a study of 263 physicians in Romania, more years in the job was associated with higher burnout scores; the percentage of physicians who reported high EE changed from 11% in the 4th year of work to 17% in the 7th year [29]. In addition, Toker et al. indicated that physicians who stayed >10 years in the job had significantly lower DEP scores than those during their first year [26].

Other Risk Factors have also been mentioned. In a study of 193 EM physicians, Kuhn et al. reported that the single strongest predictor of burnout was anxiety due to concern for a bad future [30]. In several studies on EM physicians, depression-related with Number of Years in the Job was found to be a predictor of burnout [13,20,31].

Demographic risk factors: The association between sex and burnout was also studied. In a study by AL Qahtani, et al. on EM physicians in Saudi Arabia, the development of burnout in male physicians was three times higher than in females [32]. In contrast, in a Canadian study, Patterson et al. reported an association between female sex and burnout among physicians [10]. Additionally, Jalili, et al. reported that younger physicians are associated with the development of high DEP scores [19]. In addition, Toker, et al. reported that younger EM physicians had higher DEP and EE scores [26].

Lifestyle: The effects of lifestyle on the development of burnout were assessed. AL Qahtani, et al. found that smokers were at a higher risk of burnout than non-smokers [32]. Goldberg, et al. reported that alcohol consumption is associated with burnout in 1272 EM physicians in the USA [22]. Furthermore, several studies have reported that sleep disorders and taking medications are associated with a high risk of burnout [22,32]. In contrast, frequent and regular exercise is associated with a low risk of burnout [22,27].

War environment related burnout: Professor Helal, et al. noticed a steady association between the development of burnout and war environment. Physicians who come from war countries suffer from bullying, persecution, racial discrimination, psychological and social stress, and employers' domination over them in some countries; therefore, they must work in unsuitable environments.

As an example, what happened in Syria, where thousands of physicians were forced to flee from the scourge of war, spread worldwide: Turkey, Arab Gulf countries, and Europe. Where they faced difficulties in obtaining visas and jobs, they were also forced to work in jobs that were not suitable psychologically or physically, exposure to extra hours of work without pay, exposure to unsuitable working conditions and location, and the lack of work essentials such as an office table or a chair to sit on. Most of Syrian doctors cannot return to their country, they are forced to work, in any circumstances. Furthermore, their families are not allowed to visit them, which increases their psychological and physical stress.

Dealing with Burnout

The participants faced burnout using various methods. Keller et al. studied the methods of facing stress on 77 emergency physicians in the USA, and found that physicians used short- and long-term coping methods to deal with stress, such as talking with others, crying, making alternate plans, daydreaming, preparing for the worst, using food or coffee, and sleeping more than usual [28]. In another study on all staff in the emergency department, Howlett et al. reported that action responses were associated with decreased burnout, whereas emotional responses were associated with increased burnout [33].

Conclusion

Burnout in emergency centers is a major health problem that must be properly diagnosed and treated. Most studies indicate a high prevalence of burnout, mostly because of various definitions and samples. Consequently, Burnout is a syndrome in which depersonalization, a reduced sense of personal accomplishment, and emotional exhaustion develop as a result of chronic stress. This can be caused by

the working environment, difficulty in balancing work and family life, number of years in the job, demographic factors, and war environment.

All these risk factors increase psychological and physical stress and expose physicians to heart diseases, such as cardiac ischemia, hypertension, stroke, intracranial hemorrhage, renal failure, stress ulcers, and spinal cord diseases.

Dissatisfaction is a significant factor behind attempts to leave and early retirement among the medical staff.

According to our findings, burnout and intention to leave the job reached amazing percentages among emergency participants, who frequently reported puny management, poor working status, and rickety health. Therefore, our approach shows that job conditions are more significant than salary.

Recommendations

- Our team suggests improving work-family balance, working processes through participation, and multidisciplinary teamwork to prevent the early departure of emergency physicians.
- A significant lack of physicians appears to quadruple the burnout average among emergency physicians. Therefore, correcting the lack of physicians in the PEC, PICU, and NICU is a radical approach.
- We suggest using the term Helal-Shaikha Syndrome, which refers to the steady relationship between burnout and war environments among immigrant and refugee physicians.

Conflicts of Interest

No conflicts of interest for any authors

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