

COVID-19 and the occupational stress experienced by health professionals in the hospital context: integrative review

COVID-19 e o estresse ocupacional vivenciado pelos profissionais de saúde no contexto hospitalar: revisão integrativa

COVID-19 y estrés ocupacional experimentados por profesionales de la salud en el contexto del hospital: revisión integrativa

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ABSTRACT

Objective: To analyze Brazilian and international scientific publications about the stress experienced by health professionals in the hospital context during the COVID-19 pandemic.

Methods: Integrative literature review carried out on the SciELO, ScienceDirect, and LILACS databases, and sources of official Brazilian institutions, with documents published by May 2020. **Results:** Of the 26 selected references, 19 (73.08%) were indexed articles, and 7 (26.92%) were obtained from official institutions. The study found that stress is mainly due to the overload of hospital services, the removal of professionals, the insufficiency of personal protective equipment and strict biosecurity measures, challenges in the allocation of available resources, and the risk of contamination by COVID-19. **Final considerations:** The stress experienced by health professionals in hospital institutions during the pandemic can trigger occupational and psychological problems.

Descriptors: COVID-19; Health Personnel; Occupational Stress; Hospitals; Mental Health.

RESUMO

Objetivo: Analisar as publicações científicas brasileiras e internacionais acerca do estresse vivenciado pelos profissionais de saúde no contexto hospitalar durante a pandemia de COVID-19.

Métodos: Revisão integrativa da literatura realizada nas bases de dados SciELO, ScienceDirect, LILACS e em fontes de instituições oficiais brasileiras, com documentos publicados até maio 2020. **Resultados:** Das 26 referências selecionadas, 19 (73,08%) foram artigos indexados e 7 (26,92%) foram obtidas de instituições oficiais. Verificou-se que o estresse é decorrente sobretudo da sobrecarga dos serviços hospitalares, afastamento de profissionais, insuficiência de equipamentos de proteção individual e rigorosas medidas de biossegurança, desafios na alocação dos recursos disponíveis e risco de contaminação pela COVID-19. **Considerações finais:** O estresse vivenciado pelos profissionais da saúde nas instituições hospitalares durante a pandemia pode desencadear problemas ocupacionais e psicológicos.

Descritores: COVID-19; Profissionais de Saúde; Estresse Ocupacional; Hospitais; Saúde Mental.

RESUMEN

Objetivo: Analizar las publicaciones científicas brasileñas e internacionales acerca del estrés vivido por los profesionales de salud en el contexto hospitalario durante la pandemia de COVID-19.

Métodos: Revisión integrativa de la literatura realizada en las bases de datos SciELO, ScienceDirect, LILACS y en fuentes de instituciones oficiales brasileñas, con documentos publicados hasta mayo de 2020. **Resultados:** Entre las 26 referencias seleccionadas, 19 (73,08%) fueron artículos indexados y 7 (26,92%) fueron obtenidas de instituciones oficiales. Se verificó que el estrés es causado sobretudo por la sobrecarga de los servicios hospitalarios, alejamiento de profesionales, insuficiencia de equipos de protección individual y rigorosas medidas de bioseguridad, desafíos en el destino de los recursos disponibles y riesgo de contaminación por COVID-19. **Consideraciones finales:** El estrés vivido por los profesionales de salud en las instituciones hospitalarias durante la pandemia puede desencadenar problemas laborales y psicológicos.

Descritores: COVID-19; Personal de Salud; Estrés Laboral; Hospitales; Salud Mental.

INTRODUCTION

At the end of 2019, the World Health Organization (WHO) received alerts of a series of cases of pneumonia in the city of Wuhan, China. It was the initial milestone of an outbreak originated by a new coronavirus (SARS-CoV-2), causing the coronavirus disease (COVID-19), which has since spread with increasing numbers of cases in other regions of the world. On January 30, 2020, the WHO declared a Public Health Emergency of international importance, and on March 11, 2020, the disease became a pandemic⁽¹⁻³⁾.

As of July 08, 2020, more than 1,577,004 cases of COVID-19 have been confirmed in Brazil. Of this total, more than 64,265 were killed, with a mortality rate of 30.6 deaths/100 thousand inhabitants⁽⁴⁾. Although there is no official recommendation, the WHO globally estimates an average of 3.2 beds per thousand inhabitants. In Brazil, the density of beds, which was previously estimated at 2.23 beds per thousand inhabitants in 2010, fell to 1.95 beds in 2019⁽⁵⁾.

The emergencies of public health, while evidencing the fundamental role of the Public Health System (SUS) in the containment of COVID-19, expose the structural weaknesses of the system, in particular, the lack and/or unequal distribution of health professionals and medium and high complexity care infrastructure⁽⁶⁾. Thus, a negative interaction between the work environment and human factors can trigger physical and emotional responses that cause damage to the quality of life and lead to the involvement of diseases⁽⁷⁾.

In the hospital environment, it is common to find different and complementary stressors. The natural stress required of professionals for working with people's lives — with the complexity that permeates the possibilities of healing and with the fears of aggravation and death — weakens those who need this service and also those who work with it. Nursing and medical professionals, in particular, routinely live with pain and suffering and are subjected to intense rhythms and long working hours, low wages, complex human relationships, scarcity of materials, and a reduced number of professionals⁽⁸⁻¹⁰⁾.

Occupational stress is a set of manifestations in the worker's body that has harmful potential to his health due to his difficulty in developing his activities, added to the service demands⁽¹¹⁻¹²⁾. Stress at work results from the interaction between many psychological requirements involving time, speed, and intensity, less control in the work process concerning decision-making and intellectual abilities, as well as from the lower social support received⁽¹¹⁻¹²⁾.

The devaluation and precariousness of the health professionals' work are historical in Brazil. The COVID-19 pandemic brings an additional and notably new challenge to the hospital system and, consequently, to health professionals. The scenario is alarming, atypical and uncertain, little understood, and advances rapidly, which justifies the realization of studies aimed at presenting and gathering scientific evidence, so far little explored, that incite reflections and understanding about the mental health of health professionals in time of facing the pandemic.

OBJECTIVE

To analyze Brazilian and international scientific publications about the stress experienced by health professionals in the hospital context during the COVID-19 pandemic.

METHODS

Ethical aspects

According to current standards, this research did not require approval by the Ethics Committee since the data collected are in the public domain.

Type of study

It is an integrative review of the literature, which gathered, evaluated, and synthesized the results of studies already published on the subject of interest.

Methodological framework

The study followed the steps to conduct this review: elaboration of the research question, the definition of the inclusion and exclusion criteria, selection and search of the material in the data sources, categorization of the studies, critical evaluation of the included studies, analysis and synthesis of the results and presentation of the review⁽¹³⁾.

In the first moment, the study outlined the research question: what scientific evidence is available in the national and international literature that addresses the stress experienced by health professionals in the hospital context during the COVID-19 pandemic?

Data source

Data collection occurred between April and May 2020 on the databases ScienceDirect Elsevier (ScienceDirect), Latin American and Caribbean Literature in Health Sciences (LILACS), Scientific Electronic Library On-Line (SciELO). The researchers chose such sources because they allow indexing, respectively, a significant number of International Studies and Brazilian scientific journals. In addition, to explore the pandemic context in Brazil and given the scarcity of data in national scientific publications, the consultation in other data sources was expanded: gray literature⁽¹⁴⁾, Ministry of Health (MS), National Health Surveillance Agency (ANVISA), Brazilian Hospital Services Company (EBSERH), Federal Nursing Council (Cofen).

Chart 1 – Database search strategy

Database	Search strategy	Results
ScienceDirect	(Coronavirus infections AND Health personnel)	1,039
LILACS	(Occupational stress AND Health personnel)	112
SciELO	(Occupational and personal health stress)	58
	(Coronavirus infections and health personnel)	259
TOTAL		1,468

During the search on the databases, the research used descriptors in Portuguese and English languages. They were controlled,

respectively, by the classification of descriptors in Health Sciences (DeCS) and Medical Subject Headings (MeSH): Coronavirus Infections; Health Personnel; Occupational Stress. With the Boolean operator AND, it was possible to perform combinations between the descriptors and build the search strategy in each database. The strategy used in the databases was not uniform due to their particularities and specificities during the search process, as shown in Table 1.

Collection and organization of data

The study included the articles indexed in these databases that were published in the year 2020 until May, available for reading, published in Portuguese, English, and Spanish languages, and that answered the guiding question for conducting the research. The inclusion criteria of the gray literature were: addressing the pandemic of COVID-19 in Brazil with information about the hospital system.

It excluded abstracts, editorials, letters to the editor, book chapters, repeated articles, documents that did not address coronavirus infection in humans or hospital care from the sample. The exclusion criteria of the gray literature were: COVID-19 pandemic approach without hospital system information.

The flowchart of Figure 1 shows the path of identification, selection, eligibility, and inclusion of studies.

First, the study performed a reading of the titles of the articles and their conformity with the objective of this research to analyze the data; later, the careful reading of the abstracts that contemplated the guiding question; and then, the full publications reading. Finally, researchers explored the material and interpreted the results. They organized the selected papers in a matrix built in the Microsoft Excel program (version 2013) with the following information: authors, year of publication, country of authors, title, and objective of the study.

RESULTS

The study included a total of 26 references in this review of which 19 (73.08%) were found on the indexed articles database; and 7 (26.92 %), obtained from the gray literature. Their results will be exposed separately to facilitate understanding.

Chart 2 refers to articles published on databases.

Regarding indexed publications (19 articles): as for nationality, 17 (89.47%) are international, all identified in the ScienceDirect database, with 7 (41.17%) articles from China, followed by Spain and Singapore with 2 (11.76%) each, and a set of countries with only 1 (5.88%), United States of America, India, Australia, Italy, United Kingdom, and France. The National Articles totaled two (10.52%), both found in the SciELO database.

Regarding the gray literature, all seven references are Brazilian: one (14.28%) EBSERH guide, one (14.28%) ANVISA technical note, one (14.28%) nursing observation panel, one (14.28%) guide of the Ministry of Health, and three (42.85%) epidemiological bulletins of the Ministry of Health.

DISCUSSION

With the alarming advance of the COVID-19 pandemic, it is already possible to identify and discuss, relying on the scientific evidence gathered in the review, that, although the course and impact of COVID-19 are uncertain, the illness of frontline health professionals is particularly worrying, as it reduces human resources and compromise the quality and resoluteness of health services, causing hospital systems to already show signs of collapse. The impact of stress proved to be relevant even though it is not the central subject in all publications. Based on the observation of the challenges/difficulties produced by COVID-19 in hospital systems, these places are generators of emotional suffering to health professionals.

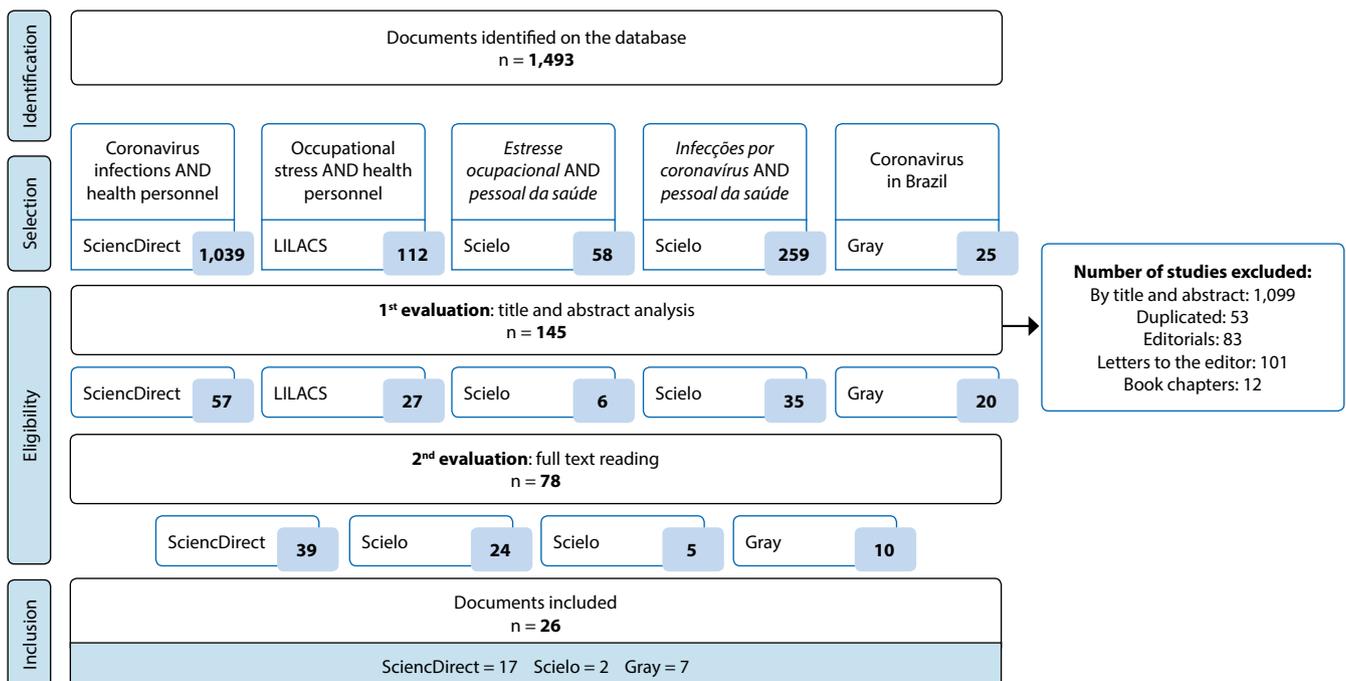


Figure 1 - Flowchart of the study

Chart 2 - Articles published by title/reference, year/country of publication, type of study or methodological approach/number of participants, interventions and outcome or main results

Title/Reference	Year/ Country	Design or approach/Number of participants	Interventions	Outcomes or mains results
COVID-19 and hospitalizations for SARS in Brazil: a comparison up to 12 nd epidemiological week 2020 ⁽¹⁵⁾	2020 Brazil	Analysis Descriptive / Does not apply	Does not apply	In 2020, hospitalization for SARS exceeded that observed in the same period in each of the previous ten years. The age group above 60 years was the most affected, above the historical level.
Occupational psychosocial risks of health professionals in the face of the crisis produced by the COVID-19: From the identification of these risks to immediate action ⁽¹⁶⁾	2020 Spain	Undefined / Does not apply	Does not apply	Identification of psychosocial risk factors and urgent protective measures that must be taken in psychosocial protection for health professionals
Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: a systematic review and meta-analysis ⁽¹⁷⁾	2020 United Kingdom	Systematic review and meta-analysis / Does not apply	Does not apply	Studies indicate a prevalence of anxiety of 23.2%; depression, 22.8%; and insomnia, 38.9%.
A study on the psychological needs of nurses caring for patients with coronavirus disease 2019 from the perspective of the existence, relatedness, and growth theory ⁽¹⁸⁾	2020 China	Cross-sectional study/ n = 10	Does not apply	The needs of existence were the main ones during the epidemic, with the demands of health and safety influencing each other. The humanistic needs of concern were the most important.
Medical masks and Respirators for the Protection of Healthcare Workers from SARS-CoV-2 and other viruses ⁽¹⁹⁾	2020 Italy	Literature review / Does not apply	Does not apply	Clinical evidence on the use of respirators is weak. The use of appropriate PPE is of crucial importance for healthcare professionals in the care of COVID-19 patients.
Intensive care management of coronavirus disease 2019 (COVID-19): challenges and recommendations ⁽²⁰⁾	2020 Singapore	Literature review / Does not apply	Does not apply	Overview of challenges and recommendations in ICU clinical management
Mental health impacts and psychological interventions in the face of the New Coronavirus pandemic (COVID-19) ⁽²¹⁾	2020 Brazil	Narrative review of literature / Does not apply	Does not apply	Identification of priority groups and guidance on psychological interventions
Nurses reports of actual work hours and preferred work hours per shift among frontline nurses during coronavirus disease 2019 (COVID-19) epidemic: a cross-sectional survey ⁽²²⁾	2020 China	Cross-sectional study/ n = 109	Does not apply	The actual length of the shift exceeded the preferred working hours of the nurses.
A qualitative study on the psychological experience of caregivers of COVID-19 patients ⁽²³⁾	2020 China	Phenomenological study/ n = 20	Does not apply	In the early days, negative emotions were dominant, and positive emotions appeared simultaneously or gradually.
Implications for COVID-19: a systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic ⁽²⁴⁾	2020 Australia	Systematic review / Does not apply	Does not apply	Three results were generated based on the categories: nursing teams supporting the provision of quality care; recognizing the physical and emotional impact; and responsiveness of the systematized organizational reaction.
Mental health problems faced by healthcare workers due to the COVID-19 pandemic – A review ⁽²⁵⁾	2020 India	Literature review / Does not apply	Does not apply	Sociodemographic variables were associated with increased stress, anxiety, depressive symptoms and insomnia in health professionals. COVID-19 can be an independent risk factor for stress in health professionals.
Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: a cross-sectional study ⁽²⁶⁾	2020 China	Cross-sectional study/ n = 994	Does not apply	Of the participants, 36.9% had mental health disorders below the threshold; 34.4%, mild disorders; 22.4%, moderate disorders; and 6.2% had severe disorders immediately after the viral epidemic.
The experiences of healthcare providers during the COVID-19 crisis in China: a qualitative study ⁽²⁷⁾	2020 China	Phenomenological study/ n = 13	Does not apply	Three thematic categories emerged: being fully responsible for the well-being of patients – “this is my duty;” challenges of working in covid-19 wards; and resilience amid challenges.

To be continued

Chart 2 (concluded)

Title/Reference	Year/ Country	Design or approach/Number of participants	Interventions	Outcomes or mains results
Knowledge, attitude, and practice regarding COVID-19 among healthcare workers in Henan, China ⁽²⁸⁾	2020 China	Cross-sectional study/ n = 1,387	Does not apply	Of the health professionals interviewed, 89% had sufficient knowledge of COVID-19, more than 85% feared self-infection by the virus, and 89.7% followed the correct practices concerning COVID19.
A cross-sectional study on mental health among health care workers during the outbreak of Corona Virus Disease 2019 ⁽²⁹⁾	2020 China	Cross-sectional study/ n = 1,521	Does not apply	The results showed that people without experience in public health emergencies performed worse in mental health, resilience, and social support.
A multinational, multicenter study on the psychological outcomes and associated physical symptoms among healthcare workers during COVID-19 outbreak ⁽³⁰⁾	2020 Singapore	Multinational and multicenter study/ n = 906	Does not apply	Of the participating health professionals, 48 (5.3%) had a positive screening for moderate to very severe depression; 79 (8.7%) for moderate to extremely severe anxiety; 20 (2.2%) for moderate to extremely severe stress; and 34 (3.8%) for moderate to severe levels of psychological distress.
Unraveling potential severe psychiatric repercussions on healthcare professionals during the COVID-19 crisis ⁽³¹⁾	2020 Spain	Case report/ n = 1	Does not apply	First reported case of severe mental illness in a healthcare professional with no prior psychiatric history due to COVID-19 outbreak
Allocating Scarce Resources and Triaging Patients during the COVID-19 Pandemic ⁽³²⁾	2020 USA	Undefined / Does not apply	Does not apply	Practical recommendations for ethical screening management and clinical and ethical issues surrounding screening and rationing decisions
Prioritization of ICU treatments for critically ill patients in a COVID-19 pandemic with scarce resources ⁽³³⁾	2020 France	Undefined / Does not apply	Does not apply	Proposal of a strategy to prioritize scarce ICU resources during the COVID-19 pandemic

Chart 3 - Gray literature according to the source/year, title and specification, of 2020

Source / Year	Title	Specification
Ministry of Health (2020) ⁽³⁴⁾	Coronavirus disease 2019	Epidemiological bulletin 17
EBSERH (2020) ⁽³⁵⁾	Mental health support in times of Covid-19	Guide
ANVISA (2020) ⁽³⁶⁾	Guidelines for health services: prevention and control measures that should be adopted during the care of suspected or confirmed cases of infection with the new coronavirus (Sars-CoV-2)	Technical note No. 4/2020
Ministry of Health (2020) ⁽³⁷⁾	Coronavirus disease 2019	Epidemiological bulletin 06
COFEN (2020) ⁽³⁸⁾	Nursing Observatory	Panel
Ministry of Health (2020) ⁽³⁹⁾	Recommendations for the protection of health service workers in the care of COVID-19 and other influenza syndromes	Guide
Ministry of Health (2020) ⁽⁴⁰⁾	Special: coronavirus disease 2019	Epidemiological bulletin 07

Even in a more optimistic scenario, there would be an overload of emergency services in several health microregions. Hospitalization for Severe Acute Respiratory Syndrome (SRAG), since the detection of the first case of COVID-19 in Brazil, exceeded the numbers of the previous year⁽¹⁵⁾. By May 29, 2020, there was an increase of more than 705% of hospitalizations due to SARS compared to the same period of 2019. The system registered 168,676 hospitalizations with 2,335 (31.0%) cases of COVID-19⁽³⁴⁾ confirmed. Hospital overcrowding, scarcity of resources, and an insufficient number of professionals directly and negatively affect the self-esteem of the professional, generating anxiety and feeling of helplessness⁽⁴¹⁾.

The situation produced by COVID-19 only aggravated and multiplied the intense cognitive, physical, social, and emotional demands experienced by health professionals in the hospital context before this pandemic⁽¹⁶⁾. The study published with 287 professionals of the ICU nursing team regarding human and material resources identified that 78.37% of the nursing team

already stated that the number of professionals was inadequate, as well as other 58.16% considered the resources available in the unit as insufficient for care, and 74.47% of the participants were with a medium level of stress⁽⁴²⁾.

Resilience can be further compromised by isolation and loss of social support, risk of being infected during care and transmission to friends and family, as well as drastic and often disturbing changes in the ways of working⁽¹⁷⁾. Distress may be related to the constant state of vigilance and alertness due to biosecurity measures, reduced self-care, insufficient information and control over the situation⁽³⁵⁾.

A study conducted with ten nurses who cared for patients with COVID-19 aimed to explore the psychological needs of professionals and showed that the principal requirement of nurses during the pandemic was manifested as health needs (physical and mental) and safety (use of PPE and emotional stability of patients' relatives), influencing each other⁽¹⁸⁾.

Personal protective equipment (PPE) is considered essential in the safety of health professionals at risk of contamination by increased exposure. The current global stock is insufficient, especially for medical masks and respirators⁽¹⁹⁾. Exceptionally, due to the increased demand caused by the COVID-19 public health emergency, the reuse of N95/PPF2 respiratory protection masks or equivalent becomes favorable for an extended period than provided by the manufacturer⁽³⁶⁾. Limited labor has complicated medical services, as health professionals are already getting sick or quarantined⁽³⁷⁾.

Although professionals focus on using PPE, a substantial risk of self-contamination lies in its improper removal⁽²⁰⁾ procedure: usually, it is performed at the end of a shift, when the worker, already tired, and can easily make mistakes during the procedure⁽¹⁹⁾. The time spent on degowning and strict gowning increases fatigue and psychological stress. In addition, the need to save PPE makes it complicated to perform physiological functions such as feeding, hydration, or toileting⁽²¹⁾.

In this review, it was possible to identify that, on the one hand, PPE helps to increase the perception of safety, well-being, and confidence, but, on the other hand, bring physical discomfort to professionals and can even cause skin lesions. In a study conducted with 109 nurses from ten hospitals intended for the treatment of COVID-19 patients in China, the results demonstrate that the actual working hours exceeded those reported by nursing professionals as ideal. About 40.37% alleged that prolonged use of PPE caused pain, dehydration, sweating, and discomfort. The intensity of work also affects the efficiency and endurance of nurses and the increased risk of infection by increased exposure⁽²²⁾.

In addition, the study conducted with 20 nurses showed that, as the number of patients increased, the workload of all nurses increased at the rate of 1.5 to 2 times the regular schedule and workload. Failure to meet physical and psychological needs brought a sense of helplessness. Nurses were asked to keep the protective clothing, reducing the number of times they wore it because the protective equipment was scarce, which resulted in fatigue⁽²³⁾.

An adequate amount of the available workforce is essential to ensure that professionals take breaks during shifts and take leave when they are sick⁽²⁴⁾. The risk of infection among the health team shows another relevant reason for the psychological impact, the sudden change of role of the health professional into patient causing feelings of frustration, helplessness, and stigma⁽²⁵⁾. The level of mental health impairment is directly related to exposure to PEOPLE confirmed or suspected of being infected by the virus, that is, the higher the exposure, the greater the aggravation of psychological symptoms suffered by health professionals⁽²⁶⁾.

Data on the illness of health professionals in the context of COVID-19 and its impacts are still inconsistent, as the numbers of infected and deaths increase daily. The nursing team represents the largest workforce present in hospital institutions. As of May 21, 2020, more than 16,000 nurses, technicians, and nursing assistants have been removed from their jobs, with 136 deaths associated with the disease. The age group from 31 to 40 years presented the highest occurrence, with 6,866 cases, followed by the age group from 41 to 50 years, with 4,484 cases⁽³⁸⁾.

Exceptionally, in emergencies, health service workers may be required to replace co-workers and perform tasks that are not their

routine, which may imply a new pattern of contamination and transmission risk⁽³⁹⁾. When deaths begin to be reported, anxiety and stress levels increase, especially in the face of the possibility of involuntary relocation to other areas due to workforce shortages⁽⁴³⁾.

In Brazil, many health professionals do not have the experience to act in large emergencies, as in the case of COVID-19, and it represents an additional stressor⁽²¹⁾. There is a shortage of health professionals trained to manage mechanical ventilation equipment, respiratory physiotherapy, and advanced care directed to severe COVID-19 patients⁽⁴⁰⁾. A critical reflection is raised on this point and finds agreement with international findings.

A study with nine nurses and four doctors found that none of the participants had experienced a previous action of an infectious epidemic and entry into the isolation ward was seen as oppressive and stressful. The professionals did not understand the risk, transmissibility, pathogenicity, and treatment of the disease, which brought nervousness and lack of confidence⁽²⁷⁾. Another survey, conducted with 1,357 health professionals, showed that the group with five to nine years of experience (36.0%) was less likely to feel tired, revealing specific ability and practice to deal with public health emergencies⁽²⁸⁾.

The experience with a public health emergency was also significantly associated with a reduction in the prevalence of psychological suffering in 1,521 health professionals, of whom 1,374 had no experience (new team)⁽²⁹⁾. People without practice with a public health emergency had worse mental health, resilience, and social support, while most of the experienced team knew how to protect themselves better and had the confidence to overcome the disease, which was a benefit to improve their resilience and mental health⁽²⁹⁾.

Although the aging of the worker decreases his physical and cognitive ability, the years of his career give him greater professional experience and resilience to cope with stress⁽⁴⁴⁾. However, in a pandemic period, the guidelines are for the removal of the workforce over the age of 60. Therefore, many professionals may face the dilemma between applying for sick leave or continuing to work and being able to contribute to the workforce in an overstretched healthcare sector.

There was a wide variety of physical symptoms experienced by 906 healthcare professionals from healthcare professional hospitals during the current COVID-19 outbreak. The most common symptoms reported were headache (31.9%), sore throat (33.6%), anxiety (26.7%), lethargy (26.6%), and insomnia (21.0%)⁽³⁰⁾. All this pressure can not only reduce work efficiency but also increase the risk of medical errors and cause moral and/or emotional injuries, with an imbalance between their own needs and those of patients⁽³¹⁾.

The COVID-19 pandemic poses the main challenge to balance the principles of equality and equity in the distribution of risks and benefits. Most of the time, decisions concern ICU beds, mechanical ventilation, PPE, and other missing resources⁽³²⁾. When the health system reaches saturation, prioritization to allocate available resources goes beyond ethical principles in an attempt to minimize the number of deaths and maximize the years of life preserved (age factor)⁽³³⁾.

The imbalance between psychological demand and control over the work process generates tension and loss of skills and interest, resulting in a lower autonomy of the professional⁽⁴⁵⁾. When this

autonomy is greatly compromised by the limitations of working conditions, moral stress and the feeling of failure may arise. Such an adverse situation leads to conflicts between freedom and duty, in which the absence of resources can mean life or death⁽⁴⁶⁾.

Finally, the evidence discusses the importance of interventions at the personal level, such as self-care actions and psychological support that strengthen the resilience of the front line team, create favorable working conditions, and reduce stress, directly reflecting on the health of workers and the quality of care provided.

Study limitations

The limitations of this study relate to the choice of descriptors and databases/data sources since they may not contain all national and international publications. However, this aspect does not compromise the results considering the number of articles and the period analyzed.

Contributions to the fields of Nursing, Health or Public Policy

The study contributes to the critical perception that it is necessary to point out new and consistent measures to contain the stress of nursing and health workers during and after the COVID-19 pandemic. At the same time, it reinforces the need to think about educational, social, and psychological strategies for facing future public health emergencies by health professionals.

FINAL CONSIDERATIONS

With the rapid advance of the new coronavirus pandemic, hospital systems are already overloading and putting pressure on their health

professionals in different nations. The study allowed the international literature to be reached as the most up-to-date and recent reference on the atypical moment of emergency in public health, at a time when the number of Brazilian productions is still incipient.

No universal guidelines have been developed to date. And those drawn up in one country may not suit others. The study allowed the synthesis of published studies and the knowledge of different realities experienced by countries that have already advanced in the control of the pandemic and by those who still face the most critical moments, as is the case of Brazil.

With the publications found, the study was able to achieve the proposed objective, as they express that the illness of health professionals is worrying and highlight the importance of researching by the scientific community on the consequences of COVID-19 for mental health.

To that end, it is essential to intensify scientific production, especially the Brazilian one, considering the particularities of the largest public health system in the world. By conducting the reflection on the current moment of emergency and the stress experienced by professionals in the hospital environment, the study expects to develop the critical look that causes concerns in health professionals about their work reality, avoiding conformism and adapting of this reality to strengthen the fight for the realization of social rights and the defense of the SUS.

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