



Trends in Psychological Distress and Burnout Syndrome among Healthcare Workers due to COVID-19

Jennings Hernandez ^{a*}

^a Washington University of Health and Science, United States of America.

Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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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 among 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. In this paper, we will examine the occupational burnout syndrome and the psychological distress among HCWs working frontline during the pandemic. Also, the paper will explore whether there is a correlation between occupational burnout syndrome, mental and psychological distress, and COVID-19. 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. 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. Throughout the pandemic, many cases of tragic suicidal deaths have emerged. Consequently, attention to the well-being of healthcare professionals (HCPs) across the world has become imperative to adequately 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

*Corresponding author: E-mail: hergar305@gmail.com;

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. Through various studies, we will demonstrate how the pandemic has affected frontline workers' mental and psychological well-being as well as how inadequate working conditions and long working hours lead to occupational burnout syndrome. Results will show how healthcare workers are feeling unaccomplished, second-guessing their clinical decisions, defeated, and mentally and physically drained. 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.

Keywords: Coronavirus; COVID-19; occupational burnout syndrome; psychological distress syndrome; Protective Personal Equipment (PPE); pandemic.

1. 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 spread and impact the lives of all 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 with COVID-19. By March 2020, the world was engulfed with more patients than capacity limits. While the world was in a position, healthcare workers continued to courageously put their own physical and mental health on the line with the surge in patient admittance. Poor working conditions, lack of protective personal equipment (PPE), short-staffed, limited medication supply, 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 put 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 work longer hours than usual, an increase in deaths on their watch, emotional exhaustion, and loss of personal achievement. Healthcare workers on the front lines during times of crisis and natural disasters have historically suffered 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 symptoms of PTSD, 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 that included 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 were 24.3, 25.8, and 45%, respectively [4].

2. STATEMENT OF THE PROBLEM

During the 1980s and 1990s, other global pandemics such as SARS, AIDS, and Ebola also shook the medical field, but in 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 been widely affected globally to some extent, the COVID-19 pandemic has impacted everyone more severely and left hospitals with scarce supplies, families separated from those affected, and healthcare workers facing burnout and mental health issues.

3. 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 objective 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 front-line workers. Two mental health measures, namely the emotional exhaustion component of burnout and psychological distress were explored. The questions explored during this research were whether indicators of these mental health problems (i) rise monotonically or (ii) follow some other pattern, such as rising and falling in synchrony with local epidemiological waves of COVID-19 cases. Secondary questions were whether this pattern differs between personnel with different occupational roles and what proportion of hospital personnel reported levels of emotional exhaustion and psychological distress.

4. LITERATURE REVIEW

Physical and mental pressures endured by front-line healthcare workers during this pandemic have been nothing short of distressing. The

deplorable working conditions of medical personnel have been below par when considering the ease with which 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 the virus. To ameliorate this, scientists have stressed the importance of constant hand washing and wearing a face mask, particularly an N95 or N99 respirator mask, gowns, and eyewear to reduce and minimize transmission. The universal lack of PPE universally has raised many concerns about the ability of healthcare systems to fully protect their staff. The unsatisfactory availability of personal protective equipment (PPE) in healthcare facilities is one of the many factors that dominate 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, the uptake of working hours, an upturn of fatalities during shifts, emotional exhaustion, loss of personal achievement, and the unknowns of the disease accounts for these factors.

A study at Massachusetts General Hospital found that front-line health care workers had a nearly 12-times higher risk of testing positive for COVID-19 compared to 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 March and April 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 of 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. The findings of this research highlighted the importance of adequate PPE supplies for healthcare workers and the 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.

Throughout the pandemic, many cases of tragic suicidal deaths have emerged. Consequently, attention to the well-being of healthcare professionals (HCPs) around 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 patients with COVID-19. A web-based Research Electronic Capture Software (REDCap) was used to perform the study. Inclusion criteria were limited to healthcare workers and social media platforms (Facebook, WhatsApp, Twitter, email) were used to recruit participants worldwide. 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 highest 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 that affected 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 these, anxiety and depression are the top two mental health conditions that lead to suicide by medical 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 attempt to commit suicide, 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 Web 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 were collected from a control group for comparison purposes. The use of statistical analysis was carried out using Comprehensive Meta-Analysis software. A random-effects meta-analysis (DerSimonian and Liard approach) was administered. Out of 25 studies used, the results concluded that some countries had a high risk of 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, an excessive sense of responsibility, and the desire to please everyone appreciates qualities in the workplace, but increase stress and depression and lock physicians in a vicious circle without seeking help [9].

5. CONCLUSION

Globally, front-line workers are experiencing an unprecedented amount of burden and intensity in delivering healthcare during the coronavirus COVID-19 coronavirus pandemic. Physical,

emotional, and mental exhaustion have hit many of us hard leading to occupational burnout syndrome. As front-line 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 preexisting 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 symptoms of posttraumatic stress disorder, 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 AND ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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