Review Article

Are Healthcare Workers on the Frontline Experiencing Psychological Distress & Burnout Syndrome Due to COVID-19 Pandemic?

ABSTRACT

The coronavirus COVID-19 pandemic has caused significant physical and mental tension among frontline workers globally. Poor working conditions, lack of protective personal equipment (PPE), short-staffed departments, medication shortage, depleted hospital beds, and ventilators have had a direct correlation with occupational burnout syndrome (BOS) and psychological distress amongst frontline healthcare workers (HCW) and their physical and mental well-being. The limitless hours on shift, the abundant number of daily cases, and the upturn of fatalities have contributed to the stressors among HCWs during this pandemic. We will examine the occupational burnout syndrome and the psychological distress among HCWs working frontline during the pandemic. The paper will explore if there is a correlation between occupational burnout syndrome, mental and psychological distress, and COVID-19. Categories explored will entail anxiety levels, mental and physical strains of working long hours, working under subpar conditions with limited PPE and patient rooms, and fear of exposure to the virus. Many cases of tragic suicidal deaths have emerged throughout the pandemic. Consequently, attention to the well-being of healthcare professionals (HCPs) across the world has become imperative to appropriately support and monitor. The Diagnostic and Statistical Manual of Mental Disorders, (DSM-5) and the Maslach Burnout Inventory – Medical Personnel (MBI-MP) are tools used by psychiatrists to diagnose and treat mental health such as Burnout Syndrome and psychological distress levels which also encompasses post-traumatic stress disorder (PTSD) and mass traumatic events (MTE). Studies have shown a high prevalence of PTSD symptoms, anxiety, fear, depression, and frustration in emergency professionals involved in the COVID-19 pandemic. It is expected that subpar working conditions will continue to deteriorate the physical and mental well-being of HCWs on the frontline as the number of COVID-19 cases continue globally even after three years since its inception.

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Keywords: Coronavirus, COVID-19, Occupational Burnout Syndrome, Psychological Distress Syndrome, Protective Personal Equipment (PPE), pandemic.

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INTRODUCTION

In 2019 in Wuhan, China the world was expeditiously introduced to the coronavirus disease (COVID-19) pandemic and the world was turned around in a blink of an eye. Globally, hospitals and healthcare workers had no idea of the magnitude to which this pandemic would scamper on through and impact the lives of everyone in more than 60 countries. Healthcare workers were being overwhelmed with an unfamiliar disease with a plethora of complications and hazy tell-tale symptoms. Soon enough, like wildfires, hospitals were saturated with very sick patients presenting with COVID-19. By March 2020, the world was engulfed with more patients than capacity limits. While the world was at a stance, healthcare workers continued to put their own physical and mental health on the line courageously with the surge of patient admittance. Poor working conditions, lack of protective personal equipment (PPE), short-staffed, scarcity of medication, and lack of hospital beds and ventilators have impacted the mental and physical well-being of healthcare workers. It was determined early on that the virus would quickly advance to respiratory complications and in more cases than none become a fatal disease to many affected by it. This has placed a substantial amount of stress and fatigue on healthcare workers leading to occupational burnout syndrome and psychological distress. Burnout syndrome (BOS) is the experience of fatigue for extended periods of time and reduced levels of motivation and interest in the job, which leads to decreased job productivity [1]. During this pandemic, healthcare workers are bearing longer hours than usual, an upturn of fatalities on their watch, emotional exhaustion, and loss of personal achievement. Healthcare workers on the frontlines during times of crisis and natural disaster historically suffer from more severe emotional distress, depression, anxiety, and social isolation. Many studies have aimed to delineate contributors to burnout and common themes that have emerged include excessive workloads, feeling unsupported, lack of autonomy, and lack of work-home integration. In addition to traditional causes of burnout, the heightened risk of occupational exposure to infection, process inefficiencies, limited resources, and financial instability have been established as additional stressors among HCWs during COVID-19 [2]. By 2022, several studies showed a high prevalence of PTSD symptoms, anxiety, fear, depression, and frustration in emergency professionals involved in the COVID-19 pandemic. The most common symptoms included recurrent and intrusive thoughts about the events experienced during patient caregiving, difficulty in falling asleep, in memory and concentration, hyper-vigilance and hyper-arousal, anger outburst, loss of motivation to work, mood dysregulations, avoidance of working activities and places, alcohol/drugs abuse, numbing, isolation and psychological detachment [3]. To date, COVID-19 continues to affect our communities, our country, and every other country globally. While burnout is not considered to be a mental illness, symptoms of common mental disorders

have also been measured to determine the impact of the COVID-19 pandemic on healthcare workers' mental health even in current times 3 years after we were introduced to the SARs-COV-2 coronavirus. A systematic review containing 65 studies that included 97,333 healthcare workers from 21 countries found a pooled prevalence of 21.7, 22.1, and 21.5% for moderate depression, anxiety, and post-traumatic stress disorder respectively during COVID-19. Similarly, in a systematic review and meta-analysis including 29 studies and 22,380 hospital staff caring for COVID-19 patients from countries in Europe and Asia, the prevalence of depression, anxiety, and stress was 24.3, 25.8, and 45%, respectively [4].

STATEMENT OF THE PROBLEM

During the 1980s and '90s, other global pandemics such as SARS, AIDS, and Ebola also shook the medical field as well but to lesser proportions, as the world did not see as many cases or deaths, and hospitals were not oversaturated with admissions. A total of 2,707 responses from an online study from healthcare participants in 60 different countries found that half (51.4%) of the respondents from 33 countries reported emotional exhaustion burnout and psychological distress related to their work during the COVID-19 pandemic. The U.S. had the highest reported burnout and mental health decline among all countries at a rate of 62.8% [5]. Although other pandemics have vastly affected globally to a certain extent, the COVID-19 pandemic has impacted everyone more gravely and left hospitals with scarce supplies, families segregated from those afflicted, and healthcare workers facing burnout and facing mental health issues.

PURPOSE OF THE STUDY

The purpose of this research is to address burnout syndrome and psychological distress among healthcare workers at the forefront during the COVID-19 pandemic. The goal of this research is to acquire and establish if there had been an increase in anxiety and other mental health concerns as well as burnout levels for workers impacted by COVID-19. This research is crucial because it attempts to understand how the pandemic has shaped the mental and physical well-being of frontline workers. Two mental health measures, namely the emotional exhaustion component of burnout and psychological distress were explored. Questions explored during this research were whether indicators of these mental health problems are (i) rising monotonically, or (ii) following some other pattern, such as rising and falling in synchrony with the local epidemiological waves of COVID-19 cases. The secondary questions were whether this pattern differs between personnel with different occupational roles, and what proportion of hospital personnel were reporting levels of emotional exhaustion and psychological distress.

LITERATURE REVIEW

The physical and mental pressures endured by frontline healthcare workers during this pandemic have been nothing short of distressing. The deplorable working conditions of medical staff have been below par when considering how easily the virus spreads by aerosolized droplets that linger and remain airborne and can quickly affect others in proximity through direct contact. These droplets can enter the eyes, nose, mouth, or land on surfaces making it an easy vector to transmit

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the virus. To ameliorate this, scientists have stressed the importance of constant handwashing and wearing a face mask, particularly an N95 or N99 respirator mask, gowns, and eyewear to reduce and minimize transmission. The lack of PPE universally has raised many concerns as to the capabilities of healthcare systems ability to fully protect their staff. The unsatisfactory availability of personal protective equipment (PPE) in healthcare sites is one of the many factors dominating occupational burnout syndrome (BOS) and psychological distress. Hospitals have in part, many facets from anxiety/depression to suicide or death from directly acquiring the virus. In addition, uptake of working hours, an upturn of fatalities during shifts, emotional exhaustion, loss of personal achievement, and the unknowns of the disease account for these factors.

A study at Massachusetts General Hospital found that frontline health care workers had a nearly 12-times higher risk of testing positive for COVID-19 compared with individuals in the general community, and those workers with inadequate access to personal protective equipment (PPE) had an even higher risk [6]. The study was conducted to recognize the degree of danger for healthcare workers from a lack of PPE supply and the brunt these deficits may have on the infection rates. The study took place between the month of March and April of 2021 and consisted of 99,795 healthcare workers directly working with COVID-19 patients and 2,035,395 community individuals in the U.S and U.K. Investigators used a smartphone app called the COVID symptom tracker to evaluate the chances taken developing COVID-19 symptoms and/or testing positive for the virus. Findings showed that 5,545 healthcare workers tested positive for the virus in that 1-month time frame. There was an 11.6-times greater risk to test positive for healthcare workers and those without proper PPE had a 23% greater risk. Findings from this research highlighted the importance of adequate PPE supplies for healthcare workers and reduction of exposure to the virus. The uneasiness and concerns of not having proper PPE have led to stress, anxiety, depression, and many other mental health issues for current healthcare workers on the frontline.

Many cases of tragic suicidal deaths have emerged throughout the pandemic. Consequently, attention to the well-being of healthcare professionals (HCPs) across the world has become imperative to appropriately support and monitor [7]. The Diagnostic and Statistical Manual of Mental Disorders, (DSM-5) and the Maslach Burnout Inventory – Medical Personnel (MBI-MP) are tools used by psychiatrists to diagnose and treat mental health such as BOS which also encompasses post-traumatic stress disorder (PTSD) and mass traumatic events (MTE).

A cross-sectional study assessing workload and burnout of HCP was performed on 2,707 HCPs from healthcare sites working directly with COVID-19 patients throughout 60 countries and found that HCPs are more likely to experience burnout syndrome proportional to working with COVID-19 patients. The study was the first intercontinental study exploring the perceptions of HCPs during the pandemic without any global constraints and/or regulations. The purpose of the study was to understand the contributing components associated with occupational burnout syndrome by HCPs working with COVID-19 patients. A web-based software Research Electronic Data Capture (REDcap) was used to perform the study. Inclusion criteria were limited to healthcare workers and social media platforms (Facebook, WhatsApp, Twitter, email) was used to recruit participants globally. HCPs were contacted through IRB-approved messages that included a link to the survey. Additionally, study participants were encouraged to distribute the link to other colleagues through personal networks. The survey consisted of 40 questions based

on three criteria (exposure, perception, workload). This survey was evaluated and approved by The University of Illinois team of infectious diseases, psychiatrists, and public health specialists. The study questionnaire consisted of 40 items on a 7-point Likert scale (1-strongly disagree; 7-strongly agree). The survey was translated into 18 languages by expert linguistic translators. Results yielded 51.4% of respondents reported emotional exhaustion burnout and psychological distress related to working directly in the frontline with patients inflicted with COVID-19. The United States had the greatest burnout among the 60 countries surveyed with 62.8%. According to the survey, they also found that the main contributors to BOS were associated with work impacting household activities, feeling pushed beyond training, and making life-prioritizing decisions due to PPE supply shortages [8].

BOS has a direct correlation with suicide. Studies have found that medical professionals are already at an increased level of experiencing and suffering from mental health issues. Of those, anxiety and depression are the top two mental health conditions leading to suicide by medical-related professionals. Physicians are an at-risk profession for suicide, with women, particularly at risk. The rate of suicide in physicians increases over time, especially during onerous global pandemics. The high prevalence of physicians who committed suicide attempts as well as those with suicidal ideation should benefit from preventive strategies at the workplace [9]. A systematic review and stratified meta-analysis and meta-regression on suicide risk among healthcare workers during pandemics were researched. The study looked at suicides, suicide attempts, and suicidal ideations from the national and local registers. A questionnaire survey was also initiated (via the WWW and paper printout) for HCPs with suicide attempts and/or suicidal ideations. The use of PubMed, Cochrane Library Science Direct, and Embase databases was searched on April 2020 with the keywords: suicide AND healthcare worker OR physician. Data was collected from a control group for comparison purposes. The use of statistical analysis was conducted using Comprehensive Meta-Analysis software. A random effect meta-analysis (DerSimonian and Liard approach) was administered. Out of 25 studies used, results concluded that some countries had a high risk for suicide by at-risk health professionals with the U.S. having the highest findings (12% higher than other countries). Routinely face breaking bad news, and are in frequent contact with illness, anxiety, suffering, and death. Perfectionism, compulsive attention to detail, an exaggerated sense of duty, excessive sense of responsibility, and desire to please everyone appreciates qualities in the workplace but increased stress and depression and imprison physicians in a vicious circle without seeking help [9].

CONCLUSION

Globally, frontline workers are experiencing an unprecedented amount of burden and intensity in delivering healthcare during the coronavirus COVID-19 pandemic. Physical, emotional, and mental exhaustion have hit many of us hard leading to occupational burnout syndrome. As frontline workers, we are experiencing occupational burnout syndrome because we are feeling unaccomplished, second-guessing our clinical decisions, defeated, and mentally and physically drained. The truth of the matter is COVID-19 has changed the way we think and work. The pandemic is nowhere near its end nor has the world curve the number of people getting infected daily. As it stands, the United States is seeing record numbers of daily infections and deaths 3 years into the pandemic. A third and fourth wave has hit and will continue to come on and off. For the time being, all we can do is abide by the Hippocratic Oath and continue to put our

patients first. Research in the past had shown that epidemics can cause severe and variable psychological effects on people. In the general population, this can lead to the development of new psychiatric symptoms and the worsening of pre-existing illnesses. Irrespective of getting exposed or being infected people can develop a fear of falling ill or dying, excessive worry/anxiety, helplessness, tendency to blame other people who are ill. The psychiatric illnesses that people develop include depression, anxiety, panic attacks, somatic symptoms, and posttraumatic stress disorder symptoms, to delirium, psychosis, and even suicidality [10]. Measures to assist in the mental well-being of hospital staff should take priority and programs should be implemented in healthcare organizations to evaluate and protect the mental health and well-being of the healthcare workforce. From this pandemic, we have learned firsthand that health emergencies exacerbate and elevate the risk of stress, burnout, depression, anxiety, and other mental health challenges in the workforce.

CONSENT

It is not applicable

ETHICAL APPROVAL

It is not applicable

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