

Burnout Among Healthcare Professionals in the USA

by

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Submitted to the Departments of Psychology

School of Purchase College

in partial fulfillment of the requirements

for the degree of Bachelor of Arts

Purchase College

State University of New York

May 2020

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Abstract

Many healthcare professionals (HCPs) experience on-going work-related stress. Burnout is an epidemic in the healthcare system, although many organizations are attempting to address burnout. Future research is needed to enhance studies and improve ways to reduce burnout, and to develop strategies to help HCPs combat the symptoms of burnout. Burnout is a prevalent issue among HCPs; the impact on HCPs is severe and validated by numerous studies. The main objectives of this literature review are to: 1) define burnout among HCPs, 2) describe the epidemiology of burnout in HCPs, 3) explore the work-related and non-work related risk factors for burnout in HCPs, 4) examine strategies to prevent burnout, and 5) review the effectiveness of interventions for burnout among HCPs. The unique environment that healthcare involves (i.e., demanding schedules, time constraints, the pressure to save lives, and long hours) is often unfavorably and conducive to burnout. The high prevalence of burnout and the suffering it causes HCPs and their patients points to the urgent need for effective prevention and intervention programs.

Keywords: burnout, exhaustion, workload, risk factors, HCPs, occupational stress

Burnout Among Healthcare Professionals (HCPs) in the USA

The healthcare industry is the largest service-providing sector in the USA, with more people employed in the industry than in any other occupation (Dressner, 2017). The work environment encountered by healthcare professionals (HCPs) is often stressful, with many experiencing intense work-related stress. People working in healthcare face immense challenges in maintaining positive mental, emotional, and physical health. Working long hours, shift work, dealing with death, coping with unrealistic expectations of medicine from patients and family members are everyday challenges that HCPs cope with (Brooks, Gerada & Chalder, 2011). In addition, HCPs experience challenging time constraints, and a continuous focus on the needs of others contributes to emotional fatigue (Leiter & Maslach, 2016).

According to the Occupational Safety and Health Administration (OSHA), workplace violence is four times more common within healthcare in comparison to private industry (OSHA, 2015). Unfortunately, workplace violence towards HCPs is on the rise and under-reported (Mealer et al., 2009). About 39% of nurses experience verbal abuse each year (Jacobowitz), and about 47% of physicians have reported being physically assaulted at work (Stephens, 2019). Substantial work-related stress takes a toll on the mental and emotional health of many HCPs, and cost-consequence studies have found that it is costing the healthcare industry billions of dollars (Han et al., 2019).

Unmanaged chronic work-related stress is known as the occupational phenomenon referred to as burnout (WHO, 2019). In the USA, over half of the physicians and one-third of nurses experience symptoms of burnout (Reith, 2018). Using a base-model projection, researchers found that approximately 4.6 billion dollars a year are attributable to physician

burnout, with turnover rates increasing cost (Han et al.,2019). Thus, the financial costs of burnout in the USA are substantial (Han et al.,2019).

Burnout, although not classified as a medical condition, has three distinct symptomatic signs: emotional exhaustion, depersonalization (detachment), and low personal accomplishment (WHO, 2019). The intense feeling induced by increased work-related stress is known as emotional exhaustion, which includes emotional and cognitive depletion and physical fatigue (Mudallal, Othman, & Hassan, 2017). Emotional exhaustion results from dealing with numerous serious issues and stressors related to end of life care and death. The experience of emotional exhaustion leaves many HCPs feeling unable to cope with work, fatigued, helpless, and depressed (Mudallal, Othman, & Hassan). In addition to negatively impacting HCPs, lack of empathy for patients due to psychological distress can further contribute to adverse patient outcomes. Depersonalization brings about interpersonal problems due to the feelings of detachment from ones' occupation and others (i.e., colleagues, patients) and can result in detachment from important protocols and instructions. Lastly, low personal accomplishment is the negative, cynical perspective toward work and feelings of worthlessness as a professional, which reduces work efficiency, and professionalism (Mudallal, Othman, & Hassan). In a study of primary care nurses, researchers found that 28% felt emotionally exhausted, 15% were affected by detachment (depersonalization), and 31% felt low personal accomplishment (Monsalve-Reyes et al.,2018).

Burnout has profound implications on HCPs critical thinking, work efficiency, work-life balance, and their patients' health outcomes. The experience of burnout is associated with other mental illnesses, such as depression, post-traumatic stress disorder (PTSD), acute stress disorder (ACD), anxiety disorders, and adjustment disorders (Mealer et al., 2009). Researchers found that

nurses who experience burnout were more likely to have symptoms of PTSD, which led to nurses reporting higher distress within family and friend relationships. Burnout negatively impacted their functioning in multiple areas, such as chores, school, and leisure, and decreased their overall satisfaction with life (Mealer et al.,2009). Unfortunately, burnout leaves HCPs susceptible to catching a cold, flu, pneumonia, or physical ailments (i.e., severe back pain, herniated disc) (Dressner, 2017).

Burnout, as an outcome of the workplace environment stressors, tasks, and work responsibilities, is a crucial topic to explore. Understanding and recognizing the risk factors associated with burnout is essential in deducing the right methods needed to address and reduce burnout within HCPs. It is essential to research prevention, intervention, and stress-management strategies that could aid many HCPs. Finally, research on the relationship between HCP well-being and patient health outcomes is essential to reduce the medical and cost-consequences of burnout within healthcare organizations.

The topic of burnout is complex, and there is a great deal of research on the topic, with contradictory findings and plenty of debate about burnout throughout the years. The main objectives of this literature review are to: 1) define burnout among HCPs, 2) describe the epidemiology of burnout in HCPs, 3) explore the work-related and non-work related risk factors for burnout in HCPs, 4) examine strategies to prevent burnout, and 5) review the effectiveness of interventions for burnout among HCPs. Translating these objectives into research questions, this literature review will focus: (1) How is burnout defined and measured? (2) What is the impact of burnout on healthcare professionals (HCPs)? (3) Why should we be concerned about burnout among HCPs? (4) What are the work-related risk factors associated with burnout? (5) What outreach, prevention, and intervention programs for burnout are currently available to HCPs? (6)

When burnout occurs among HCPs, what innovative programs exist to help them? What is the core content and structure of these programs? (7) What are the most effective coping strategies taught in these programs?

Articles were identified using the SUNY Purchase online database system for students (i.e., Psych-ARTICLES, PsycINFO, PubMed [Medline], Psychology and Behavioral Science by Collection, and ScienceDirect) from 2009 to present. Searches for articles and journals consisted of burnout, nurses, registered nurses (RN), doctors, physicians, healthcare workers, healthcare professionals, medical students, nursing students, physician sub-specialties, nurse sub-specialties, stigmas, mental illness, barriers to seeking mental health care. Most importantly, correlational data should be taken cautiously this research was intended to find the relationships between HCPs and burnout. Current analysis and statistics were found to inform and examine the challenges HCPs incurred during earlier educational years (medical and nursing school) and during professional career. Articles written before 2009 (10 years ago) were excluded from this literature review. Studies written from 2009 to the present were excluded if they: were not written in English, did not address burnout within nurses and physicians, did not address the association between burnout and patient health within nurses or physicians, and did not address prevention, intervention, and coping strategies.

Review of Literature

Definition and Measurement of Burnout

Persistent occupational stress takes a toll on the mental, emotional, and physical health of many HCPs. Burnout is a state of emotional, mental, and physical exhaustion that occurs from prolonged stress (WHO, 2019). Burnout among HCPs is a serious concern, with many

researchers describing burnout as an epidemic within the healthcare profession. Clinical psychologist Herbert Freudenberger introduced burnout in 1974. Through experience and observation, he noticed the emotional exhaustion and psychosomatic symptoms among the staff working in a high-stress clinic (Reith, 2018). Social psychologist Christina Maslach observed numerous human service workers and studied the emotional stress of their job and found a correlation between professional identity and job behavior (Poghosyan, Aiken, & Sloane, 2009). These observations led to the creation of the Maslach burnout inventory (MBI), utilized to focus on the frequency in which HCPs experience any of the three distinct indicators of burnout (Mealer et al., 2009; Grow, McPhillips, & Batra, 2019). The three-part scale consists of a 22-item survey that uses a 7-point Likert scale that ranges from “Never to “Every day” to measure emotional exhaustion (EE), depersonalization (DP), and personal accomplishments (PA) (Poghosyan, Aiken, & Sloane, 2009). Exhaustion is one of the main components of burnout that brings on feelings of intense and emotional depletion. Physical signs are feeling drained, aches and pains, low immunity system (leaving many HCPs susceptible to frequent illnesses), changes in circadian rhythms (Maslach & Leiter, 2016; Mudallal, Othman, & Hassan, 2017). Depersonalization and low personal accomplishment are the other traits that leave HCPs feeling detached and cynical toward work and professional responsibilities/demands (Mudallal, Othman, & Hassan, 2017). and increased absenteeism (Mudallal, Othman, & Hassan). Burnout is a steady process and takes time to develop, but over time, individuals express physical, emotional, and behavioral signs. All signs and symptoms of burnout reduce work efficiency and professionalism (Mudallal, Othman, & Hassan).

There are many models of burnout, and research conducted includes cross-sectional or longitudinal studies. Most use statistical methods or correlational databases concentrated on

situational and individual factors to describe burnout syndrome, the sources of burnout, and effects (Maslach & Leiter, 2016).

Impact of Burnout on HCPs. As science and technology have increased in complexity, there have been profound changes to the world of medicine, which further increases work demands, responsibilities, and accountability for HCPs, thus expanding work-related stress. Emotional exhaustion is the primary symptom of burnout, which is primarily linked to workload (Maslach & Leiter, 2016). An intense and heavy workload leaves many HCPs feeling overextended at work, disregarded by colleagues, and even patients, which contributes to emotional fatigue. In a seven-month cross-sectional study, Mealer and colleagues (2009) distributed 810 questionnaires in a trauma II facility at the University of Colorado Hospital to the unit managers of intensive care units (ICU), inpatient non-ICU in high-stress areas (operating room, emergency room, bone marrow transplant, high-risk obstetrics), and outpatient and additional inpatient non-ICU units. Core findings from this study comprised of 90% of the nurses being positive for a minimum of one of the three types of burnout syndrome (BOS). A study investigating the prevalence of burnout among surgeons showed that the rate was high with, 40% of surgeons fulfilling criteria for burnout, 31.7% reporting emotional exhaustion, 26.5% reporting depersonalization (detachment), and 12.8% reporting low personal accomplishments (Dimou et al.,2016). Just recently, in the 2018 systematic review of burnout in physicians (Rotenstein et al., 2018), 67% reported burnout, 72% reported emotional exhaustion, 68.1% reported depersonalization, and 63.2% reported low personal accomplishment (Rotenstein et al., 2018). As a result of burnout, previous studies have found many HCPs have a lack of pride or accomplishment in one's work, depression, suicidal ideation, and self-prescribing or receiving prescriptions from colleagues for anti-depressants (Dimou et al.,2016).

Burnout not only has severe consequences for HCPs but has a negative impact on patient care and patient outcomes. In a nation-wide physician survey across the U.S., out of the 6,695 physicians who responded (3,574), ten percent reported making at least one medical error within the last three months (White, 2018).

Some studies found as much as 1 in 20 prescriptions containing errors (Hall et al., 2016). Burnout has also led to increased turnover rates, with HCPs wanting to leave the job (profession) altogether, increased absenteeism, and a negative (cynical) perspective of work-related responsibilities (Maslach & Leiter, 2016). A systematic review of HCPs well-being, burnout, and patient safety, 89% of studies found a relationship between wellbeing and errors made, and 83.3% of studies found a relationship between burnout and errors (Hall et al., 2016).

Cost-consequence analysis studies indicate that physician burnout costs are substantial, varying from \$7600 to \$11000 per physician annually (Han et al., 2019). This cost alone is substantial, and it pleads for further investigation and research on recognition, intervention, prevention strategies on burnout. Not to mention, more research on the underlying risk factors or contributors to burnout, which could indicate why HCPs are more susceptible to burnout than other professionals. Research on risk factors that increase the risk of burnout can help to inform prevention and intervention so that we will turn to a discussion of this research.

Risk Factors of Burnout

Demographic Characteristics

Previous literature has found that age, gender, marital, and socioeconomic status are associated with burnout (Grow, McPhilips, & Batra, 2019). Multiple studies have found that female physicians have 30-60% increased odds of burnout (Dyrbye et al., 2017). Additional

studies found based on the MBI scale, 43.3% of female surgeons met the criteria for burnout compared to 39% of men (Dimou et al.,2016). However, gender is not an indication of who will experience burnout more; instead, it is the combined variables of workload, work-life balance, family expectations, and other gender roles (Halbesleben, 2010).

Age does play a role, with studies finding that age is significantly associated with emotional exhaustion and experience (Mudallal, Othman, & Hassan, 2017) and cost-consequence models attributing physician burnout is significant in physicians 55 and younger (Han et al.,2019). Furthermore, nurses 45 years or older experience more occupational injuries and illnesses than younger nurses resulting in more days away from work (Dressner, 2017). Marital status and spousal occupation are additional contributing factors with studies revealing that marriage with someone whose occupation is not a physician increases the rate of burnout by 23 %, and having a child under 21 years-old increased the rate of burnout by 54% (Dyrbye et al.,2017).

Work-Related Risk Factors

Workload

Overall, burnout often seems to occur because of a combination of work stress (i.e., workload, demands, and time constraints), individual traits (i.e., personality traits[superiority or rescue complex]), and organizational factors (i.e., lack of support from upper management, lack of recognition) that build into a vicious cycle of occupational stress (Maslach & Leiter, 2016).

Workload within the healthcare facilities are hectic and call for high demands such as, dealing with a heavy patient workload, having severely ill or unstable patients, life-threatening and acute emergencies, time constraints, and being understaffed (Maslach & Leiter, 2016; Leiter

& Maslach, 2009). Heavy workload and workplace environment contribute to burnout and exhaustion, which led to occupational injuries.

When additional work responsibilities heightened by organizational bureaucracy pulls one away from the reason they entered the profession, it causes dramatic friction (Maslach & Leiter, 2016). Unfortunately, additional work responsibilities that impede patient care can further increase symptoms of low personal accomplishment and detachment towards one's occupation.

Since burnout is a response to chronic unmanaged occupational stress (WHO, 2019), perception and experience of stress within the work environment is crucial to the well-being of the HCP and overall patient health outcomes. Job demands that place high stress on the HCPs combined with dealing with human lives are the active components that lead toward burnout. Maslach and Leiter (2016) found that their six-work life areas that contribute to burnout, workload, control, reward, community, fairness, and values. These domains capture the complicated relationship between the dimensions of burnout (i.e., emotional exhaustion, depersonalization, personal accomplishment) and how one's expectation of their work is an additional element toward occupational stress (Grow McPhillips & Batra, 2019). According to the Mayo Clinic (2018), burnout risk factors are associated with unmanaged work-life balance, identifying strongly with work, high workload, little to no control over-work, and working in health care.

Lack of appropriate resources and workplace hazards

When a worker feels like they cannot make decisions, or they cannot work efficiently due to lack of resources, it can substantially affect work efficiency and enhance emotional

exhaustion (Maslach & Leiter, 2016). In dealing with life and death matters, a lack of control over resources needed to work efficiently can heighten occupational stress.

The lack of means during emergencies, lifting and moving, and transporting patients, working understaffed, lack of training and policies, inadequate security staff, unrestricted public access, congested waiting rooms, long waits are all OSHA workplace environment risk factors that contribute workplace violence (OSHA, 2015).

Workplace hazards (i.e., crowded halls, bending, lifting patients) leave millions of HCPs exposed to fatigue, physical ailments, slips, falls, back pain, and other injuries (Dressner, 2017). According to the Monthly Labor Review from the U.S. Bureau of Labor Statistics, overexertion and bodily reactions led to 45.6% of occupational injuries and illnesses among nurses (Dressner). Workplace hazards reported in 2016 found that 19,790 nurses had sustained work-related injuries that required days away from work costing organizations (Dressner). The workload experienced by many HCPs is a massive contributor and directly associated with exhaustion (Brom et al., 2015).

Workplace Recognition, Communication, and Community

Reward or recognition consists of a meaningful reward system that acknowledges hard-working behavior. Lack of recognition or feeling undervalued can decrease work productivity and decrease moral (Maslach & Leiter, 2016; Leiter & Maslach, 2009). Control consists of the perceived lack of control in one's occupation, resources, or equipment. Community is communication and support among colleagues. When making crucial life-threatening decisions that require critical thinking, efficient communication, and teamwork among colleagues are essential, any major conflicts (i.e., friction with colleagues) within the workplace environment

can add to job stress (Maslach & Leiter). Fairness is the perceived equality and respect among all colleagues that decisions made at work (i.e., policies) are fair and impartial for all. Values are the shared idealistic morals or views that appealed many to their job. When personal ethical values and organizational values of a company collide, it causes friction and leads workers to feel divided in their work and question work responsibilities (Maslach & Leiter). In a previous study, risk factors associated with the feelings of stress recalled by HCPs consisted of the heavy workload, high demands/expectations of patients and families, verbal and physical assaults (i.e., dealing with irate patients and families), working night shifts and holidays, dealing with ill unstable or end of life patients, dealing with life-threatening and acute emergencies, time constraints, being understaffed, lack of equipment available or equipment failure, working with the opposite sex, friction with colleagues, lack of teamwork, insufficient communication among colleagues, lack of professional knowledge, and having little or no social support from managers (Akbar et al., 2017). These daily hassles and stressors due to work-related stress are associated with burnout. Previous and current competing studies have all found that these work-related risk factors are a conglomerate assortment that fuel work stress and perpetuate the symptoms of burnout if not dealt with appropriately. Mealer and colleagues (2009) found that risk factors, such as years employed, and inexperience contributed to nurses developing symptoms of burnout syndrome (BOS). Which makes much sense since when many first enter their occupation, many are inexperienced. Although schooling and clinical are there to assimilate many into their professional role, burnout has been discovered as early as medical and nursing school (Mealer et al., 2009).

Workplace violence

Workplace violence is a legitimate problem within the healthcare occupation. Disturbance in the work environment can perpetuate immense distress, impair work efficiency, impede concentration, and affect interactions (i.e., avoidance behavior) with others around them (Jacobowitz, 2013). Occupational safety is crucial for a healthy work environment. Unfortunately, workplace violence towards HCPs is on the rise and under-reported (Mealer et al., 2009). Between 2003 and 2007, the U.S. Bureau of Labor Statistics found that 60% of all non-fatal violent assaults occur in healthcare and social assistance services with, 75% of attackers being patients or clients (Jacobowitz, 2013). According to the American College of Emergency Physicians (ACEP), 70% of E.R. physicians have testified that E.R. violence is increasing, and 80% of physicians admit that workplace violence has hindered with patient care (Stephens, 2019). Furthermore, physicians who experience workplace violence are seven times more likely to be anxious and four times more likely to have depressive symptoms (Jacobowitz). Undergoing physical violence, especially at work, can take a toll on anyone. So, when HCPs experience such attacks, they are more inclined to leave their job, attest to increased levels of exertion, and have issues carrying out their work (Jacobowitz). Unfortunately, this leaves many with increased lingering anger, fear of patients, discomfort taking care of patients, need to vent, wanting to keep incidents quiet, suppressed unpleasant feelings, and a desire for retaliation (Jacobowitz). These characteristic traits brought on by workplace violence only ignite the symptoms of burnout experienced by HCPs.

Systemic Factors

Many HCPs are aware of the barriers that affect patients, and patients are not afraid to voice opinions and become irate due to the inability to acquire suitable health care needs. These frustrations and disparities are known to turn verbal and lead to verbal and physical assaults

against HCPs. Physicians have attested to strains in caring for patients with low SES, trying to find colleagues to accept or assist in caring for patients that need specialists, trying to provide quality care, or needing to decline care due to low reimbursement rates (Arpey, Gaglioti, & Rosenbaum, 2017). These factors are hampering when trying to provide quality care and leave many HCPs frustrated, and when trying to tailor care with patients with low SES limits access and results in adverse patient health outcomes (Arpey, Gaglioti, & Rosenbaum, 2017). SES impacts patient care and enhances the work-related stress levels for many HCPs.

Non-work-related risk factors. Many are aware that HCPs hold themselves to a higher standard, with most dedicated to delivering quality patient care. Brooks and colleagues (2011) found that individual risk factors are along the lines of personality traits, capacity for emotional regulation, and one's perception of stress (Brooks, Gerada & Chalder). Doctors tend to have a strong sense of responsibility, integrity, and passion and tend to be over-committed, workaholics, with a desire for efficiency (Brooks, Gerada & Chalder). Given the frequency of exposure to stress, these individual risk factors tend to be an additional contributor to burnout. Bringing on feelings of guilt for things out of one's control, self-doubt, low self-esteem, and additional psychiatric comorbidities that, when fused with pre-existing individual vulnerabilities, can enhance the risk of mental illness (Brooks, Gerada & Chalder). Exposure to chronic occupational stressors leaves pre-disposed HCPs to psychological disorders, including depression, anxiety, sleep deprivation, fatigue, substance abuse, suicidal ideation, and relationship issues (Kumar, 2016). A study addressing suicidal ideation among physicians found 6.4% admitted to suicidal ideation, and 77.8% of them scored high on the PRIME-MD scale for depression (Dimou, Eckelbarger, & Riall, 2016). The physician suicide rates are alarmingly high at about 28 to 40 per 100,000 which is more than twice the rate of suicide in the general population (12 per

100,000) (Anderson, 2018). Previous research had indicated an association between anxiety and depression medical errors for errors (Hall et al.,2016), so psychological disorders impact physicians and the patients they serve. The conditions and experience of burnout among HCPs are associated with depressive symptoms (i.e., fatigue, lack of interest, and concentration) (Maslach &Leiter, 2016), signifying how impactful burnout is on the HCP.

Prevention & Intervention for Burnout

Prevention. Prevention is vital when acknowledging the impact of burnout on HCPs. Personal and organizational costs of burnout are severe and impactful on many levels, leading many researchers to evaluate and find different types of preventive interventive strategies. Multiple studies on burnout and data display different results on intervention programs. In a literature review examining inventive preventive strategies found practicing meditation (i.e. guided or mindfulness training) helps with the perception and management of stress and provides HCPs with different coping techniques (De Oliveira et al., 2019). Mindfulness training creates awareness of one's emotions and feelings towards others due to purposefully awareness on being in the present. Connecting with one's emotions can facilitate emotional self-regulation and coping skills. A study investigating mindfulness with physician participants found that, after an eight-week treatment of mindfulness-based stress reduction, Maslach Burnout Inventory scores improved along with subjects' blood pressure and heart rates (Amutio et al.,2015) with results continuing during the ten-month follow-up period (Amutio et al.,2015).

Stress management techniques are useful in helping with stress, but there are mixed reviews on the effectiveness of brief stress management training programs for reducing stress among HCPs (Kumar, 2016). Building resilience programs as a preventive strategy against burnout among HCPs can be essential. Resilience training is an impactful preventive tool in

assisting with managing chronic stress. Resilience training programs provide coping skills and aid an individual with the ability to overcome adversity effectively, leading to positive behavioral responses (Kumar, 2016). Resilience training has proven to be an efficient strategy in dealing with occupational stress (De Oliveira et al., 2019; Jacobowitz, 2013). Resilience training can provide the HCP with the ability to balance workload and prioritize better.

Since reducing burnout is the main objective, additional preventive strategies have begun addressing the work environment disturbance, which can perpetuate immense distress (Jacobowitz, 2013). Occupational safety is crucial for a healthy work environment. Programs, such as critical incident debriefing (CID) and critical incident stress debriefing (CISD), are tools used within some healthcare facilities to manage stress reactions for nurses and other HCPs that have experienced physical assault (Jacobowitz, 2013). Both programs provide HCPs the ability to communicate in small, supportive groups to decompress and address current incidents or adverse events that peaked stress responses due to occupational stress (Harrison & Wu, 2017). A previous meta-analysis found a large effect size (Cohen's $d = .86$), implying that CID programs help reduce acute symptoms of stress (Jacobowitz, 2013). CID techniques alleviate anxiety, stress, depression, sleep disturbances, feelings of incompetence, low personal accomplishment, low self-esteem, and guilt (Harrison & Wu, 2017). Providing or offering a routine structure CISD on an organizational level can facilitate in developing resilience in HCPs. Although programs like CID and CISD seem to have been successful, not all facilities provide such programs to nurses and other healthcare professionals.

Existing literature has found that improving work engagement is a preventive method of burnout (Kumar, 2016), which is positively correlated with personal accomplishment, psychological well-being, and mental resources than work dedication to the profession (Kanste,

2011). Work engagement is having a positive mindset on work responsibilities, job resources, and demands; it is characterized as having high energy levels (stamina), mental resilience, perseverance, and absorption (Kanste, 2011). When facilities promote work engagement (i.e., employee congress, leadership support), it facilitates involvement, organizational commitment, and intrinsic motivation (Canadian Centre for Occupational Health and Safety, 2018). Data analysis revealed that work engagement is positively associated with work commitment (Kanste, 2011). Previous literature and evidence-based research have found that effective leadership with support (Joint Commission, 2018) and addressing engagement is vital to personal satisfaction, which increases morale, resiliency, and trust (Canadian Centre for Occupational Health and Safety, 2018).

One innovative study by Stier-Jarmer and colleagues (2016) provided an exciting approach and they decided to investigate participants with different occupations (i.e., healthcare workers, administrative and commercial staff) with high-intensity stress levels (on the verge of burnout) to attend a three-week program of group therapy to lower their risk of burnout. The participants used techniques to self-assess stress levels, initiate regular use of relaxation techniques (i.e., mindfulness training, yoga, and muscle relaxation), and physical exercise (i.e., high-intensity sports). The participants in this program also had twenty-minute moor applications (mud bath and massage) known as health resort treatments (HRT) combined with stress management interventions (SMI). These strategies aided in reducing participants' perceived levels of stress. The pre-and post-study followed up with participants one, three, to six months after to assess for the effectiveness of the program (Stier-Jarmer et al.) using the Maslach Burnout Inventory-General Survey, Perceived Stress Questionnaire (PSQ), WHO-Well-being index, Euro-Qol health status index, and ICD-10-psychic symptoms.

Interestingly, this study recorded pre and post regularity of back pain and the frequency of sick days (absenteeism) taken in the prior six months (Stier-Jarmer et al.). Overall, researchers found that participants in the intervention program have substantial improvements in one, three, and six months after the intervention in comparison to controls and waiting groups, resulting in an improvement in psychological functioning over time (Stier-Jarmer et al.). Furthermore, participants attested to a significant decrease in back pain and sick days taken (Stier-Jarmer et al.). This program targeted some of the impacts of burnout and was successful in reducing perceived stress and emotional exhaustion (Stier-Jarmer et al.). This program was exciting as it intently focused on a significant reason many HCPs attest to calling in sick; injury and muscular ailments (i.e., back pain, herniated disc) (Dressner, 2017). Although this program was successful in targeting significant symptoms of burnout, such as emotional exhaustion, and perception of stress, it seems very pricey, which may not be affordable for some facilities. Also, some people may not like massages or consider them a source of relief, others may have allergies to moor(mud) applications, and many may not have the ability to access or afford such resources on their own. This study did not account for differences in personality traits, social support, or socio-demographical differences (i.e., age, gender, sex, educational status) (Stier-Jarmer et al., 2016). Furthermore, the recovery time is short, and the program requires further examination and replication to determine the efficacy of perception of stress and the effectiveness of the program over time (Stier-Jarmer et al., 2016).

While most programs group all HCPs together, programs need to address each profession and its responsibilities. For instance, the Mayo Clinic Physicians Well-Being Program was designed in 2007 to allow physicians to freely and openly discuss their frustration and concerns. This program consists of a survey designed to keep their anonymity. The co-directors, Dr.

Dyrbye and Dr. West, have researched burnout for years and realized it is a severe threat to HCPs well-being and to the quality of patient care delivered (Krisberg, 2018; Mayo Clinic, 2020). Overall, the program collects data and tests hypotheses on specific organizational and personal characteristics and interventions that can be used to obtain new knowledge and create new ways to provide further assistance to physicians who experience burnout (Krisberg, 2018; Mayo Clinic, 2020). This program addresses, captures, tracks, and trends all issues observed from a physician's perspective, which meets Joint commission (independent non-profit healthcare accreditation program) standards in distinguishing new hazards, trends, and new ways to improve and provide solutions (Joint Commission, 2018).

To address the violence encountered by HCPs, states, such as California and New Jersey, provide workplace violence prevention resources (i.e., CID, hospital safety zone programs) to help increase confidence and build resilience in HCPs'. To further push the zero-tolerance of physical violence against HCPs, seventeen states have implemented and enforced laws against assault or battery of HCPs (Jacobowitz, 2013).

To effectively reduce burnout, preventive planning, and strategies come from combined innovative measures of stress reduction techniques, organizational changes, and interventions once HCPs are experiencing burnout.

Intervention. Intervention programs for burnout consist of guided to non-guided mindfulness exercises, physical exercise (i.e., yoga), healthy eating, cognitive-based therapies (CBT), group discussions, retreats, and conferences (Kumar,2016). Cognitive-based therapy (CBT) is a psychotherapy approach used to relieve the feeling of stress and allow an individual to identify and cope with daily challenges with the prospective hope to negate negative thinking and respond to adverse events in a more effective way (Mayo Clinic,2020). Numerous studies have

validated the use of CBT as an intervention for anxiety disorders, clinical depression, and other mental illnesses. CBT can positively alter thoughts and emotions concerning stress and enhance behavioral responses (Kumar, 2016). A study investigating burnout and self-reported cognitive difficulties found that a ten-week CBT program considerably decreased emotional exhaustion and physical and mental ailments (Oosterholt et al., 2012). This study reported a decrease in burnout symptoms as a result of CBT, but the researchers found that these results did not last. Therefore, CBT seems to be helpful, at least temporarily, but future studies require extensive review of the impact of CBT over a longer period of time (Oosterholt et al., 2012).

A review of intervention programs by Awa, Plaumann, & Walter (2010) found that most programs involved person-directed, organizational-directed, or a combined program. The person and organization-directed intervention approach addresses both the personal and organizational aspects by changing work procedures, establishing better work evaluation and supervision, reconstructing tasks, decreasing work demands, facilitating job control, and including employees in decision making (Awa et al., 2010). The combined approach (both personal and organizational) yielded significant positive changes in burnout lasting up to a year after implementation (Awa et al., 2010). However, person-directed approaches, which focus on enhancing job competence, personal coping skills, various social support, and relaxation exercises, also had significant positive effects, with 82% of person-directed interventions lasting up to six months after implementation (Awa et al., 2010).

Researchers found that intervention programs that included refresher sessions provided longer-lasting changes in burnout for up to two and half years in comparison to non-refresher programs, which depending on the type (i.e., person-directed, organization-directed, or person-organization-directed) yielded six months to a year in changes (Awa, Plaumann & Walter).

Recommendations and Conclusion

Future Research. Efforts are needed to focus more on the development and evaluation of prevention and intervention programs to improve the occupational stress and work environments along with the well-being of HCPs that have experienced burnout syndrome. The healthcare industry is the largest service-providing sector in the USA, with more people employed in the industry than in any other occupation (Dressner, 2017). Understanding the challenges faced by many HCPs is helpful in the recognition, reduction, and prevention of burnout. The burnout composition of emotional exhaustion, depersonalization (detachment), and low personal accomplishment (WHO, 2019) are known to have profound repercussions on HCPs critical thinking, work efficiency, work-life balance, and their patients' health outcomes. Previous literature has found different studies with different results and contradictory conclusions (Chirkowska, 2012), implying that there has not been a clear consensus on an effective set of preventive programs to address the complex dimensions of burnout.

Prevention methods are required to improve the sources (i.e., workload, control, recognition, community, fairness, and values) of burnout have on HCPs. For instance, when confronted with tremendous and consistent time restraints in high job demands, many will develop psychological disorders (Canadian Centre for Occupational Health and Safety, 2018).

Therefore, future research should address the situational (job demands) and individual (personal characteristics) predictors to working and how symptoms of burnout impact how one is engaged in their work.

Since most stress management models use Lazarus transactional model of stress, future research needs to address the strengths and limitations of this model. In a study of the six coping

strategies by Lazarus and Folkman, results indicated that nurses utilized self-control, seeking social support, and escape-avoidance. However, an exciting finding was that nurses also adopted spiritual coping, situational coping, and preventive monitoring of situations, tactics Lazarus and Folkman did not foresee, and something for future research to address (Akbar et al.,2017). Situational coping consisted of the nurse taking control of adverse situations; meanwhile, preventive monitoring was an additional strategy employed by nurses to be on standby and be ready for any adverse situations (Akbar et al.,2017). Lastly, spiritual coping (based on religious preference), was employed by nurses to reduce stress and achieve peace (Akbar et al.,2017). Although the findings were interesting, why had nurses adopted such tactics, and why has this not been explored further? These questions should be addressed in future studies.

Like anything, starting at the beginning is an excellent way to tackle problems, since most HCPs require extensive education and clinical hours, both medical and nursing schools should implement recognition of symptoms of burnout. Studies have found that nursing students exhibit high levels of academic burnout, stress, and self-esteem issues (Edwards et al.,2010). One study found that 95% of nursing students identified themselves as having anxiety and/or depression, and were unhappy (Edwards et al.,2010), with many expressing fear of making medical errors or watching the death and anguish of patients in pain (Edwards et al.,2010). One study found that when medical residents experience burnout, there is an increased risk of depression, and they make more medical errors than fellow residents who solely experience burnout or depression (Hall et al.,2016). These statistics provide a framework of the relationship between of perceived stress, burnout, and mental illness.

Previous research has found that stress and feelings of depression start in medical school (Brooks, Gerada & Chalder, 2011). Thus, demonstrating that medical schools need to find other

comprehensive and efficient ways to train new doctors and be mindful not to de-humanize themselves and to treat themselves with compassion. More specifically, medical and nursing schools should educate students about how to identify signs of burnout and individual and institutional risk factors for burnout. Implementing yearly lectures on burnout could promote self-awareness and lead to decreases in burnout.

Facilities, hospitals, and medical and nursing schools need to steer toward cultivating a more positive work environment and find ways to reduce doctors' workload. Potential research should assess the effectiveness of curricula aimed at burnout prevention in medical and nursing schools, residency programs, and subspecialty programs. Unfortunately, there is a lack of current research on nursing students and the rate of burnout among them. Most studies focus relatively on medical students; future studies need to address more on nursing student burnout.

Additionally, schools should provide confidential outside therapy and focus on anonymity. Higher education organizations should pair both nurses and doctors during clinical training to evaluate patients and facilitate a program of practical communication tools, techniques, collaboration, and planning. Doing so will help increase cohesion with colleagues at work and facilitate social support, which is useful in managing workplace violence and stress (Jacobowitz, 2013). Facilities should understand that the healthcare sector is not only a human service-providing sector but a human-servicing-human providing sector. HCPs that work in the medical field are humans as well, and the training and exhaustion that comes from working in healthcare are tiresome, draining both physically, mentally, and emotionally.

While most studies have investigated occupational stress in the nursing profession, there has been no development in finding when actual occupational stress starts to form. Since most research studies have included quantitative research, it is essential to implement qualitative

studies. Qualitative research can help to understand burnout as a subjective experience, especially during one on one interview sessions. Qualitative research allows the researchers to listen and note the responses of HCPs and document how each person examines, identifies, and perceives the effects of stressors and how and when they adopted specific coping strategies. Henceforth, future research should require more qualitative studies with diversity in age groups, gender identities, a variety of medical fields and hospital units, and years of experience. These studies should compare facilities that have implemented stress management programs versus facilities that have not provided stress management programs (Akbar et al.,2017). Additional studies should also assess the impact of CBT and other interventions in facilities that offer these services versus facilities that do not. These studies should be followed up with pre-post analyses and annual reviews to see if the effectiveness of programs is successful in alleviating or reducing burnout. Furthermore, patient demographics, availability to resources (i.e., CID, CISD, and wellness programs), management and administrative styles, and colleague collaboration should also be addressed to access the role it plays with burnout. Future research needs to build on the relationships between practice and patient health outcomes and safety.

Healthcare organizations. Many organizations require modifications in order to reduce burnout. One modification is the implementation of an extensive yearly review of the structure, work processes, and demands. Secondly, healthcare organizations need to provide and evaluate professional development programs that will assist in better work placement. Thirdly, healthcare organizations need to promote healthy lifestyle choices to reduce stress and health symptoms, along with strengthening coping strategies for stress management (Kumar, 2016). In addition to tackling these three essential items, healthcare organizations could assist in increasing morale, team building techniques, engagement, psychological support, ultimately decreasing the risk of

burnout. Establishing appropriate recognition amongst peers, increasing growth opportunities, and promoting the development of a better work-life balance would also decrease burnout (Canadian Centre for Occupational Health and Safety, 2018).

Ultimately the goals for healthcare organizations are to foster positive work environments, requiring organizations to focus more on reforming the HCP's responsibilities, placing more focus and support on the HCPs. This requires holding executives, administrators, and managers accountable for addressing burnout and its impact on HCPs by providing intervention methods to improve the sources of burnout (i.e., workload, control, recognition, community, fairness, and values). Healthcare organizations and those implementing guidelines and procedures should require an appropriate assessment of how workload and other organizational factors contribute to burnout.

Implementation of wellness programs, relaxation rooms (i.e., calm and serene place for staff to relax and reflect in a positive setting to overcome anxiety attacks or to go during breaks) in facilities, fewer shifts, extra paid time off, or even brief beginning, middle, or end of shift huddles with colleagues or dyads (i.e., group or team of nurses or practitioners taking of particular patients) can help increase morale and reduce workplace stress throughout the day. Sometimes it takes simple changes; for instance, staff meetings, which require attendance and inform workers about the current changes and new implementation of policies, can help reduce the stress placed on HCPs. These meetings should include time for staff to be vocal about the problems, issues, or lack of resources that impair their abilities to perform their jobs. This segment of time should be non-judgmental and allow workers to feel safe expressing concerns regarding work responsibilities, policies, and management. Furthermore, organizations need to address staffing inadequacy, which plagues many healthcare facilities, especially hospitals.

Working in an understaffed environment only increases occupational stress and working without reprieve enhances exhaustion and leads to impactful cost-consequences.

Policy Makers. In the Sentinel Event Alert by Joint Commission (2018), they express how verbal and physical assault toward HCPs should not go unreported, suggesting that organizations need to jump on the problem as soon as it arises. Although some measures for workplace violence are being addressed, workplace violence remains at large. All states should have zero-tolerance laws against physical and verbal assaults on HCPs. After decades of research and acts of violence, numerous facilities have implemented a code system for agitated patients to alert security or other law enforcement. For instance, in facilities (i.e., hospitals), the use of standard “code blue” might be heard in some facilities. This code indicates the need for quick appropriate emergency personnel to come to location alerted to help resuscitate a patient. Like “code blue,” other facilities have implemented their alert system for HCPs. The implemented policies and codes systems are additional ways facilities have taken to keep HCPs safe. However, many organizations realize that violence is on the rise, and the need for new ways are essential.

For instance, South Carolina Hospital Associations has taken action to keep staff safe with their “Hospital Safe Zones,” the creation of this program is to reduce violence by identifying where violence starts in the first place by implementing zero violence tolerance. This program is committed to identifying and reporting incidents of violence against HCPs, by creating a culture where HCPs are encouraged to report incidents, therefore improving workplace safety for hospital staff (South Carolina Hospital Association, 2019). The facility believes that by focusing on the issue and bringing awareness, organizations can minimize or entirely rid silent incidents with zero-tolerance policies and codes (South Carolina Hospital Association, 2019). This program means to send a message to employees that the organization's

top priority is staff safety. It also communicates to the public that physical and verbal violence toward HCPs is not tolerated. These efforts are impactful when addressing sources of burnout. The U.S. health care policymakers need to do an annual evaluation of its laws, policies, regulations, standards, and procedures related to HCPs work environment, patient and occupational safety, professional development, and well-being. The Joint Commission calls for organizations to observe data, track, and trend all reports of workplace violence. Implementation of preventive and interventive resources could help reduce the violence that leads HCPs to be at greater risk of burnout (Joint Commission, 2018).

While working in healthcare is both challenging and rewarding, adopting healthy behaviors is key to one's overall well-being and optimal patient outcomes. Therefore, many HCPs should adopt ways to cultivate resilience at work and work diligently to obtain a healthy work-life balance. This can include anything from meditation to physical exercise or spiritual methods. Organizations should reinforce effective communication skills, creative coping skills, healthy eating, physical exercise, and create incentives for HCPs to join.

Future research is needed to enhance studies and improve ways to recognize, reduce, prevent, and create innovative interventive strategies to combat the symptoms of burnout. Equally important is understanding and acknowledging when burnout occurs for organizations and HCPs to recognize the symptoms and do what is needed to alleviate symptoms. Work environment stressors have a considerable effect on the mental health and well-being of many HCPs. Evidence shows that burnout is an epidemic and a growing consequence for the U.S. healthcare system. Inevitably there has not been an exact conceptual framework to decrease burnout effectively. Action is needed immediately to address burnout and impact on the U.S. healthcare system. Most importantly, HCPs' opinions and concerns regarding all matters of

healthcare need to be given more attention. Knowing about burnout is one thing, but much more needs to be done to address this issue.

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