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RESEARCH

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PSYCHOSOCIAL LOAD AND BURNOUT SYNDROME IN HEALTHCARE PROFESSIONALS IN THE FIGHT AGAINST COVID-19 PANDEMIC

Carga psicossocial e síndrome de burnout em profissionais de saúde no combate a pandemia de COVID-19

Carga psicossocial y síndrome de quemadura en profesionales sanitarios en la lucha contra la pandemia COVID-19

Roni Robson da Silva¹, Leandro Andrade da Silva²

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ABSTRACT

Objective: to provide information on the potential risks of Burnout syndrome and the exposure of health professionals in the pandemic COVID-19. **Method:** this is an integrative literature review that followed the PICO strategy. The search for the articles was carried out in three electronic databases: Pubmed / Medline, BVS and Scielo. The descriptors “mental health”, “burnout”, “coronavirus” and “health personnel” were used with full texts, published in the period from 2016 to 2021, in English, Portuguese and Spanish and the Boolean operator AND was used. **Results:** 168 articles were found, thirty-five articles were selected to be read in full and 10 met the criteria of this review. **Conclusion:** evidence shows that this population is more vulnerable to risk for mental disorders, exhaustion and suicidal ideation.

DESCRIPTORS: Mental health; Burnout; Coronavirus; Health personnel.

RESUMO

Objetivo: Fornecer informações sobre os riscos potenciais da síndrome de *Burnout* e da exposição de profissionais de saúde na pandemia COVID-19. **Método:** trata-se de um estudo de revisão integrativa da literatura que seguiu a estratégia PICO. A busca dos artigos foi realizada em três bases de dados eletrônicas: Pubmed/Medline, BVS e SciELO. Foram utilizados os descritores “*mental health*”, “*burnout*”, “*coronavirus*” e “*health personnel*” com textos completos, publicados no período de 2016 a 2021, no idioma inglês, português e espanhol e foi usado o operador booleano *AND*. **Resultados:** foram encontrados 168 artigos. Trinta e cinco artigos foram selecionados para serem lidos na íntegra e 10 atenderam aos critérios desta revisão. **Conclusão:** as evidências mostram que os profissionais de saúde da linha de frente de enfrentamento ao COVID-19 apresentam maior vulnerabilidade de desenvolver transtornos mentais, exaustão e ideação suicida.

DESCRIPTORIOS: Saúde mental; *Burnout*; Coronavírus; Profissionais de saúde.

- 1 Nursing student at the Veiga de Almeida University (UVA). Postgraduate student in MBA Health Management at the School of Nursing, University of São Paulo-EERP/USP. E-mail rr.roni1@gmail.com. ORCID: <https://orcid.org/0000-0001-6010-6438>
- 2 Nurse. Post-Doctorate by the Graduate Program in Nursing of the State University of Rio de Janeiro (PPGEnf/UERJ). Specialist in Mental Health and Psychosocial Care from the National School of Public Health Sérgio Arouca/ENSP of the Oswaldo Cruz Foundation (FIOCRUZ). Professor of the Undergraduate Course in Nursing at the Veiga de Almeida University (UVA). ORCID: <https://orcid.org/0000-0003-3213-5527>

RESUMEN

Objetivo: brindar información sobre los riesgos potenciales del síndrome de Burnout y la exposición de los profesionales de la salud en la pandemia COVID-19. **Método:** se trata de una revisión integradora de la literatura que siguió la estrategia PICO. La búsqueda de los artículos se realizó en tres bases de datos electrónicas: Pubmed / Medline, BVS y Scielo. Se utilizaron los descriptores “salud mental”, “burnout”, “coronavirus” y “personal de salud” con los textos completos, publicados en el período de 2016 a 2021, en inglés, portugués y español y se utilizó el operador booleano AND. **Resultados:** 168 artículos Se encontraron treinta y cinco artículos seleccionados para ser leídos en su totalidad y diez cumplieron los criterios de esta revisión. **Conclusión:** la evidencia muestra que esta población es más vulnerable al riesgo de trastornos mentales, agotamiento e ideación suicida.

DESCRIPTORES: Salud mental; Burnout; Coronavirus; Personal de salud.

INTRODUCTION

Burnout is known as professional burnout syndrome,¹ is characterized by psychological exhaustion, depersonalization, and reduced personal accomplishment at work.² The term burnout was first introduced by the American psychologist Herbert Freudenberger in his research article in 1974,³ where he described it as the inability to cope with increasing work demands,⁴ manifested by headache, sleep disturbance, behavioral changes, and reduced cognition.⁵

Burnout syndrome is defined as a psychophysiological condition consisting of emotional exhaustion encompassing feelings of hopelessness, loneliness, depression, anger, impatience, irritability, tension, and decreased empathy,⁶ decreased energy, worry; increased susceptibility to illness, headaches, nausea, muscle tension, low back or neck pain, and sleep disturbances.^{1,4,6} Burnout is included in the 11th Revision of the International Classification of Diseases (ICD-11).⁷ According to the World Health Organization (WHO), Burnout is defined as a syndrome conceptualized as resulting from chronic stress in the workplace that has not been successfully managed.⁸ It is characterized by three dimensions: feelings of depleted energy; feelings of work-related negativism or cynicism; and reduced professional effectiveness.⁷⁻⁸ Burnout refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life.⁸

A recent survey by the International Occupational Medicine Society Collaborative, representing occupational medicine societies in 42 countries, provides some estimates.⁹ The survey obtained results on burnout of health professionals from 30 countries across the income range.⁹ Different comparability issues prevent drawing firm conclusions from the survey, but focusing only on professionals reporting occupational burnout, the survey reported proportions ranging from 17.2% (Japan) to 32% (Canada), with Austria and Ireland reporting comparable proportions of those in Canada.⁹⁻¹⁰ The New England Journal of Medicine surveyed burnout in healthcare. In the 2019 survey, 83% of respondents, who are, clinical leaders and healthcare executives, saw this problem as “severe” or “moderate” in their workplaces.¹¹ In 2016, this percentage was 96%, indicating a slight improvement in this percentage, however it is apparent that the problem remains prevalent. This same survey also finds

burnout to be a major concern for nurses:9,1178% believe it to be a severe or moderate problem.

The pandemic COVID-19 expose the vital role that healthcare professionals play in alleviating suffering and saving lives.¹⁻¹³ Healthcare professionals are the key players in managing the COVID-19 pandemic and are inevitably on the front lines of exposure to the virus.¹³⁻¹⁴ Due to its enormous impact on productivity, physical and mental health as well as its sequelae, all raise the urgent need for further exploration of the topic.¹⁴ As of December 2019, COVID-19 has spread rapidly worldwide, affecting people in 210 countries and territories with the current count exceeding 53 million people infected and over 1,300,000 deaths.¹⁴ In addition to the lives claimed globally, the pandemic has led to high levels of panic and anxiety worldwide.¹⁵ Moreover, they constitute a remarkable proportion of people who have contracted the disease, with 10% confirmed cases in some reports.¹⁶ The deadly and uncontrollable nature of COVID-19, along with the relatively high infection and mortality rate among healthcare workers, can cause feelings of anxiety and stress among medical staff.¹¹⁻¹³ Issues such as social stigmatization, shortage of supplies of personal protective equipment, and heavy staff workload may exacerbate this situation.^{5,8-9} In this context, this pandemic is expected to have a substantial psychological impact on healthcare workers.^{3,5}

Burnout can have serious consequences for both patients and health care workers.¹⁷ The unfolding of this situation leads to impaired physical and mental health, lack of motivation, absenteeism, and also leads to deterioration in the quality of care provided by the affected staff, with poor patient outcomes.¹⁸ Several studies have found that high levels of burnout in health care workers are associated with less safe patient care. These consequences impose huge costs on society.^{8-9,13} Health authorities need more information about the magnitude of this problem in this perspective this study is relevant to science by identifying the associated factors and thus preparing the professional for future outbreaks of infectious diseases¹⁹ adapt sound interventions and implement strategies to alleviate the concerns and fears of health professionals.²⁰ This study aims to provide information about the potential risks of Burnout syndrome and exposure of health professionals in pandemic COVID-19.

METHOD

This is an integrative literature review. It is a method that is characterized by gathering and synthesizing research results on a theme in a systematic and orderly manner. The research question was defined from the PICO strategy, which foresees the definition of participant (P), intervention (I), comparison (C) and outcome (O). It is intended to answer the guiding question: What are the impacts of Burnout syndrome (O), on physical and mental health (I) in health professionals (P) who are in the fight against the pandemic of COVID-19 (C)? Then, the keywords “mental health”, “burnout”, “coronavirus” and “health personnel” were defined from the vocabulary of the Descriptors in Health Sciences (DeCS), for being common terminology to the research. These were combined using the

Boolean operator AND in the databases and/or electronic libraries: Medical Literature Analysis and Retrieval System Online (MEDLINE/Pubmed), the Virtual Health Library (VHL), and the Scientific Electronic Library Online (SciELO). The same search strategy was used in all databases and/or electronic libraries. The inclusion criteria of the articles for analysis were: population group of health professionals, published between 2016 and 2021, available in full, in Portuguese, English, Spanish, French, German, and Italian that dealt with the theme of chronic interpersonal emotional stress at work. Opinion articles, editorials, duplicate articles, and publications that did not deal with the theme were excluded. The collection period was from February to April 2021. For data analysis, an analytical framework was built to gather and synthesize key information from the studies. The collection tool gathered the following information: title, author(s)/year of publication/country, objective, method, main results. The level of evidence identified in the analyzed articles was classified according to the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system,²¹ a system considered sensitive to grading the quality of evidence. In this system, the quality of evidence is described in four levels: high, moderate, low, and very low (Chart 1). Evidence from randomized clinical trials starts with a high level and evidence from observational studies, with a low level.²¹

Chart 1 - Levels of evidence. Rio de Janeiro, RJ, Brazil, 2021.

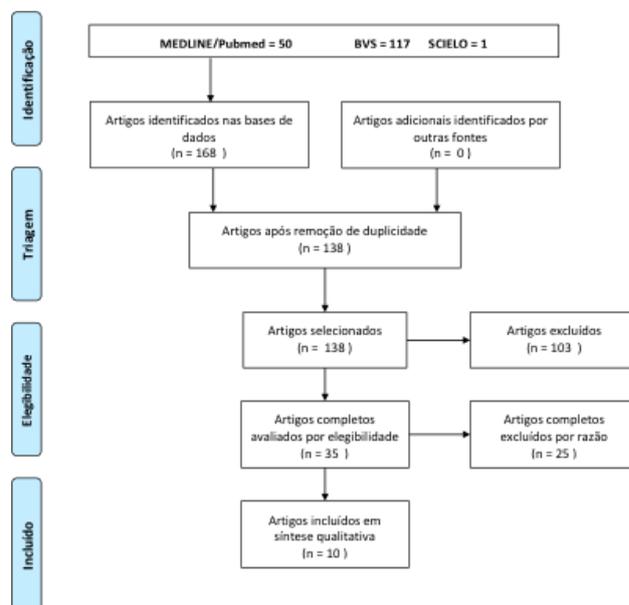
| Level | Definition | Implications |
|----------|---|--|
| High | There is strong confidence that the true effect is close to that estimated. | It is unlikely that further work will modify the confidence in the effect estimate. |
| Moderate | There is moderate confidence in the estimated effect. | Future work may modify the confidence in the effect estimate, with the possibility of even modifying the estimate. |
| Low | Confidence in the effect is limited. | Future work is likely to have a major impact on our confidence in the effect estimate. |
| Very Low | The confidence in the effect estimate is very limited. There is an important degree of uncertainty in the findings. | Any estimate of effect is uncertain. |

Source: The authors, 2021

In this review, based on the classification adopted (GRADE system) to assess the quality of evidence, the risk of bias of randomized clinical trials of product technologies was considered in relation to methodological limitations regarding the design or execution of individual studies. The evidence from randomized clinical trials can be downgraded by lack of allocation confidentiality, lack of blinding, incomplete follow-up, selective reporting of outcomes, and other

limitations such as early termination of the trial for benefit and insufficient information to assess whether there is a significant risk of bias. For each of these domains the risk of bias is assessed and classified as high risk, uncertain, and low risk of bias.

Figure 1- Selection of articles by descriptors in the databases Rio de Janeiro, RJ, Brazil, 2021.



Source: The authors, 2021.

RESULTS AND DISCUSSION

A total of 168 studies were identified in these databases, as illustrated in Figure 1, which followed the PRISMA²² recommendations to describe the literature search process. From these, 30 duplicate articles were excluded, leaving 138 unique articles. Then, the titles and abstracts were read, observing the inclusion and exclusion criteria. As a result, 103 articles were excluded and 35 articles met the eligibility criteria. We then started the full, in-depth reading of these studies by two reviewers, independently. Any disagreements between reviewers that arose during this stage were worked out and resolved by consensus, resulting in a final sample of 10 articles. The articles included in this synthesis, Chart 2, were developed in six different countries: Brazil (n= two), United States (n= three), Spain (n= one), France (n= one) and Italy (n= two), Germany (n= one) covering, in their completeness, as subjects, all health professionals. As for the method, most of the researchers used the qualitative approach (n= seven) to describe and analyze, in depth, the different dimensions in which the Burnout Syndrome occurs. Another 3 papers were review studies, and in only one of the studies, the authors indicated making use of quantitative and qualitative methods, complementarily. Although this type of methodological design has proven to be the most appropriate to unveil the various facets of the professional burnout syndrome in human and social relations, this fact characterizes all the articles as being of low level of evidence.

Table 2 - Summary of the results of the systematic review. Rio de Janeiro, RJ, Brazil, 2021.

| Titles | Author(s), Year / Country. | Goal | Method | Results | Level of Evidence |
|--|--|--|-------------------------------------|--|------------------------------|
| Preditores da Síndrome de <i>Burnout</i> em enfermeiros de serviços de urgência pré-hospitalar | Tomaz HC, et al., (2020) Brasil | To analyze the presence of Burnout Syndrome components and related factors in Family Health Strategy professionals | Analytical cross-sectional study | High levels of burnout, moderate scores on the factors that make up resilience, and low efficiency in the use of coping strategies against stressors. | Low |
| Prevalência de <i>burnout</i> em enfermeiras pediátricas: uma revisão sistemática e meta-análise | Pradas-Hernández L, et al., (2018) Espanha | Analyze the prevalence of burnout, reported burnout, severity, and risk factors, to better understand the risk of emotional exhaustion, depersonalization, and feelings of low personal accomplishment | systematic review and meta-analysis | The following prevalence values were obtained: (i) emotional exhaustion, 31% (95% CI: 25-37%); (ii) depersonalization, 21% (95% CI: 11-33%); (iii) low personal accomplishment, 39% (95% CI: 28-50%). | Moderate |
| Les professionnels de santé face à la pandémie de la maladie à coronavirus (COVID-19) : quels risques pour leur santé mentale ? | El-Hage W, et al., (2020) França | The purpose of this article is to take stock of the risks associated with caregivers' exposure to COVID-19 to their mental health. | Review Study | Caregivers, therefore, have an increased risk of anxiety, depression, exhaustion, addiction, and post-traumatic stress disorder. | Low |
| Depressão e ansiedade em profissionais de enfermagem durante a pandemia da covid-19 | Santos KMR, et al., (2021) Brasil | To analyze the prevalence of depression symptoms, anxiety, and associated factors in professional nursing staff during the Covid-19 pandemic | Qualitative study | Symptoms suggestive of mental disorders were related to female nursing professionals, of brown color or race, with a monthly income of less than 5 minimum wages who worked in the private sector, having symptoms of Burnout Syndrome | Very Low |
| Professional Quality of Life and Mental Health Outcomes among Health Care Workers Exposed to Sars-Cov-2 (Covid-19) | Buselli R, et al., (2020) Italia | To identify the possible impact of contextual variables on quality of work life as represented by compassionate satisfaction in PS in COVID-19 emergency. | Cross-sectional study | Women showed greater trauma than men, while frontline staff and health care assistants reported greater compassionate satisfaction | Low |
| Psychosocial burden of healthcare professionals in times of COVID-19 - a survey conducted at the University Hospital Augsburg | Zerbini G, et al., (2020) Alemanha | Investigate the psychosocial burden of doctors and nurses depending on their degree of contact with COVID-19 patients. | Cross-sectional study | Nurses working in COVID-19 wards reported higher levels of stress, burnout, and depressed mood, as well as lower levels of work-related accomplishment | Moderate |
| Attending to the Emotional Well-Being of the Health Care Workforce in a New York City Health System During the COVID-19 Pandemic | Ripp J, et al., (2020) Estados Unidos | Seek measures to protect the physical health and emotional well-being of frontline employees | Observational study | Most important in the minds of front-line health care workers working in conditions of possible contagion is personal safety. | Very Low |

| Titles | Author(s), Year / Country. | Goal | Method | Results | Level of Evidence |
|--|--|---|-------------------------------------|---|----------------------|
| Psychological Adjustment of Healthcare Workers in Italy during the COVID-19 Pandemic: Differences in Stress, Anxiety, Depression, Burnout, Secondary Trauma, and Compassion Satisfaction between Frontline and Non-Frontline Professionals | Trumello C, et al., (2020) Italia | Investigating the psychological adjustment of health care workers during the peak of the COVID-19 pandemic | Cross-sectional study | The overall findings indicate that the mental health of frontline health care workers requires more consideration and that targeted prevention and intervention programs are needed | Moderate |
| Impact of viral epidemic outbreaks on mental health of healthcare workers: a rapid systematic review and meta-analysis | Serrano-Ripoll, MJ et al., (2020) Estados Unidos | Examine the impact of health care delivery during health emergencies caused by viral epidemic outbreaks on the mental health of health care workers | Systematic review and meta-analysis | Given the very limited evidence on the impact of interventions to address mental health problems in health professionals, the identified risk factors represent important targets for future interventions. | High |
| COVID-19, Mental Health, and Suicide Risk Among Health Care Workers: Looking Beyond the Crisis | Reger MA, et al., (2020) Estados Unidos | Analyze the impacts of the long-term covid-19 pandemic on health care workers (health care professionals) | Observational study | The mental health needs of health care workers, including burnout, depression, PTSD and, in particular, suicide risk, should not be ignored | Low |

Source: The authors, 2021.

In the context of the global crisis caused by the pandemic COVID-19, we know that health care workers are the first line of defense in fighting this disease.²³ Unfortunately, coping with this health emergency operates under poor working conditions,^{13,16,19} due to the scarcity of biosafety equipment, infection control systems, lack of recognition programs and work incentives, and finally physical and psychological abuse and discrimination by patients.²⁴ These factors impact their mental health states the study. This goes along with thinking about the known stressors of the work context that can be identified as psychosocial work factors.² Another study addresses the effects that can manifest as stress, depression, anxiety, due to insufficient information about the virus,⁵ the continuous care of patients with COVID-19, high workload, constant exposure to critical events such as death, fear of being infected and infecting their family members, and the consequence on their own health.²⁵ Systematic review and meta-analysis has reported the presence of psychiatric symptoms in a population without mental disorders, such as depression, anxiety, post-traumatic stress, and aggravation in those with mental disorders.²⁶ A cross-sectional study, points out that the psychological consequences weaken and incapacitate health care workers, who are exposed to a higher risk due to inadequate working conditions.²⁷ If this situation is not considered, the psychosocial consequences on their

mental health are likely to be very severe,²⁸ forcing many of them to quit their jobs. The impact does not affect all countries in the same way in Brazil, for example, with a deficient health care system, economic, geographical, and social problems due to accessibility; poor infrastructure, lack of equipment, and working conditions.^{14,24}

Another study indicates that the inadequate management of health services generated by stress affects good performance, as well as influences the quality of care and consequently puts patient safety at risk,²⁹ while another states that COVID-19 brings the exposure of health personnel to physical, biological and psychological risks, without having the basic conditions to control, mitigate and cope with the serious and even irreversible consequences of the pandemic, so it can be considered an occupational disease due to the psychological consequences.³⁰ It is evident that this pandemic has serious psychosocial effects on health professionals, since they are directly linked to working conditions.³¹ In this sense, if working conditions are inadequate, they will put the health of their family at risk, and consequently, the impact on their mental health will be aggravated.³²

It is interesting to consider that some studies have shown that training with biosafety measures, correct application of infection control procedures, as well as the possession of personal protective equipment³⁰ and

the recognition of their efforts at the institutional and governmental levels,²⁰ can generate a feeling of security and motivation to continue working.³¹⁻³²

A limitation of this study was the scarcity of research related to the topic, even though it is a subject that should be treated with utmost importance and urgency, because it is a problem that affects not only health professionals, but also the users who receive their care. It is recommended that more field research be conducted so that we have a greater dimension of the problem and thus outline strategies to mitigate the damage and benefit the community.

CONCLUSION

Many studies have focused on recognizing protective factors that help the performance of health professionals and improve their adaptation, since there is a great physical and mental demand for their services in times of crisis. However, this capacity for adaptation and resilience is due to the protection and support provided by adequate working conditions, with a decrease in psychosocial risk factors. Consequently, it is necessary to be aware of the specific needs of health workers and implement psychological intervention programs focused on crisis and post-trauma care and also make administrative and organizational changes in order to have an organized and quality health system, ensuring its sustainability responsiveness despite the crisis. There is a consensus across the relevant literature that healthcare professionals have an increased risk and elevated levels of stress, anxiety, depression, and post-traumatic stress disorder, which can have long-term psychological implications. Including feelings of worrying about their own health, fear of bringing the infection home to family members or others, and not having ready access to occupational health testing.

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Corresponding author

Roni Robson da Silva

Address: Rua Jose Higino, 214, Ap 303, Tijuca

Rio de Janeiro/RJ, Brazil

Zip code: 20.520-202

Email address: rr.roni1@gmail.com

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