

BURNOUT SYNDROME IN NURSING DURING THE COVID-19 PANDEMIC: A NARRATIVE REVIEW

Edgardo Álvarez-Muñoz

School of Nursing, Santo Tomás University.
Temuco, Chile

ORCID: 0000-0002-2882-7494

Gerak Aguilar-Valdivia

Clínica Alemana Osorno, Osorno, Chile

ORCID: 0000-0001-7722-6268

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



Abstract: Introduction: The coronavirus pandemic has put healthcare workers under significant pressure. In this sense, different international studies have been published that establish a close relationship between the workload associated with caring for patients with COVID 19 and the presence of exhaustion, fatigue, depression, anguish and anxiety. **Objective:** Describe the phenomenon of burnout syndrome and its impact on nursing professionals during patient care during the COVID-19 pandemic. **Methodology:** Narrative review, carried out in the electronic databases Scopus and PubMed, for which the keywords “nursing” were used; “covid-19” and “burnout”. The Boolean term “AND” was used and the following filters were applied: Articles in English and published in the last 3 years. In addition, “full open Access” filters were applied for Scopus and no filters were applied for PubMed. Data collection by open coding technique. **Results:** 21 selected articles were reviewed, from which an in-depth analysis was carried out to respond to the theme of the study. **Conclusion:** With the arrival of COVID-19, the stressors associated with the increased demand for care from infected patients have been exacerbated. This has resulted in nurses presenting feelings of anguish, fear, anxiety, physical and mental exhaustion, and even suicidal ideation. **Keywords:** Burnout; Covid-19; Nursing; Pandemic

INTRODUCTION

The psychiatrist Herbert Freudenberger described burnout for the first time in 1974 as a set of signs and symptoms related mainly to the progressive loss of energy, demotivation and exhaustion (physical and emotional), after observing a group of health professionals in a health center. addiction rehabilitation^(1,2).

Among the signs and symptoms that make up the syndrome, a feeling of depersonalization

and personal dissatisfaction has been found, including cynicism, irritability and decreased or lack of concentration⁽³⁾. It has been linked to metabolic syndrome in health workers⁽⁴⁾, and to a decrease in their immune response⁽⁵⁾.

This syndrome was recently recognized by the World Health Organization (WHO) as an “occupational phenomenon”, that is, an occupational disease⁽⁶⁾, with an estimated prevalence of 76% in professionals who base their work on interpersonal relationships, since either with a patient or with colleagues⁽⁷⁾, which can create impersonal and withdrawn relationships, reducing efficiency, productivity and work self-efficacy, triggering eventual resignation⁽⁸⁾.

The pandemic caused by coronavirus 2019 (COVID-19) has put healthcare personnel under significant pressure⁽⁹⁾. In this sense, studies have been published that establish a close relationship between the workload associated with caring for patients with COVID 19 and the presence of exhaustion, fatigue, depression, anguish and anxiety⁽⁹⁻¹²⁾.

During the pandemic, nurses experienced significant emotional and physical repercussions, which generated reflection on applied emotional management. This process led nurses to reconsider their future work, including the possibility of leaving their duties or changing units. Furthermore, they questioned their choice of profession, even considering not choosing it again in the future⁽¹³⁾.

These considerations are framed in an emotionally hostile context, where the aforementioned options and reflections were influenced by long working hours in an environment loaded with physical demands, fear of personal and family contagion, as well as stigma and social rejection, given that considered a population at high risk of contagion⁽¹⁴⁾.

Likewise, the increase in demand for care, to which nurses have been exposed, has had an impact on their mental health and work performance, and the permanent fear of exposure and contagion to the virus has also contributed as triggering factors. burnout.

During the pandemic, it has been noted that the incidence of burnout syndrome is linked to various factors, including length of work experience, level of responsibility, length of working hours, eating habits, and ineffective emotional coping strategies. These elements have been identified as variables that increase the risk of burnout in healthcare personnel⁽⁶⁾.

For this reason, it is essential to study this phenomenon and understand its impact, since this can provide bases for designing effective strategies that address burnout in the daily practice of nursing professionals. This stressor can negatively influence concentration, understanding, and the ability to make appropriate decisions, further underscoring the importance of implementing preventative and supportive measures.

Consequently, the objective of this article is to describe the phenomenon of burnout syndrome and its impact on nursing professionals during the care of patients in the COVID-19 pandemic.

MATERIAL AND METHOD

This study is based on a narrative review with a qualitative approach whose objective is to describe the current state of research on burnout syndrome in nurses during the COVID-19 pandemic. For this purpose, a variety of information sources were used, including primary, secondary and tertiary documents.

Eligibility criteria were set to include articles in English published between 2020 and 2022 that specifically addressed burnout in nurses during the pandemic. The search strategy was carried out in the electronic databases

Scopus and PubMed, using keywords such as “nursing”, “COVID-19” and “burnout”, combined with the Boolean operator “AND”. Additional filters were applied to include only articles in English and published in the last 3 years, as well as the “full open Access” filter for Scopus.

Data collection was done using open coding, a process that involves separating, examining, comparing, and conceptualizing data to organize it into lines, sentences, or paragraphs. This makes it easier to examine and compare them based on similarities and differences⁽¹⁵⁾.

RESULTS

A total of 21 articles were found that fulfilled the purpose of this narrative review. Table 1 summarizes the selected articles, from which an in-depth analysis was carried out to respond to the objective of the study.

It has been described that in the past nurses have been in direct contact with diseases that have caused epidemics in different parts of the world. For the influenza pandemic in 2000, no records of burnout related to professional activity in this type of crisis were found, in contrast to what is currently happening in the COVID-19 pandemic⁽³²⁾.

The global health context has led to positive actions in public policies in various countries, mainly in the management of physical resources and optimization of health human resources. However, for nurses, working conditions have not improved compared to the pre-pandemic period, with high levels of exhaustion, dissatisfaction with their work and intentions to leave their employer persisting⁽³¹⁾.

Several factors have been identified that impact the mental health of healthcare workers, including nurses. These factors include: limited resources in hospitals, the constant threat of exposure to the virus as

Authors	Year/Magazine/ Country	Design	Objective
Sagherian et al. ⁽¹⁶⁾	2020 J Clin Nurs USA	Descriptive- Transversal	To describe levels of insomnia, fatigue and recovery between shifts, and psychological well-being (exhaustion, post-traumatic stress and psychological distress), and examine differences in these measures based on work-related characteristics among nursing staff during the COVID-19 pandemic. COVID-19 in the United States.
Jose et al. ⁽¹⁷⁾	2020 Indian J Crit Care Med India	Descriptive- Transversal	To determine burnout and resilience among frontline nurses providing direct patient care in the ED of a tertiary care center in North India.
Raudenská et al. ⁽¹⁸⁾	2020 Best Pract Res Clin Anaesthesiol Czech Republic	Revision	The review will describe some psychological terms: especially psychological (emotional) trauma, acute stress disorder (ASD) and post-traumatic stress disorder (PTSD), mass traumatic event, secondary traumatic stress (TTS), moral injury, and burnout to better understand the underlying problems associated with COVID-19
Murat et al. ⁽¹⁹⁾	2021 Int J Ment Health Nurs Türkiye	Descriptive- Transversal	This study aims to determine the levels of stress, depression and burnout of frontline nurses during the COVID-19 pandemic. Accordingly, the mental health status of nurses will be examined, which will make a positive contribution to the literature to psychologically prepare nurses participating in this panic and future pandemic, and to organize preventive mental health services.
Chen et al. ⁽²⁰⁾	2021 Int J Ment Health Nurs Taiwan	Descriptive- Transversal	To assess trauma, burnout, post-traumatic growth, and associated factors for nurses in the COVID-19 pandemic.
Galanis et al. ⁽²¹⁾	2021 J Adv Nurs Greece	Revision	Examine nurse burnout and associated risk factors during the COVID-19 pandemic.
Chirico et al. ⁽²²⁾	2020 BJPsych Int Italy	Revision	Not specified.
Li et al. ⁽²³⁾	2021 J Nurs Manag Taiwan	Descriptive	To examine workplace factors related to the coronavirus disease 2019 (COVID-19) pandemic to determine adverse mental health effects and whether organizational strategies mitigate these effects.
Crowe et al. ⁽²⁴⁾	2021 Intensive Crit Care Nurs Canada	Mixed Method Convergent Parallel	To examine the mental health of critical care registered nurses providing direct patient care during the initial phase of the COVID-19 pandemic in Canada.
Schulze et al. ⁽²⁵⁾	2022 BMC Health Serv Res Germany	Mixed	To evaluate what psychosocial burdens and possible positive aspects are experienced by nurses working in long-term care facilities during the COVID-19 pandemic.
Stevenson et al. ⁽²⁶⁾	2022 Child Abus Negl United States		We explored the deleterious effects of the COVID-19 pandemic on nurse parental burnout, child maltreatment, and child neglect, as mediated by compassion fatigue.
Maben et al. ⁽²⁷⁾	2022 Int J Nurs Stud United Kingdom	Longitudinal qualitative	To examine the impact of the pandemic on the psychosocial and emotional well-being of frontline nursing staff.
Khan et al. ⁽²⁸⁾	2022 J Nurs Manag Belgium	Cross-section	To examine work factors related to the coronavirus disease 2019 (COVID-19) pandemic for adverse effects on mental health and whether organizational strategies mitigate these effects.
Belji et al. ⁽²⁹⁾	2022 Front Public Heal Italy	cross-section	To examine personal and work environmental risk factors associated with occupational burnout among hospital nurses.

Simonovich et al. ⁽³⁰⁾	2022 SAGE Open Nurs United States	Descriptive study	To qualitatively describe the emotions experienced by American nurses during the initial response to the COVID-19 pandemic.
French et al. ⁽³¹⁾	2022 J Nurs Regul USA	Cross-section	Describe the working conditions, work outcomes, and patient safety and quality of care measures of registered nurses (RNs) in hospitals and nursing homes just before the pandemic.
Sullivan et al. ⁽³²⁾	2022 Nurs Clin North Am United States	Revision	Analyze the history of pandemics and examine research related to nurse burnout during the previous and current COVID-19 pandemic.
Wan et al. ⁽³³⁾	2022 BMC Nurs China	Multicenter, descriptive and cross-sectional study	To investigate the levels of burnout and anxiety of nurses during the COVID-19 epidemic and analyze the factors that influence burnout.
Son et al. ⁽³⁴⁾	2022 Collegian Korea	cross-section	To identify the impact of younger nurses' job stress and perceived organizational support on their willingness to care for COVID-19 patients.
Howie-Esquivel et al. ⁽³⁵⁾	2022 Hear Lung United States	Exploratory correlational study	1. Describe burnout levels and work-related quality of life 2. Determine the relationship between burnout and work-related quality of life 3. To examine whether resilience moderates the association between work-related quality of life and burnout.
Andlib et al. ⁽³⁶⁾	2022 Int Nurs Rev Pakistan	cross-section	To assess the burden of burnout and psychological distress and their association among Pakistani nurses providing care to COVID-19 patients.

Table 1: Summary of selected studies

an additional occupational risk, long shifts, altered sleep patterns, difficulties in reconciling work and family life, neglect of personal and family needs due to increased workload, and lack of sufficient communication and up-to-date information⁽¹⁸⁾.

A study carried out in Germany⁽²⁵⁾, showed significant differences in the psychosocial burden of nurses in nursing homes before and after the COVID-19 pandemic. Likewise, another European study, carried out in England⁽²⁷⁾ evaluated the aspects related to the control of emotions linked to stress and working conditions, reflected in the first and beginning of the second wave of COVID-19, where English nurses perceived that moral distress, compassion fatigue, the landscape of death and disorders in emotional states, even led them to consider leaving the profession.

Likewise, working conditions were determining factors in Belgian nurses during the first wave of COVID-19, where a high risk of burnout was found, with 70% (n=4552), with the main risk factors being the lack of medical equipment. personal protection

(PPE), changes in workload and direct work with patients infected with COVID-19⁽²⁸⁾.

Another study of 1,499 Taiwanese nurses agrees that redistribution, increased work hours, and occupational stigma were associated with adverse mental health and clear intentions to leave the profession⁽²³⁾.

A study conducted in Turkey concluded that nurses with less than one year of work experience, those employed in public hospitals, and those who perceived an insufficiency in the quality of nursing care experienced significantly higher levels of stress compared to with their colleagues with more work experience, those who worked in private institutions and those who considered their care to be competent, respectively⁽¹⁹⁾.

At the same time, it was shown that nurses had high levels of burnout during the COVID-19 pandemic, where the relationships between resilience and quality of work life influence. This suggests that burnout comes from the workplace and from personal sources, determining that resilience could not overcome the effect of burnout⁽³⁵⁾.

Organizational support provided to Korean nurses, including COVID-related training, may reduce work-related stress arising from exposure to the virus, especially for those who recently entered the profession⁽³⁴⁾.

In an analysis between anxiety and burnout in Chinese nurses, it was determined that there is a significant positive correlation between emotional exhaustion and cynicism but not in personal fulfillment⁽³³⁾. Although the characteristics of the studies are different, similar results are obtained in the predisposing risk factors for burnout, in a study carried out in both Iranian⁽²⁹⁾ and Pakistani nurses⁽³⁶⁾.

Similarly, an Indian study⁽¹⁷⁾, applied to nurses who performed clinical tasks in emergency services during the pandemic, estimated that they experienced a moderate to severe level of burnout in emotional exhaustion and depersonalization.

Nurses experienced high levels of emotional exhaustion, low personal accomplishment, and depersonalization. These levels of burnout are much higher even among nurses who work in highly stressful environments. Negative emotions and feelings from patients, colleagues, and family members can trigger similar emotions and feelings in nurses, influencing perceived stress among them and making them more vulnerable to emotional exhaustion. Nursing staff who are exposed and in contact with confirmed or suspected COVID-19 patients are more often distressed, nervous and scared. Thus, nurses face continuous stress that can trigger post-traumatic stress, suicidal ideation and suicide⁽²¹⁾. In this last scenario, at the beginning of the pandemic, Italian nurses were forced to avoid their family and friends. This strong emotional burden generated the suicide of nurses who tested positive for COVID-19 and feared infecting their patients.

⁽²²⁾.

In a mixed Canadian study, the effect, at the beginning of the pandemic, on the mental health of nurses in critical units was evaluated, resulting in clinical concern for symptoms related to post-traumatic stress, as well as emotional alterations, mainly linked to the information fluctuations and dynamics of their actions, as well as being able to satisfy the sustained needs of patients and their own personal and family commitments⁽²⁴⁾. Exposure to death and continuous suffering affects family relationships, due to greater parental exhaustion, leading to child abuse and abandonment, marital conflicts and substance abuse⁽²⁶⁾.

A similar study was carried out in the evaluation of American nurses, whose results coincide in the emotional aspects that predispose to burnout. These professionals present symptoms such as subthreshold insomnia, acute and chronic fatigue, as well as poor recovery between shifts. In addition, they report experiencing emotional exhaustion, depersonalization, moderate psychological distress and a high level of post-traumatic stress, especially exacerbated during care for patients with COVID-19⁽³⁰⁾.

Another study carried out in the same country concluded that, while caring for patients with COVID-19, nurses report feelings of fear, frustration, helplessness and guilt for not being able to meet the expectations of others⁽¹⁶⁾.

Women and staff working in care units or departments related to COVID-19 had significantly higher levels of emotional exhaustion, however, it is men who present higher levels of depersonalization⁽²⁰⁾.

CONCLUSIONS

Burnout syndrome has been a constant burden in the work of nurses even in times before the pandemic. However, with the arrival of COVID-19, these challenges have increased exponentially due to the greater demand for care from infected patients. This situation has placed nurses in an extremely challenging and stressful position, facing grueling work hours and increased emotional pressure.

The impact of this global health crisis has resulted in nurses experiencing an expanded range of negative emotions, including distress, fear, anxiety, and acute physical and mental

exhaustion. Many have even experienced suicidal ideation, reflecting the critical level of stress and emotional exhaustion to which they are subjected.

It is evident that nurses are on the front lines of combating this pandemic, facing significant personal and emotional risks in their daily work.

It is urgent to recognize the vital importance of your psychological and emotional well-being, and act accordingly. Therefore, a call is made to immediately implement specific strategies and policies aimed at providing the necessary support for the care and protection of the mental health of these professionals.

REFERENCES

1. Carlin M, Garcés De Los Fayos J. El síndrome de burnout : Evolución histórica desde el contexto laboral al ámbito deportivo. *An Psicol.* 2010;26(1):169–80. Disponible en: <https://doi.org/10.6018/analesps>
2. Terns-Campius L, Pedreira-Robles G. Prevalencia de burnout en enfermeras de nefrología tras un año de pandemia por COVID-19. *Enferm Nefrol.* 2022;25(May 2021):39–45. Disponible en: <http://dx.doi.org/10.37551/s2254-28842022004>
3. Shawahna R, Maqboul I, Ahmad O, Al-Issawy A, Abed B. Prevalence of burnout syndrome among unmatched trainees and residents in surgical and nonsurgical specialties : a cross - sectional study from different training centers in Palestine. *BMC Med Educ.* 2022;22:1–12. Disponible en: <https://doi.org/10.1186/s12909-022-03386-8>
4. Meng-Ting T, Jau-Yuan C. Burnout and metabolic syndrome among healthcare workers : Is subclinical hypothyroidism a mediator? *J Occup Health.* 2021;63:1–10. Disponible en: <https://doi.org/10.1002/1348-9585.12252>
5. Cui J, Ren YH, Zhao FJ, Chen Y, Huang YF, Yang L, You XM. Cross-sectional study of the effects of job burnout on immune function in 105 female oncology nurses at a tertiary oncology hospital. *Med Sci Monit.* 2021;27:1–7. Disponible en: <https://doi.org/10.12659/msm.929711>
6. Cabezón M, Agurto M, Estefó M, Oliveros X, Ojeda D, Cisternas P, et al. Burnout en funcionarios de salud en tiempos de pandemia. *Rev Med Chil.* 2021;149:1589–93. Disponible en: <http://dx.doi.org/10.4067/S0034-98872021001101589>
7. Membrive-Jiménez M, Gómez-Urquiza J, Suleiman-Martos N, Velando-Soriano A, Ariza T, De la Fuente-Solana E, et al. Relation between burnout and sleep problems in nurses : A systematic review with meta-analysis. *Healthcare.* 2022;10:1–16. Disponible en: <https://www.mdpi.com/2227-9032/10/5/954>
8. Tehrani S, Keshtkar A, Ramasamy A, Fadaei M. The worldwide prevalence of burnout syndrome among bank employees : a systematic review and meta-analysis protocol. *Syst Rev.* 2021;10:1–6. Disponible en: <https://doi.org/10.1186/s13643-021-01833-z>
9. Guttormson J, Calkins K, McAndrew N, Fitzgerald J, Losurdo H, Loonsfoot D. Critical care nurse burnout, moral distress, and mental health during the COVID-19 pandemic: A United States survey. *Heart&Lung.* 2020;55(Junio):127–33. Disponible en: <https://doi.org/10.1016/j.hrtlng.2022.04.015>
10. Kishi H, Watanabe K, Nakamura S, Taguchi H, Narimatsu H. Impact of nurses' roles and burden on burnout during the COVID-19 pandemic: Multicentre cross-sectional survey. *J Nurs Manag.* 2022;1–9. Disponible en: <https://doi.org/10.1111/jonm.13648>

11. Sikaras C, Ilias I, Tselebis A, Pachi A, Zyga S, Tsironi M, et al. Nursing staff fatigue and burnout during the COVID-19 pandemic in Greece. *Public Health*. 2021;9:94–105. Disponible en: <https://doi.org/10.3934/publichealth.2022008>
12. Pachi A, Sikaras C, Ilias I, Panagiotou A, Zyga S, Tsironi M, et al. Burnout, depression and sense of coherence in nurses during the pandemic crisis. *Healthcare*. 2022;10(1):1–11. Disponible en: <https://doi.org/10.3390/healthcare10010134>
13. Arimon-Pagés E, Fernández-Ortega P, Fabrellas-Padrés N, Castro-García A, Canela-Soler J. Dealing with emotional vulnerability and anxiety in nurses from high-risk units a multicenter study. *Int J Environ Res Public Health*. 2022;19:1–11. Disponible en: <https://doi.org/10.3390/ijerph19095569>
14. Pathiraja P, Srikanthi W, Jayamanne B, DeSilva H. Depression, anxiety and stress among nursing officers in a dedicated hospital for COVID patients in Sri Lanka: A single institute experience. *Pakistan J Med Sci*. 2022;38(4):1073–6. Disponible en: <https://doi.org/10.12669/pjms.38.4.5508>
15. Do Prado ML, De Souza ML, Monticelli M, Cometto MC, Gómez PF. Investigación cualitativa en enfermería. Metodología y didáctica. Washington DC: OPS; 2013. 255 Consulta: agosto 28, 2023. Disponible en: https://iris.paho.org/bitstream/handle/10665.2/51587/9789275318171_spa.pdf?sequence=3&isAllowed=y
16. Sagherian K, Steege LM, Cobb SJ, Cho H. Insomnia, fatigue and psychosocial well-being during COVID-19 pandemic: A cross-sectional survey of hospital nursing staff in the United States. *J Clin Nurs*. 2020. Disponible en: <https://doi.org/10.1111/jocn.15566>
17. Jose S, Dhandapani M, Cyriac MC. Burnout and resilience among frontline nurses during covid-19 pandemic: A cross-sectional study in the emergency department of a tertiary care center, north india. *Indian J Crit Care Med*. 2020;24(11):1081–8. Disponible en: <https://doi.org/10.5005/jp-journals-10071-23667>
18. Raudenská J, Steinerová V, Javůrková A, Urits I, Kaye AD, Viswanath O, et al. Occupational burnout syndrome and post-traumatic stress among healthcare professionals during the novel coronavirus disease 2019 (COVID-19) pandemic. *Best Pract Res Clin Anaesthesiol*. 2020;34(3):553–60. Disponible en: <https://doi.org/10.1016/j.bpa.2020.07.008>
19. Murat M, Köse S, Savaşer S. Determination of stress, depression and burnout levels of front-line nurses during the COVID-19 pandemic. *Int J Ment Health Nurs*. 2021;30(2):533–43. Disponible en: <https://doi.org/10.1111/inm.12818>
20. Chen R, Sun C, Chen JJ, Jen HJ, Kang XL, Kao CC, et al. A large-scale survey on trauma, burnout, and posttraumatic growth among nurses during the COVID-19 pandemic. *Int J Ment Health Nurs*. 2021;30(1):102–16. Disponible en: <https://doi.org/10.1111/inm.12796>
21. Galanis P, Vraika I, Fragkou D, Bilali A, Kaitelidou D. Nurses' burnout and associated risk factors during the COVID-19 pandemic: A systematic review and meta-analysis. *J Adv Nurs*. 2021;77(8):3286–302. Disponible en: <https://doi.org/10.1111/jan.14839>
22. Chirico F, Nucera G, Magnavita N. Protecting the mental health of healthcare workers during the COVID-19 emergency. *BJPsych Int*. 2021;18(1):1–2. Disponible en: <https://doi.org/10.1192/bji.2020.39%0A>
23. Li TM, Pien LC, Kao CC, Kubo T, Cheng WJ. Effects of work conditions and organisational strategies on nurses' mental health during the COVID-19 pandemic. *J Nurs Manag*. 2022;30(1):71–8. Disponible en: <https://doi.org/10.1111/jonm.13485>
24. Crowe S, Howard AF, Vanderspank-Wright B, Gillis P, McLeod F, Penner C, et al. The effect of COVID-19 pandemic on the mental health of Canadian critical care nurses providing patient care during the early phase pandemic: A mixed method study. *Intensive Crit Care Nurs*. 2021;63:102999. Disponible en: <https://doi.org/10.1016/j.iccn.2020.102999>
25. Schulze S, Merz S, Thier A, Tallarek M, König F, Uhlenbrock G, et al. Psychosocial burden in nurses working in nursing homes during the Covid-19 pandemic : A cross-sectional study with quantitative and qualitative data. *BMC Health Serv Res*. 2022;1–13. Disponible en: <https://doi.org/10.1186/s12913-022-08333-3>

26. Stevenson MC, Schaefer CT, Ravipati VM. COVID-19 patient care predicts nurses' parental burnout and child abuse: Mediating effects of compassion fatigue. *Child Abus Negl.* 2022;130:105458. Disponible en: <https://doi.org/10.1016/j.chiabu.2021.105458>
27. Maben J, Conolly A, Abrams R, Rowland E, Harris R, Kelly D, et al. 'You can't walk through water without getting wet' UK nurses' distress and psychological health needs during the Covid-19 pandemic: A longitudinal interview study. *Int J Nurs Stud.* 2022;131:104242. Disponible en: <https://doi.org/10.1016/j.ijnurstu.2022.104242>
28. Khan Y, Bruyneel A, Smith P. Determinants of the risk of burnout among nurses during the first wave of the COVID-19 pandemic in Belgium: A cross-sectional study. *J Nurs Manag.* 2022;1125–35. Disponible en: <https://doi.org/10.1111/jonm.13624>
29. Belji Kangarlou M, Fatemi F, Paknazar F, Dehdashti A. Occupational burnout symptoms and its relationship with workload and fear of the SARS-CoV-2 pandemic among hospital nurses. *Front Public Heal.* 2022;10(April):1–9. Disponible en: <https://doi.org/10.3389/fpubh.2022.852629%0A>
30. Simonovich SD, Webber-Ritchey KJ, Spurlark RS, Florczak K, Mueller Wiesemann L, Ponder TN, et al. Moral distress experienced by US nurses on the frontlines during the COVID-19 pandemic: Implications for nursing policy and practice. *SAGE Open Nurs.* 2022;8. Disponible en: <https://doi.org/10.1177/23779608221091059>
31. French R, Aiken LH, Fitzpatrick Rosenbaum KE, Lasater KB. Conditions of nursing practice in hospitals and nursing homes before covid-19: Implications for policy action. *J Nurs Regul.* 2022;13(1):45–53. Disponible en: [https://doi.org/10.1016/S2155-8256\(22\)00033-3](https://doi.org/10.1016/S2155-8256(22)00033-3)
32. Sullivan D, Sullivan V, Weatherspoon D, Frazer C. Comparison of nurse burnout, before and during the COVID-19 pandemic. *Nurs Clin North Am.* 2022 Mar;57(1):79–99. Disponible en: <https://doi.org/10.1016/J.CNUR.2021.11.006>
33. Wan Z, Lian M, Ma H, Cai Z, Xianyu Y. Factors associated with burnout among Chinese nurses during COVID-19 epidemic: a cross-sectional study. *BMC Nurs.* 2022;21(1):1–8. Disponible en: <https://doi.org/10.1186/s12912-022-00831-3>
34. Son Y-J, Lee H, Jang SJ. Work stress and perceived organisational support on young Korean nurses' care for COVID-19 patients. *Collegian.* 2022. Disponible en: <https://doi.org/10.1016/j.colegn.2022.05.009>
35. Howie-Esquivel J, Do H, Lewis C, Travis A, Cavanagh C. Quality of work-life among advanced practice nurses who manage care for patients with heart failure: The effect of resilience during the Covid-19 pandemic. *Hear Lung.* 2022;55(Junio):34–41. Disponible en: <https://doi.org/10.1016/j.hrtlng.2022.04.005>
36. Andlib S, Inayat S, Azhar K, Aziz F. Burnout and psychological distress among Pakistani nurses providing care to COVID-19 patients: A cross-sectional study. *Int Nurs Rev.* 2022;(Mayo 2021). Disponible en: <https://doi.org/10.1111/inr.12750>