

# Burnout Syndrome in Health Care Personnel During the COVID-19 Pandemic

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### Síndrome de desgaste profesional en el personal de salud durante la pandemia de COVID-19

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#### Abstract

The WHO defines occupational stress as a reaction that may occur when a person is faced with work-related demands and pressures that test the individual's ability to cope with certain situations, and it exacerbates in healthcare personnel who provide care to patients with COVID-19. That is, what results from the imbalance between the pressures and demands that the individual faces, on the one hand, and the knowledge acquired on the other hand. Burnout syndrome is a type of work-related stress that encompasses a state of physical, emotional and mental exhaustion that leads to individual and social consequences. The objective of this systematic review is to identify the risk factors for the development of Burnout Syndrome in health personnel related to the care of patients with COVID-19. A search was carried out in the PubMed database, including original articles, randomized studies, systematic reviews, and textbooks in Spanish and English, published during the period 2020-2023. The main risk factors for the development of Burnout Syndrome identified in the literature were youth, female sex, singleness, workload and the level of job satisfaction of the professionals.

#### Keywords

COVID-19, Risk Factor, Health Personnel, Burnout Syndrome, Professional Burnout.

#### Resumen

La Organización Mundial de la Salud (OMS) define el estrés laboral como una reacción que puede manifestarse ante exigencias y presiones laborales que ponen a prueba la capacidad que tiene cada persona para afrontar ciertas situaciones y que se agravan en el personal de salud que atiende pacientes con la COVID-19. Es decir, lo que resulta del desequilibrio entre las presiones y exigencias a las que se enfrenta el individuo, por una parte, y los conocimientos adquiridos por otra parte. El Síndrome de desgaste profesional, conocido también como síndrome de agotamiento emocional o psicológico, o por el anglicismo *burnout*, es un tipo de estrés laboral que engloba un estado de agotamiento físico, emocional y mental que conlleva a consecuencias individuales y sociales. El objetivo de esta revisión narrativa es identificar los factores de riesgo para el desarrollo del Síndrome de desgaste profesional en el personal de salud relacionado con la atención de pacientes con la COVID-19. Se realizó una búsqueda en la base de datos PubMed, se incluyeron artículos originales, estudios aleatorizados, revisiones sistemáticas y otros textos en español e inglés, publicados durante el periodo 2020-2023. Los principales factores de riesgo identificados en la literatura para el desarrollo de Síndrome de desgaste profesional fueron la juventud, sexo femenino, la soltería, la carga de trabajo y el nivel de satisfacción laboral de los profesionales.

#### Palabras clave

COVID-19, Factores de Riesgo, Personal de Salud, Desgaste Profesional, Agotamiento Psicológico.

## Introduction

Professional exhaustion is known by the anglicized term "burnout". It is an expression used by athletes to describe a situation in

which, contrary to favorable prospects, an athlete fails to achieve the expected results, no matter how much preparation and effort they put into it.<sup>1</sup>

According to the *Diccionario de términos médicos de la Real Academia Nacional de Medicina de España*, professional burnout syndrome is the appropriate translation of the English word that literally means "destroyed by heat".

In healthcare services it was first used in 1974 by Herbert Freudeberger, a psychiatrist working as a volunteer assistant in a New York drug addiction clinic.<sup>i</sup>

It has been scientifically proven that the professional burnout syndrome is composed of three factors or dimensions:<sup>i</sup>

1. Emotional exhaustion: this is a fundamental aspect and involves symptoms of loss of energy, physical and psychological exhaustion and a feeling of being at one's limit, of not being able to give more of oneself.<sup>i</sup>
2. Depersonalization: in this case, as a protective measure, the subject may develop a negative change in attitudes and responses towards others, especially towards the beneficiaries of one's own work, becoming distant, using derogatory labels to refer to others, or trying to blame them for their frustrations and decreased work commitment.
3. Low personal accomplishment: it is a feeling of personal professional inadequacy to perform the job. It involves feelings of inadequacy, low self-esteem and ideas of failure.<sup>i</sup>

Healthcare professionals and other public health decision-makers work beyond their potential to contain COVID-19. In such circumstances, healthcare professionals directly involved in the diagnosis and management of patients with COVID-19 are subject to various psychological stressors associated with the workplace.<sup>ii</sup>

Burnout is an element that threatens the general population, not just healthcare personnel. A positive observation is that, over the years, there has been an advance in knowledge about burnout.<sup>iii</sup>

This paper includes a review of original articles, randomized studies, systematic reviews, and texts in Spanish and English, published during the period 2020-2023, with the objective of identifying risk factors for the development of professional burnout syndrome in health personnel related to the care of patients with COVID-19.

## Discussion

Burnout syndrome is a type of occupational stress that encompasses a state of physical,

emotional, and mental exhaustion that leads to individual and social consequences. In 1977, during the annual congress of the American Psychological Association, the term burnout was established to describe a situation that occurred among human services workers consisting of the fact that, after months of work and dedication, they ended up becoming emotionally exhausted.<sup>i</sup>

Since its inception, burnout syndrome has been defined in many ways, being described by Maslach and Jackson as a syndrome characterized by emotional exhaustion, depersonalization, and low personal fulfillment at work, which can occur among individuals whose daily tasks are limited to the service of people.<sup>iv</sup>

Other authors, including Pines and Aronson, proposed a broader definition, not restricted to the helping professions: "It is the state of mental, physical and emotional exhaustion produced by chronic involvement in work in emotionally demanding situations".<sup>v</sup>

The SARS-CoV-2 pandemic caused a general increase in cases of anxiety, depression, and burnout syndrome in healthcare workers. This global health situation triggered an unprecedented health crisis with a high prevalence of psychological distress in healthcare workers, requiring the documentation of risk factors for the development of burnout syndrome among healthcare workers facing COVID-19.<sup>iv</sup> In many countries, this large-scale health situation resulted in the restructuring and reorganizing of health service delivery to support emergency services, medical intensive care units, and continuing care units.<sup>v</sup>

Healthcare professionals exposed to working with patients during the COVID-19 pandemic are at increased risk for short- and long-term mental health problems. Healthcare workers must receive psychosocial support to protect their mental well-being if they must continue providing high-quality patient care.<sup>vi</sup>

Some of the strategies adopted during the pandemic<sup>6</sup> as risk factors to promote resilience include increasing the sense of control over the adverse situation, for example, increasing the perception that disease prevention measures can be managed, or controlling the possibility of becoming infected by protecting oneself with the resources that healthcare providers have at hand to care for infected patients.<sup>vii</sup>

Burnout is not a sudden onset of symptoms. Many people with burnout syndrome have a variety of thoughts, feelings, and actions that progress through a series of stages, often with options for prevention. It

is critical to understand the different stages of burnout syndrome to prevent it (honeymoon phase, stress onset, chronic illness, stress, and burnout).<sup>viii</sup>

The COVID-19 pandemic exerted considerable psychological pressure on front-line healthcare workers. Although the problem of burnout, which overlaps with symptoms of depression, remains urgent, few studies have addressed it comprehensively.<sup>ix</sup>

In a study, Castro *et al.* described risk factors associated with burnout syndrome in healthcare workers during the COVID-19 pandemic, as female sex, young age, being in contact with COVID-19 patients, previous history of depression or psychiatric illness, being nursing staff or resident medical staff, and longer work hours. It has also been reported that independent predictors of burnout syndrome are medical personnel and respiratory kinesiologist.<sup>x</sup>

Work time, fear of infection and infecting loved ones or patients, and concern about controlling the epidemic, among others, can be precipitating factors for an alteration in the mental health of healthcare professionals in times of COVID-19. Such alterations can be a serious problem on a personal scale, and an impairment in the professional performance, and can increase the risk of contagion and professional malpractice.<sup>xi</sup>

According to Matsuo T *et al.*, a study evaluated 488 healthcare workers; of these, 369 (75.6 %) responded to the survey, from which 57 (15.4 %) were excluded due to missing data. The final sample included 312 respondents, with a median age of 30.5 (26 to 40) years, with 223 (71.5 %) women, and median experience of 7.0 (3 to 15) years. The overall prevalence of burnout was 31.4 % (98 of 312). Of 82 physicians, 11 (11.2 %) experienced burnout; of 126 nurse personnel, 59 (46.8 %) experienced burnout; of 22 radiologic technologists, eight (36.4 %) experienced burnout; and of 19 pharmacists, seven (36.8 %) experienced burnout. It is worth noticing that nurse personnel working inwards with COVID-19 patients are psychologically affected by the consequences of the pandemic due to a higher workload and more time in direct contact with COVID-19 patients compared to physicians.<sup>xii</sup>

The COVID-19 pandemic caused enormous pressure on healthcare workers, with many implications for their physical and emotional well-being.<sup>xiii</sup> Likewise, it is important to mention that it had a substantial impact on their mental health.<sup>xiii</sup> which is why healthcare personnel should become a priority for mental health strategies.<sup>xiii</sup>

In this scenario, understanding the consequences of the COVID-19 outbreak

on the health of first-line healthcare professionals is urgent, and the root causes of the psychophysical impact related to emotional exhaustion and somatic symptoms should be sought.<sup>xiv</sup> Patient care is the first-factor causing stress, as well as job satisfaction. The suffering or stress of medical personnel is caused by identification with the anguish of the patients and their families, by the reactivation of their conflicts, and by the frustration of their diagnostic-therapeutic perspectives concerning the patient's condition. Therefore, adequate psychosocial training can enable the health professional to deal with the inevitable anxiety of the patient and family in a more satisfactory way.<sup>iv</sup>

## Personal and familial implications

Healthcare workers are at high risk of developing physical and mental health impairments. The nature and frequency of these outcomes are undetermined. COVID-19 has had a substantial impact on the mental health of healthcare workers it must be a priority for health strategies since it has personal and occupational repercussions that, according to Salazar *et al.*, manifest themselves in symptoms such as chills, cough, diarrhea, dyspnea, fatigue, fever, headache, myalgia, nausea, and vomiting.<sup>xiii</sup>

It is suggested that the COVID-19 pandemic affected women with young children, with a higher prevalence of burnout among female physicians and nurse personnel, and physicians under 30 years old, accompanied by research suggesting that part-time work helps healthcare workers mitigate burnout.<sup>xv</sup>

It is noted that the nursing personnel experienced high levels of burnout during the COVID-19 pandemic and that various sociodemographic, occupational, psychological, and COVID-19-related factors played a role in this burnout syndrome.<sup>xiv</sup> Nurses experienced significant difficulties during the COVID-19 pandemic worldwide.<sup>xvi</sup>

In a study on COVID-19, it was shown that 80 % of health professionals suffer from low or moderate burnout syndrome, and 20 % suffer from severe burnout syndrome. Among nurses, the prevalence of burnout syndrome is around 70 %.<sup>xvii</sup>

## Risk factors related to burnout syndrome

Occupational burnout syndrome is an adaptive disorder due to chronic work-related stress; it is a particular form of stress. There are many causes: family, economic, social, occupational, etc., and different reactions to stress.

However, burnout syndrome is a special form, motivated by the relationship between the person and his or her work; it occurs when work tasks are related to managing, relating to, or helping other people. According to Barello *et al.*, demographic risk factors are age, gender, marital status, job characteristics, work attitudes, and personality traits.<sup>xiv</sup>

The COVID-19 health emergency changed the lives of professionals and parents, increasing perceptions of stress and specific symptoms of exhaustion, emotional distancing, and depersonalization, as well as a decrease in feelings of satisfaction and fulfillment.<sup>xviii,xix</sup> Among health professionals caring for minors in therapeutic communities, the pandemic required numerous emotional tools and cognitive resources, so Peres *et al.* describe the professional characteristics of those who cared for patients with COVID-19.<sup>ixiii,xix</sup>

Another study found that nursing personnel working with patients with COVID-19 are exposed to various stressors that can lead to professional burnout, and also demonstrated that working conditions with COVID-19-positive patients are associated with experiencing burnout symptoms.<sup>xx</sup> Another study in Ghana, Africa, demonstrated a high prevalence of burnout among healthcare workers in Accra, particularly during the onslaught of the COVID-19 pandemic.<sup>xxi</sup> Working night shifts and at the primary level of healthcare was significantly associated with a higher likelihood of experiencing burnout, so shift rotation for staff and adequate provision of resources for primary-level hospitals was recommended, showing that the high burnout syndrome could be caused by other factors such as bereavement caused by multiple losses and also by limited support resources for healthcare workers.<sup>xxi</sup>

Resilience, mentalization capacity, and burnout syndrome among healthcare workers are interrelated phenomena with important professional implications.<sup>xxii</sup> Education and training programs for healthcare workers should include knowledge and skills that are important for healthcare worker resilience in a pandemic.<sup>xxii</sup> It is important to be clear about one's purpose in life as a healthcare worker, which was most strongly associated with decreased levels of burnout.<sup>xxiii</sup>

A study confirmed a high incidence of burnout syndrome in the emotional exhaustion and depersonalization dimensions, among frontline nurse personnel working in COVID-19 care services during the outbreak,<sup>xxiv</sup> finding relevant data of history of previous psychiatric illness. Atten-

tion must be paid to the high prevalence of burnout among healthcare workers, not only in the frontline and during pandemics, should be addressed.<sup>vii,xxiv</sup>

## Prevention of burnout syndrome

Burnout syndrome can be prevented or solved. It is possible to be mildly optimistic, although caution should be exerted, especially when a person is suffering from burnout, given that it can be contagious and is easy to understand the permanent complaints, negative attitudes, suspicions, rejections, etc., in fact, it is noticeable that when there is a person with burnout in a group, the others are more at risk of suffering from it. It is therefore necessary to recognize it and help in the initial stages.<sup>i</sup>

In a study conducted during a pandemic in South Korea, it was shown that promoting the well-being and quality of work life of healthcare workers in response to a pandemic crisis contributed to reducing burnout among frontline nurses and enhancing the safety of healthcare workers and patients.<sup>xxv,xxvi</sup> This demonstrates the importance of considering the prevalence and predictors of burnout syndrome in nurses caring for patients with COVID-19.

Healthcare workers are critical to providing medical treatment in the community at large, especially during the COVID-19 pandemic, thus highlighting the importance of monitoring physical and mental well-being among all workers, not only among medical and nursing staff, who are the most visible frontline staff, as early identification of psychological distress and burnout syndrome, as well as increasing access to medical care for employees and family members can help decrease the negative effects impacting essential healthcare workers.<sup>xxvii</sup>

It is difficult to predict the duration of the pandemic's impact, but it could be an opportunity for healthcare institutions to review and improve their system to take a proactive role in mitigating professional burnout by recognizing the impacts, implementing work-life balance policies, and providing access to mental health services to alleviate professional burnout.<sup>xxviii</sup>

Both physical and psychological aspects of healthcare personnel must be considered to ensure their well-being. In addition, it is necessary to understand the relationship between the contribution of long working hours and the constant decrease in the quality of life of these personnel; therefore, an allocation of fixed working hours for healthcare personnel should be made.<sup>xxix</sup>

During the critical situation of the COVID-19 pandemic frontline staff who directly interacted with suspected and diagnosed COVID-19 patients were at high risk of becoming infected, which contributed to professional burnout.<sup>xxx</sup> This contrasts with a study from Mozambique, in which many healthcare workers reported a reduction in burnout, this may be associated with the lower number of COVID-19 cases observed during 2022.<sup>xxxi</sup>

### **Cognitive techniques for emotional self-care**

Cognitive resources can also be used for the prevention of emotional disturbance or, in other words, mental healthcare. It is suggested that healthcare personnel could benefit from these techniques applied to practical cases. This approach offers an active preventive response to burnout.<sup>i</sup>

Among the various techniques is Socratic questioning or guided discovery, which is about asking inductive questions that help to change the "rigid perception" of reality into a state of curiosity. It is about realizing that there are other alternatives to the interpretation of what is happening. At times of disturbance, it may be difficult to do this to oneself. Even so, one can develop the habit of questioning cognitive distortions by asking oneself questions in writing.<sup>i</sup> Another important technique is selective abstraction or filtering (relative to the stimulus), which consists of focusing on a detail extracted from its context, ignoring other features of the situation, and considering the whole experience based on that fragment. A single detail is highlighted, and the rest is tinged by it.<sup>i</sup>

Existing programs and resources to facilitate healthcare provider's wellness were inadequate before the pandemic, and despite the pandemic experience, they appear to remain insufficient.<sup>xxxi</sup> This situation is further complicated by the findings of this review, given that the healthcare personnel have less capacity to initiate, sustain, and complete interventions to improve their wellness.<sup>xxxii</sup>

In pandemic settings, clear communication of guidelines and precautionary measures reduces the likelihood of emotional distress, as does support from co-workers. Social support outside the workplace can also decrease stress, yet healthcare personnel often neglect relationships with friends and family because of workloads or concerns about infecting others due to their exposure to the virus.<sup>xxxiii</sup>

COVID-19 is a public health problem because of the high impact it has generated, and it has posed a challenge to economics and medicine worldwide,<sup>xxvi</sup> which makes it necessary to implement various psychological interventions for healthcare personnel, as such efforts could potentially mitigate the negative impacts of the pandemic on their mental health and prepare them for future risks.<sup>xxxiv</sup>

Burnout syndrome is associated with work overload, role conflict (ambiguity), lack of participation and control, clinical work (direct relationship with patients), and medical specialties with a predominance of chronic, critical, oncological, and terminal patients.<sup>iv</sup> It is worth mentioning that the syndrome is also associated with people who have suffered emotional conflicts in their childhood, which have made them narcissistic and ambitious, obsessive, anxious, or depressive.<sup>iv</sup>

The considerable prevalence of burnout syndrome in primary healthcare professionals in low- and middle-income countries has implications for patient safety, quality of care, and workforce planning.<sup>xxvii</sup>

Maintaining social contact is increasingly challenging in the context of distancing requirements. There are reports of healthcare workers experiencing social problems such as stigma and abuse due to public fears of contracting the virus from those with increased exposure, making it foremost to identify the biggest factors for the development of professional burnout syndrome in healthcare personnel who are in patient care with COVID-19. More cross-sectional studies are needed to help identify evidence-based solutions.<sup>xxviii</sup>

### **Conclusions**

The risk factors for the development of burnout syndrome in healthcare personnel related to patient care with COVID-19 found in the literature reviewed were age, observed more frequently among young people, and job satisfaction, which increases with age and is the major predictor of longevity. In terms of sex, women had more job stress than men. Regarding marital status, single people are more prone to the development of burnout linked to the profession since nursing personnel are more at risk of suffering burnout syndrome as they work closer with patients with COVID-19 and are affected psychologically by a heavier workload and more time in direct contact with patients with COVID-19, compared to medical personnel.



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