# IMPACTS OF THE COVID-19 PANDEMIC ON THE MENTAL HEALTH OF HEALTHCARE PROFESSIONALS IN BRAZIL: AN INTEGRATIVE REVIEW

IMPACTOS DA PANDEMIA DE COVID-19 NA SAÚDE MENTAL DOS PROFISSIONAIS DE SAÚDE DO BRA-SIL: UMA REVISÃO INTEGRATIVA

# Ismael Felipe Gonçalves Galvão<sup>2</sup>; Thárcia Kiara de Beserra de Oliveira<sup>1</sup>

<sup>1</sup>Docente da Faculdade de Medicina de Olinda e do Centro Universitário Unifacisa. Doutora pela Universidade Federal de Campina Grande. <sup>2</sup>Estudante de Medicina da Faculdade de Medicina de Olinda – FMO

# **ABSTRACT**

Introduction: The COVID-19 pandemic exposed insecurities, adversities, and fears that the international community had not experienced for decades. Pandemics lead to sudden changes in daily life, generating consequences that may exceed the coping capacity of those affected. Therefore, this study aimed to review the psychological impacts resulting from this reality. **Objective:** To conduct a review and demonstrate the impacts of the COVID-19 pandemic on the mental health of healthcare professionals in Brazil. **Methods:** This integrative review included studies published in English and Portuguese between January 1, 2020, and February 10, 2020. Two databases were searched (SciELO and PubMed) using the following descriptors: mental health, covid-19, health workers, and Brazil. **Results:** Thirty-nine studies were identified, and 12 met the eligibility criteria. **Conclusion:** A clear association between the COVID-19 pandemic and the worsening of the mental health of healthcare professionals in Brazil was observed. A high demand for psychological care services due to the long-term effects of the pandemic on the mental health of this population should be expected in the future. Further research is needed to develop strategies to mitigate this adversity.

**Keywords:** COVID-19; Brazil; Mental health; Health personnel.

# **RESUMO**

Introdução: A pandemia da COVID-19 trouxe à tona inseguranças, adversidades e medos que a comunidade internacional não experienciava havia décadas. Pandemias implicam mudanças bruscas no cotidiano da sociedade. Essas implicações geram impactos que podem ultrapassar a capacidade de enfrentamento daqueles que as vivenciam. Objetivo: Realizar uma revisão integrativa e demonstrar os impactos da pandemia da COVID-19 na saúde mental dos profissionais de saúde do Brasil. Métodos: Trata-se de uma revisão integrativa, na qual foram analisados estudos publicados em língua inglesa e portuguesa, entre 1º de janeiro de 2020 e 10 de fevereiro de 2021, tendo como referência a base de dados SciELO e PubMed, empregando os seguintes descritores: Mental Health, COVID-19, Health Workers, Brazil. Resultados: Dos 39 estudos identificados após a remoção de duplicatas, 12 preencheram os critérios de elegibilidade. Conclusões: Há uma notória associação entre a pandemia de COVID-19 e o agravo da saúde mental dos profissionais de Saúde do Brasil. No futuro, poderá haver alta demanda nos serviços de atenção psicológica devido às consequências dos impactos da pandemia na saúde mental da população estudada, fato que torna necessárias a realização de pesquisas e a elaboração de estratégias para reverter essa adversidade.

Palavras-chave: COVID-19; Brasil; Saúde mental; Profissionais da saúde.

# INTRODUCTION

The World Health Organization declared the COVID-19 pandemic in March 2020 due to its high infectious capacity. Over time, social, economic, and political repercussions corroborated the development of psychological disorders among healthcare professionals, compromising interpersonal relationships and triggering failures in healthcare<sup>1-3</sup>.

Pandemics require sudden changes in routine, affecting the coping capacity of those who experience it. An increased incidence of mental disorders among the population is expected, a consequence that varies according to the magnitude of the event, the degree of social vulnerability, and the timing and quality of actions focused on mental health<sup>4</sup>.

Since then, studies have aimed to discuss the consequences of the new pandemic and its association with the mental health of frontline healthcare professionals<sup>2</sup>. Among the main factors affecting mental health were poor work environment, risk of infecting themselves and others, fear of becoming ill, fear of death, despair, hopelessness, and coping with social distancing<sup>2,5</sup>. Studies reported the neglect of public policies related to mental support for healthcare professionals and how the increased demand for psychological care services for healthcare professionals was in course<sup>2,6</sup>.

This study aimed to conduct an integrative review, summarizing the information in literature to identify the possible repercussions of

the COVID-19 pandemic on the mental health of healthcare professionals in Brazil.

# **METHODS**

This integrative review of the literature combined studies with different methodologies and compared the occurrence of the disease among groups of individuals according to the guidelines found in scientific evidence. The following question guided the review: What are the impacts of the COVID-19 pandemic on the mental health of healthcare professionals in Brazil?

# Search strategy

Electronic searches were conducted in April 2020 on SciELO and PubMed databases using the following keywords: "mental health", "COVID-19", "health workers", and "Brazil". Keywords were combined using the Boolean operator "AND".

In the first screening, titles and abstracts were reviewed using the eligibility criteria. Consequently, independent reviewers read all the articles in full. Figure 1 details the study flow-chart.

The inclusion criteria were a) scientific articles; b) free full texts (original, review, experience report, update, or case study); c) studies that addressed the mental health of healthcare professionals; d) publication date between January 1, 2020, and February 10, 2021; and e) studies available in Portuguese and English. Studies that did not address the guiding question or duplicates were excluded.

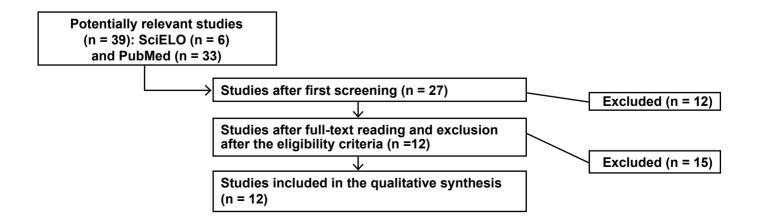


Figure 1. Study flowchart.

# **RESULTS**

	TITLE	AUTHOR	OBJECTIVES	CONCLUSION
1	Saúde Mental dos profissionais de saúde no Brasil no contexto da pandemia de COVID-19	Dantas E. (2021)	To discuss the nuances surrounding the challenges and possibilities related to the mental health of healthcare professionals in Brazil in the context of the COVID-19 pandemic <sup>2</sup> .	Currently, mental health actions are urgent and vital and must be one of the foundations of resilience in a society that will face a COVID-19 pandemic with definitive and unknown consequences for the mental health of healthcare professionals <sup>2</sup> .
2	The impact of the COVID-19 pandemic on the mental health of healthcare professionals	Ornell <i>et al</i> (2020)	To unravel the impacts of the COVID-19 pandemic on the mental health of healthcare professionals in Brazil <sup>3</sup> .	Healthcare professionals are particularly vulnerable to psychological distress, a fact that corroborates the development of psychological disorders. This reiterates the importance of intervention for the mental health promotion of these professionals <sup>3</sup> .
3	Escolhas de Sofia e a pandemia de COVID-19 no Brasil: reflexões bioéticas	Torres <i>et al</i> (2020)	To demonstrate how the pandemic affects the distribution of health resources in Brazil and highlight the ethical and psychological dilemmas experienced by health- care professionals in the context of combating the disease <sup>4</sup> .	The pandemic has led to an increased demand for therapeutic equipment and brought bioethical dilemmas to Brazilian healthcare professionals, which may generate significant psychological disorders and marks in this population <sup>4</sup> .
4	Depressão e ansiedade em profissionais de enfermagem durante a pandemia da COVID-19.	Santos et al (2021)	To analyze the prevalence of symptoms of depression, anxiety, and the associated factors in a nursing staff during the COVID-19 pandemic <sup>5</sup> .	Female gender, brown color or race, monthly income of less than five minimum wages, and working in the private sector were factors related to a higher prevalence of symptoms suggestive of anxiety and depression disorders <sup>5</sup> .
5	Capacitação nacional emergencial em saúde mental e atenção psicossocial na COVID-19: um relato de experiência.	Noal <i>et al</i> (2020)	To highlight the approaches to mental health and psychosocial care developed to provide technical support based on scientific knowledge to healthcare professionals in this context <sup>6</sup> .	Indicators of mental health and psychosocial care in crises showed that mental health was directly impacted, with a gap in the creation of public mental health policies in Brazil aimed at health emergencies <sup>6</sup> .
6	Segurança dos profissionais de saúde no enfrentamento do novo coronavírus no Brasil.	Santana et al (2020)	To present the number of healthcare professionals affected by COVID-19 in Brazil, identify some measures to reduce vulnerability, and demonstrate the repercussions on the health of these professionals <sup>7</sup> .	The precarious condition of the environments where healthcare professionals work has been evidenced, which corroborates with a worsening of the physical integrity of these professionals and their health as a whole <sup>7</sup> .
7	Exposição às informações sobre COVID-19 em mídias digitais e suas implicações para funcionários do setor de saúde: resultados de uma pesquisa on-line.	Bazán <i>et al</i> (2020)	To estimate how the high consumption of information related to the novel coronavirus disease affects healthcare professionals during the pandemic <sup>8</sup> .	Approximately half of the participants complained of headaches (57.9%) and sleep disorders (49.5%). Among other symptoms, anxiety and exhaustion were the most frequently reported. Approximately a third of respondents felt stressed almost every day or always <sup>8</sup> .

# **REVIEW ARTICLE**

	,		1	1
8	A saúde mental da enfermagem no enfrentamento da COVID-19 em um hospital universitário regional.	Dal'Bosco et al (2020)	To identify the prevalence and factors associated with anxiety and depression in nursing professionals who deal with COVID-19 in a university hospital <sup>9</sup> .	A prevalence of anxiety (48.9%) and depression (25%) was observed9.
9	The emotional impact of Coronavirus 2019- nCoV (new Coronavirus disease).	Lima <i>et al</i> (2020)	To analyze the emotional impact of the new coronavirus on the population <sup>10</sup> .	Patients and frontline professionals are vulnerable to the emotional impacts of the pandemic due to the potential stressors arising from this reality, which are underestimated, and the constant resilience of these professionals <sup>10</sup> .
10	Impact of COVID-19 on Mental Health in a Low and Middle-In- come Country	Castro- de-Araujo et al (2020)	To identify the impacts of COVID-19 on mental health in low- and middle-income countries <sup>11</sup> .	The rapid spread of the pandemic has challenged the ability of countries to maintain their economies, a factor that has contributed to the prevalence of anxiety and stress throughout the population. Brazil is unprepared for the foreseeable consequences of the impacts addressed <sup>11</sup> .
11	When health professionals look death in the eye: the mental health of professionals who deal daily with the 2019 coronavirus outbreak.	Neto <i>et al</i> (2020)	To discuss the psychological aspects of healthcare professionals dealing with the COVID-19 pandemic on a daily basis <sup>12</sup> .	Intensive care physicians are on the edge of stress, especially when dealing with older patients and death; mental health care needs to be developed to reduce the impact of these issues <sup>12</sup> .
12	Psychiatric symptom- atology associated with depression, anxiety, distress, and insomnia in health professionals working in patients affected by COVID-19: A sys- tematic review with meta-analysis.	da Silva et al (2021)	To systematically analyze psychological symptoms, such as depression, anxiety, and insomnia, among healthcare professionals who deal with COV-ID-19 <sup>13</sup> .	A strong association between COVID-19 and psychiatric repercussions in health-care professionals was reported. Health-care professionals had a higher level of indirect traumatization, in which the impact of psychological damage may exceed the tolerance and emotional resilience of these professionals <sup>13</sup> .

# DISCUSSION

The number of studies investigating the psychological impacts of COVID-19 on health-care professionals increased since the start of the pandemic<sup>12</sup>. Although the studies involved different perspectives, more homogeneous themes were discussed, such as stress factors associated with mental illness<sup>2,3</sup>.

The study by Dantas et al. (2021)<sup>2</sup> mentioned many factors, including fear of death, fear of infection and contaminating others, despair, hopelessness, and coping with social distancing. These factors corroborate the emergence of post-traumatic stress, depression and anxiety, and even suicidal behavior. The authors highlighted the importance of the Psychosocial Care Network as an excellent tool to support

healthcare professionals and the psychological resilience as a strategy to combat the challenges arising from the pandemic. Dantas et al. also stated that a massive demand for mental health services might arise and should not be neglected, given the negative psychosocial repercussions that affect the community<sup>2</sup>.

Ornell et al. (2020)³ reported that during pandemics, people comply with social distancing to reduce infection rates, while healthcare professionals usually deal with the opposite due to the exponential demand. The monitoring of healthcare professionals in direct contact with infected patients is necessary, especially regarding symptoms of depression, suicide, and anxiety. On the other hand, the study highlighted Brazil as a country with severe socio-eco-

nomic inequalities and increased contamination curves; thus, establishing the need to create strategies for monitoring and promoting the mental health of frontline healthcare professionals, considering the high burden on them<sup>3</sup>.

Torres et al. (2020)<sup>4</sup> highlighted how the need for decisions based on protocols represented one of the greatest bioethical challenges faced by healthcare professionals and may generate high levels of stress and psychological suffering. The study demonstrated how psychology, in the context of the pandemic, had the potential to reduce negative impacts and improve the communication between those involved. This process may promote the mental health of the population evaluated. The study also emphasized the unknown medium- and long-term negative impacts on the mental health of healthcare professionals and the undoubted need for psychological support<sup>4</sup>.

Santos *et al.* (2021)5 reported that females, brown race, monthly income of three to four minimum wages, living with parents and siblings, and working in private practice and places without adequate structure were factors that influenced the prevalence of moderately severe to severe depression and anxiety among healthcare professionals. On the other hand, physical activity and talking to friends and family reduced the prevalence of symptoms of anxiety and depression in healthcare professionals. Therefore, actions aimed at improving working conditions and promoting physical activity may benefit the mental health of this population.

The overload of the Unified Health System was a consequence of governmental strategies to combat the pandemic, implying disturbances that exceeded the coping capacity of healthcare professionals. This situation triggered symptoms that already existed before the pandemic, such as stress, depression, and anxiety. Approximately one-third to half of the population affected may develop or increase mental disorders, an estimate that varies according to the degree of vulnerability and the quality of public psychosocial actions in response to the pandemic. In this context, the study indicated a gap in training and public health policies in Brazil aimed at health emergencies and highlighted the need to create strategies for training and monitoring healthcare professionals6.

The precarious conditions of the environments in which healthcare professionals work contribute to the deterioration of physical integrity and health. A study7 reported that psychological repercussions are often underestimated during crises. According to the authors, reducing the triggers for healthcare professionals is necessary to maintain the entire health system and professionals and, consequently, combat the COVID-19<sup>7</sup>.

High exposure to media information may be related to psychological distress. Spending more time consuming accurate and up-to-date information related to COVID-19 was a protective factor, although such exposure may increase the psychological distress of healthcare professionals. In the study, headaches, sleep disorders, anxiety, and exhaustion were among the symptoms resulting from this suffering<sup>8</sup>.

An incidence of approximately 48.9% of anxiety and 25% of depression was observed among the healthcare professionals. In this context, conflicts of interest, the high technical and professional responsibility of these professionals, and incisive pressures may contribute to the emotional imbalance of nursing professionals. According to Bosco et al., healthcare professionals must be prepared to face the threat by seeking specialized psychological support and performing integrative activities (e.g., relaxation exercises and Reiki) to reduce the mental health impacts of the pandemic<sup>9</sup>.

Patients and healthcare professionals are constantly tested for resilience and vulnerability to the emotional impacts of the pandemic, considering the underestimated potential stressors arising from this reality. According to a research published in the Lancet Psychiatry, older adults and immigrant professionals need special attention for mental health. In addition, many professionals often do not receive training in mental health and may have a feeling of collective hysteria, increasing the rates of anxiety, depression, and stress<sup>10</sup>.

A study<sup>11</sup> described how the rapid spread of the pandemic has affected the economy in many countries, increasing the prevalence of anxiety and stress in the population. The study

# **REVIEW ARTICLE**

also reported the relationships between mental disorders and cardiovascular and metabolic diseases and the possibility of progression of these symptoms (e.g., panic disorders). Another point evaluated was the approach to vulnerable populations, such as those affected by bipolar disorder. In these populations, loneliness and other stressors can be more incisive triggers of depressive syndromes<sup>11</sup>.

Neto et al. (2020)12 stated that the rapid growth of confirmed and suspected cases of COVID-19, work overload, shortage of protective equipment, and lack of specific medication contributed to increasing the emotional burden on healthcare professionals. This study also reported a high prevalence of COVID-19 among healthcare professionals, intensifying the uncertainties and anxiety regarding their profession. Neto et al. (2020) also indicated the need to develop mental health-related care, including the use of psychotropic drugs prescribed by specialized professionals for severe mental pathologies, follow-up with appropriate health services and facilities, development of psychological treatment plans for healthcare professionals, psychological electronic counseling, and the provision of psychological support from psychotherapeutic techniques based on the adaptive stress theory<sup>12</sup>.

In their review, da Silva et al. (2021)<sup>13</sup> highlighted the prevalence of sleep disorders, anxiety, and depression associated with the high risk of infection, lack of sufficient biological protection measures, and mental suffering among healthcare professionals. The meta-analysis showed that healthcare professionals had a higher level of indirect traumatization, in which the impact of psychological damage exceeded their tolerance and emotional resilience<sup>13</sup>.

# CONCLUSION

An important association between the COVID-19 pandemic and the worsening of mental health of healthcare professionals in Brazil was observed. The consequences of COVID-19 trigger the emergence and intensification of stress and anxiety. A high prevalence of serious symptoms of mental illness, such as anxiety, depression, and burnout syndrome, were observed among healthcare profession-

als. On the other hand, public health policies to combat this problem are neglected. The lasting impact of the pandemic on the mental health of healthcare professionals may lead to a significant increase in the demand for psychological care services, highlighting the need for research and strategic interventions to address this challenge.

# REFERENCES

- World Health Organization. WHO Director-General's opening remarks at the mediabriefing on COVID-19 11 March 2020 [Internet]. WHO DirectorGeneral'sspeeches4 2020. Disponível em: https://www.who.int/dg/speeches/ detail/whodirector-general-s-opening-remarks-at-the-media-briefingon-covid-19 11-march-2020.
- Dantas ESO. Saúde mental dos profissionais de saúde no Brasil no contexto da pandemia por Covid-19. Interface (Botucatu) 2021; 25 (Suppl 1): e200203. Epub Jan 08, 2021.
- Ornell F, Halpern SC, Kessler FHP, Narvaez JCM. The impact of the COVID-19 pandemic on the mental health of healthcare professionals. Cad. Saúde Pública. 2020; 36(4): e00063520.
- 4. Torres A, Félix AAA, Oliveira PIS. Escolhas de Sofia e a pandemia de COVID-19 no Brasil: reflexões bioéticas. Rev. Bioética y Derecho; (50): 333-352. Epub 23-Nov- 2020.
- Santos KMR, Galvão MHR, Gomes SM, Souza TA, Medeiros AA, Barbosa IR. Depressão e ansiedade em profissionais de enfermagem durante a pandemia da covid-19. Esc. Anna Nery; 25(spe): e20200370. Epub Feb 03, 2021
- Noal DS, Freitas CM, Passos MFD, Serpeloni F, Melo BD, Kadri MRA et al. Capacitação nacional emergencial em saúde mental e atenção psicossocial na COVID-19: um relato de experiência. ScientificElectronic Library Online.
- Santana N, Costa GA, Costa SSP, Pereira LV, Silva JV, Sales IPPM. Segurança dos profissionais de saúde no enfrentamento do novo coronavírus no Brasil. Esc. Anna Nery. 2020; 24( spe ): e20200241. Epub Fev 01, 2021.
- Bazán PR, Azevedo Neto RM, Dias JA, Salvatierra VG, Sanches LG, Lacerda SS, et al. Exposição às informações sobre COVID-19 em mídias digitais e suas implicações para funcionários do setor de saúde: resultados de uma pesquisa on-line. Einstein (São Paulo) 2020; 18: eAO6127. Epub Dez 07, 2020.
- Dal'Bosco EB, Floriano LSM, Skupien SV, Arcaro G, Martins AR, Anselmo ACC. A saúde mental da enfermagem no enfrentamento da COVID-19 em um hospital universitário regional. Rev. Bras. Enferm 2020; 73( Suppl 2): e20200434.
- 10. Lima CKT, Carvalho PMM, Lima IAAS, Nunes JVAO, Saraiva JS, Souza RI, et al. The emotional impact of

- Coronavirus 2019-nCoV (new Coronavirus disease). Psychiatry Res 2020; 287:112915. doi: 10.1016/j. psy-chres.2020.112915. Epub 2020 Mar 12. PMID: 32199182; PMCID: PMC7195292.
- Castro-de-Araujo LFS, Machado DB. Impact of COVID-19 on mental health in a Low and Middle-Income Country. Ciênc. saúde coletiva 2020; 25(Suppl 1): 2457-60. Epub June 05, 2020
- Neto MLR, Almeida HG, Esmeraldo JD, Nobre CB, Pinheiro WR, Oliveira CRT, et al. When health professionals look death in the eye: the mental health of professionals who deal daily with the 2019 coronavirus outbreak. Psychiatry Res 2020; 288:112972. doi: 10.1016/j.psy-chres.2020.112972. Epub 2020 Apr 13. PMID: 32302817; PMCID: PMC7152886.
- 13. Silva FCT, Neto MLR. Psychiatric symptomatology associated with depression, anxiety, distress, and insomnia in health professionals working in patients affected by COVID-19: A systematic review with meta-analysis. Prog Neuropsychopharmacol Biol Psychiatry 2021; 10;104:110057. doi: 10.1016/j. pnpbp.2020.110057. Epub 2020 Aug 7. PMID: 32777327; PMCID: PMC7411383.