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From caregiver to care receiver: scope review about workers' mental health in times of COVID-19

De cuidador a requisitante de cuidado: revisão de escopo acerca do mental do trabalhador em tempos de COVID-19

Del cuidador a la solicitud de atención: revisión del alcance sobre el mental del trabajador en tiempos de COVID-19

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Abstract

Introduction: The global health crisis triggered by the COVID-19 pandemic resulted in a higher prevalence of mental illness, especially among health professionals. **Objective:** To identify the relationship between Burnout Syndrome and mental illness in health workers during the COVID-19 pandemic and related risk factors in Brazil. **Methods:** This is a scope review, for which a search was carried out in 3 databases, applying the keywords (COVID-19) and (mental health workers), with a time frame for articles published between 2020 and 2022. **Results:** 18 of the 712 articles found were included. The analysis showed that the most frequent outcomes were increased prevalence of Burnout syndrome, depression, anxiety, sleep disturbances, stress symptoms and general psychological impact. The following are related aggravating factors: personal, structural aspects of the work environment and governmental aspects. **Conclusions:** The importance of further studies on the subject is highlighted, including long-term impact analyses.

Keywords: COVID-19; Health personnel; Burnout syndrome; Mental health; Psychiatry.

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Resumo

Introdução: A crise global de saúde desencadeada durante a pandemia da COVID-19 resultou em uma maior prevalência de adoecimento mental, sobretudo entre os profissionais de saúde. **Objetivo:** Identificar a relação entre a Síndrome de Burnout e o adoecimento mental nos trabalhadores de saúde durante a pandemia de COVID-19, bem como os fatores de risco relacionados no Brasil. **Métodos:** Trata-se de uma revisão de escopo, na qual foi realizada busca em três bases de dados, utilizando os termos "COVID-19" e "*mental health workers*", com recorte temporal de artigos publicados entre 2020 e 2022. **Resultados:** Foram incluídos 18 dos 712 artigos encontrados. A análise apontou que os desfechos mais frequentes foram o aumento da prevalência da Síndrome de Burnout, depressão, ansiedade, distúrbios no sono, sintomas de estresse e impacto psicológico geral. Fatores agravantes relacionados incluem aspectos pessoais, estruturais no ambiente de trabalho e governamentais. **Conclusões:** Destaca-se a importância de mais estudos sobre a temática, incluindo análises de impacto a longo prazo.

Palavras-chave: COVID-19; Trabalhadores da saúde; Síndrome de Burnout; Saúde mental; Psiquiatria.

Resumen

Introducción: La crisis de salud mundial desencadenada por la pandemia de COVID-19 resultó en una mayor prevalencia de enfermedades mentales, especialmente entre los trabajadores de la salud. **Objetivo:** Identificar la relación entre el Síndrome de Burnout y la enfermedad mental en trabajadores de la salud durante la pandemia de COVID-19 y los factores de riesgo relacionados en Brasil. **Métodos:** Esta es una revisión de alcance, para lo cual se realizó una búsqueda en 3 bases de datos, aplicando las palabras clave (COVID-19) y (trabajadores de la salud mental), con un marco temporal para artículos publicados entre 2020 y 2022. **Resultados:** Se incluyeron 18 de los 712 artículos encontrados. El análisis mostró que los resultados más frecuentes fueron una mayor prevalencia del Síndrome de Burnout, depresión, ansiedad, trastornos del sueño, síntomas de estrés e impacto psicológico general. Son agravantes relacionados los siguientes: aspectos personales, estructurales del ambiente de trabajo y aspectos gubernamentales. **Conclusiones:** Se destaca la importancia de realizar más estudios sobre el tema, incluidos los análisis de impacto a largo plazo.

Palabras clave: COVID-19; Personal de salud; Agotamiento psicológico; Salud mental; Psiquiatría.

INTRODUCTION

Discovered on December 31st, 2019 in Wuhan, China,[1] the new coronavirus disease (COVID-19), caused by the SARS-CoV-2 virus, was officially considered a pandemic on March 31st, 2020 by the World Health Organization.[2,3] The transmissibility of this disease, added to the wide spectrum of clinical presentation, which ranges from asymptomatic to flu-like syndrome or viral pneumonia with severe sequelae and the possibility of death, has become an immense challenge for health on a global scale.[2,3] Between December 2019 and April 2022, 489,779,062 cases of COVID-19 were confirmed, with 6,152,095 deaths caused directly by this condition. Of these, 30,012,798 cases occurred in Brazil, approximately 6% of global cases, followed by 660,312 deaths, approximately 10% of deaths worldwide.[3]

This global health crisis resulted in several deficits: deaths, long-term complications due to sequelae, in addition to the impacts of social isolation necessary to combat it, such as financial and educational losses, unemployment, reduction in social interactions and leisure, increase in mental health issues, decreased quality of life, among others.[4-7] Thus, health professionals played an active and decisive role throughout the duration of the pandemic, contributing to care, recovery, prevention, and follow-up of patients and their families.[8,9] In this way, a special focus was given to these professionals, especially with regard to biosafety and working conditions, considering the risk of direct contamination.[8] Less attention was given, however, to short- and long-term mental health conditions suffered by these professionals, who experienced a unique moment of stress, uncertainty, and high workloads.[10,11]

The HEROES report, carried out in conjunction with the Pan American Health Organization (PAHO), interviewed health professionals in 2020, showing a prevalence of 4.7 to 22% of symptoms that led to suspicion of a depressive episode, and around 5 to 15% of suicidal thoughts in these workers.[10,11] These numbers are higher than the general population, with the prevalence of depressive symptoms in Brazil being estimated at 5.8%, and of suicidal thoughts at 3.8%, demonstrating the increased risk of these conditions for this group.[12,13]

Several factors may explain the greater risk of mental illness in health professionals in this context: physical and emotional stress, frustration, constant risk of contamination, discrimination, isolation, constant contact with negative emotions in patients or their families, in addition to the lack of contact with family and exhaustion. When these factors exceed the professional's psychological resilience capacity, the process of mental illness begins, which may be manifested in different ways, such as stress, insomnia, anxiety, fear, panic disorders, post-traumatic stress disorders, symptoms of depression, suicidal thoughts, suicide attempts or Burnout Syndrome.[14-16]

Mental disorders are an important cause of dysfunctionality and are among five of the ten biggest global causes of years lost due to disability.[17] These generate personal, social, and financial losses for the individual and the community. Furthermore, they are one of the main causes of absenteeism, decreased productivity, and eventual professional leave.[18] Among these disorders, Burnout Syndrome represents a high prevalence in health professionals, ranging between 25 and 67% in doctors, and 10 to 70 % in nurses, being the third cause of absenteeism in Brazil in 2009.[19,20]

Burnout is a term used to identify something that has ceased to function properly due to a lack of energy. This syndrome, initially described by Freudenberger (1974) in mental health professionals, is characterized by a set of symptoms related to emotional exhaustion, reduced professional fulfillment, and psychological illness as a direct consequence of prolonged, stressful work with high tension load.[21] Health workers are considered risk groups for this syndrome, causing a greater risk of comorbidities with other disorders and psychiatric symptoms mentioned above, in addition to reducing the professional's quality of life and the care provided to patients, absenteeism, and financial impact due to organizational costs.[21,22]

Therefore, the importance of this syndrome and its impact on the mental health of healthcare professionals must be considered in the context of the pandemic and subsequent years, aiming for specific monitoring for this risk group[23,24] in order to prevent and treat such conditions. These preventive measures involve changes in the work system of these professionals, whether individually or collectively.

Individual measures include the adoption of individual protection measures, online psychotherapy, maintenance of the quality of sleep patterns, participation in specific interest groups, use of holistic and integrative relaxation resources, perception of support from the family nucleus and prioritization of rest and breaks between working hours.[8-10] Collective measures include the organization of the service, so that professionals with longer working hours accompany newly hired employees, making the environment less threatening; the promotion, by managers, of spaces for discussion and actions aimed at recovering the health of professionals, with attention to working hours and the reduction of occupational stressors; as well as conversation circles between workers for mutual support.[14,19]

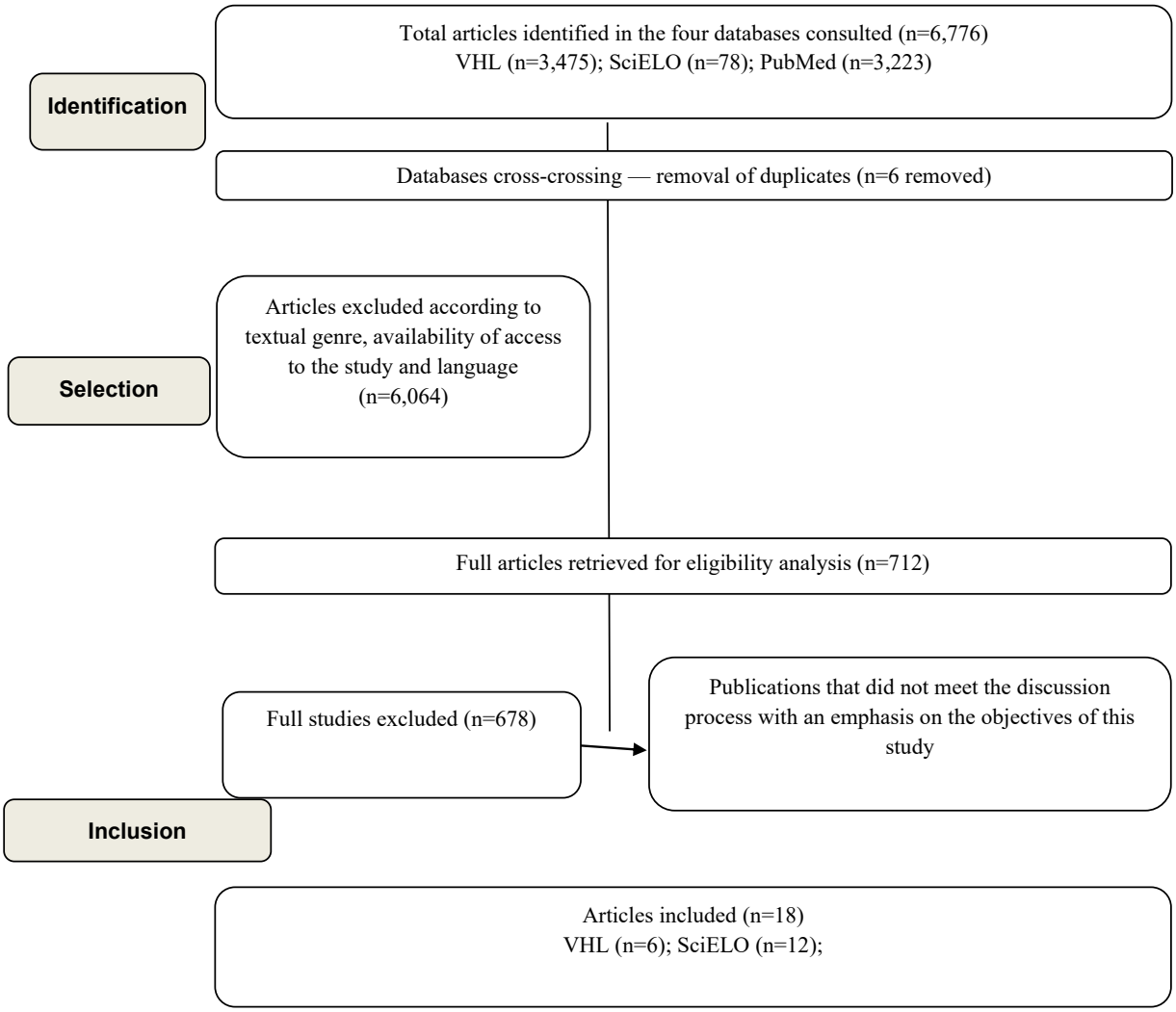
Furthermore, policies to strengthen the Brazilian mental health care network are essential, with the expansion of services to meet the increase in demand, in addition to the adoption of methods such as telemedicine to continue health care for individuals during this atypical moment, allowing adequate treatment and rehabilitation of these health professionals.[4,18]

Given the above, the objective of this study was to identify the risk factors for mental illness and their correlation with Burnout Syndrome in healthcare workers during and after the COVID-19 pandemic in Brazil.

METHODS

This research consisted of a scoping review, guided by the research question: "What are the risk factors for mental illness and their correlation with Burnout Syndrome in healthcare workers during and after the COVID-19 pandemic in Brazil?", based on the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).

The search was carried out by two independent reviewers (MNS and QESG) in three different databases: PubMed, Scientific Electronic Library Online (SciELO), and Virtual Health Library (VHL). In line with the Health Sciences Descriptors (DeCS), the keywords "COVID-19" and "mental health workers" were applied with the Boolean operator "and". A total of 6,776 articles were obtained, adding the three databases (3,223 in PubMed, 78 in SciELO, 3,475 in VHL), without applying filters (Flowchart 1).



Source: Author's elaboration in accordance with the recommendations by the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA)

Flowchart 1. Flowchart of the systematization of the bibliographic survey.

Inclusion criteria are the application of search filters, which included studies published between the years 2020 and 2022, with free full texts, published in Portuguese, English or Spanish and of the textual genre "article". This left 712 articles (219 in PubMed, 60 in SciELO, 433 in VHL) for screening.

After reading the titles and abstracts, those that did not fit the proposed theme were excluded, referred exclusively to research carried out in countries other than Brazil and duplicate articles, resulting in a total of 34 articles (8 in PubMed, 18 in SciELO, 11 in the VHL) read in full.

For analysis purposes, the articles were systematized in a database using Microsoft Excel®, considering the following variables: year of publication, title, name of authors, journal, study design/ strategy, and main findings. Systematization included the steps of identification, registration, analysis, and interpretation of the selected studies, and was carried out by two independent evaluators (GGCL and FBMM).

After this stage, of the 34 studies read in full, 18 original studies were included in this study (Flowchart 1). All included studies presented a qualitative approach, so the instrument proposed by the Critical Appraisal Skills Program (CASP) Qualitative Studies Checklist was used in the critical analysis of the studies, classified into two categories: A) high methodological rigor, as they completed at least 9 of the 10 items; B) moderate methodological rigor, as they meet 5 to 8 checklist items.

RESULTS

The scope of the study consisted of 18 scientific articles,[25-42] of which 12 were extracted from the SciELO database and 6 from the VHL. In line with the study objective and the emergence of the theme, all articles were published between 2020 and 2022, 2 in 2020,[30,42] 12 in 2021[26-29,32-41], and 3 in 2022.[25,31,34] Regarding methodological aspects, mostly cross-sectional studies were presented.[25-33,36-40]

Several professional categories were represented in the studies, however, in greater numbers, there was the participation of professionals in the field of Nursing, be they nurses, assistants or technicians.[25-42] In smaller numbers, there was mention of community health agents[28,35] and physical educators.[28] Sociodemographic characterization of health professionals allows us to recognize that in all studies the workforce is mostly female,[25-42] in a stable union or married,[27,28,33] employed in hospitals,[26,31,34,35] with a predominance of young people, between 18-59 years of age.[25,27-33,35-39] Based on studies that presented ethnic/racial identifications, self-identification as white was predominant (Chart 1).[29,30,32,35]

The predictive factors evoked by health professionals in the face of compromised mental health and psychological illness include the fear of becoming ill and infecting family members,[25,27,28,30,31,33,34,36-42] labor issues,[25,28-31,33,34,36-42] feeling of impotence and need for public policies and government actions,[25,26,30,31,36] fatigue and emotional exhaustion in the pandemic,[25,29,34] social isolation,[26,33,36] dissemination of fake news,[26-29] among others (Chart 1). Health professionals approached by the different studies reported a state of tiredness, fatigue, emotional exhaustion;[25,26,33,38] insecurity,[26,31,41] impotence, helplessness;[25,26] irritability and sadness;[35] work-related stress, suffering with the abundance of preventable deaths due to the lack of beds and appropriate respirators, the hiring of insufficiently trained professionals; and suffering with the death of colleagues, many aware of the worsening and implications of the situation and low satisfaction with protective measures.[27]

These factors impacted family life, associated with common rituals (birthdays, mealtime, and others), and became even more evident in frontline workers;[26] which intensified complaints of loneliness,[33,35] given

Chart 1. Summary table of articles according to author, year of publication, methodology and location of the study, areas of activity of the professionals covered, contributing factors to mental illness, proposals for action and Critical Appraisal Skills Program classification.

Author/year	Study method and location	Areas of activity of professionals	Presentation	Complaints	Proposal	CASP classification
Camacho et al.[25]/2022	Cross-sectional study Rio de Janeiro	Physician, Nurse, Nursing Technician or Assistant, Psychologist, Physical Therapist, Speech Therapist, Occupational Therapist, Nutritionist, Social Worker, Radiology Technician, Pharmacist, Biologist, Biotechnologist, and Laboratory technician	554 participants; 85.38% women; 82% aged 18–59; 39.5% doctors and 39.74% other categories	Fear of getting sick, infecting family members, work/employment issues, feeling of impotence and need for public policies and government action, fatigue and emotional exhaustion in the pandemic	To provide timely and accurate information, based on scientific evidence, value the workforce, implement health policies and strategic actions to support mental and occupational health, detect warning signs, and promote early intervention	A
Therense et al.[26]/2021	Cross-sectional study	Physician, Nurse, Psychologist, Occupational Therapist, Physical Therapy	55 participants	Fragility in planning to combat the pandemic and official communication from managers, dissemination of fake news, social expectations, work requirements, ICU structure, patient flow and number of deaths, strict social isolation	Reproduction of pandemic guidelines, private quotas to provide PPE and work organization. Meditation before shifts, prayers and temporary change of address to protect family members	B
Osório et al.[27]/2021	Cross-sectional study	Physician, Nurse, Nursing Technician or Assistant, Dentist, Psychologist, Physical Therapist, Speech Therapist, Occupational Therapist, Nutritionist, Social Worker, Radiology Technician, Pharmacist, Biologist, Biotechnologist, and Laboratory Technician	916 participants; 41% nurses; 62% from the southeast region; mostly women, with a partner and/or children, with 9 years of professional experience and a job position in a COVID-19 reference center	Concern about becoming infected or infecting a family member, social isolation, work overload, working in a public hospital on the front line, low wage, lack of professional autonomy, and poor working conditions	Professional appreciation and recognition, improvement in working conditions, and implementation of strategies to promote team cohesion	A

Continue...

Chart 1. Continuation.

Author/year	Study method and location	Areas of activity of professionals	Presentation	Complaints	Proposal	CASP classification
Moser[28]/2021	Cross-sectional study	Physician, Nurse, Nursing Technician, Psychologist, Physical Therapist, Speech Therapist, Occupational Therapist, Nutritionist, Social Worker, Physical Educator, Odontologist, Radiology Technician, Pharmacist, Biomedic, Biologist, Biotechnologist, and Community Health Agent	1,054 participants; 34.5% physicians; 81% women, 74.8% white; 57.2% married or in a stable relationship, 39.6% family income above 10,000 reais, and 61.9% living in the South region of Brazil. Mean age of 41.7 years, professional experience of 15 years and weekly workload of 37.6 hours of work	Coercion activity without training; Coercion unwanted activity; PPE availability; Leave to protect family members	Mental health monitored regularly; Psychiatric treatments provided for those with more serious mental health problems; To identify psychosocial factors that confer a condition of greater vulnerability, such as previous traumas and socioeconomic difficulties	A
Campos et al.[29]/2021	Cross-sectional study	Physician, Nurse, Psychologist, Physical Therapist, Nutritionist, Odontologist, Pharmacist,	1,609 participants; Mean age 36.9. 21.2% dentist; 44.2% family income between 2,005 — 8,640 reais; 38.6% Women	Changes in work routine, little information about the mechanisms of action of the virus, prevention and treatment of the disease, lack of highly efficient protocol, financial loss, working hours, conflicts between government measures and decisions, stressful routine, pressure not to make mistakes, giving up or getting sick, stressful events, memories and previous experiences	Optimization of protocols, fewer daily consultations, training, health education, mental health care measures with specialized professionals, recognizing risks and identifying the history of psychosocial exposure, intervention strategies, and psychological coping	A
Dal'Bosco et al.[30]/2020	Cross-sectional study Paraná	Nurse	88 participants, 89.8% women, 42% aged between 21-30 years old, 45% single, 83% white, 76% with income above 3,000.00	Reconciling work activities with external demands, risk of infection, physical and mental fatigue, need for continuous use of PPE, distance from family, working conditions, low wages, lack of job stability, sudden changes in role, complexity of professional performance, conflict of interests and overload, technical responsibility, and tireless search for quality care	Coping strategies with specialized psychological support, telephone support that provides differentiated, confidential and free listening, complementary integrative practices such as yoga, reiki, among others, relaxation exercises, seeking available public mental health services	A

Continue...

Chart 1. Continuation.

Author/year	Study method and location	Areas of activity of professionals	Presentation	Complaints	Proposal	CASP classification
Silva-Costa et al.[31]/2022	Cross-sectional study Rio de Janeiro	Workers from different professional categories who worked at all levels of healthcare complexity	81.5% women, mean age 40.7 years old, 27.9% nursing technicians/ assistants, 51.8% worked in hospitals	Perceived risk of illness, concern about being infected or infecting other people, political, economic, and social crisis, lack of alignment between WHO recommendations and measures adopted in the country, late vaccination, restricted availability of personal protective equipment	To promote collective spaces for discussion about work in the unit itself, actions that favor the recovery of workers, greater number of days off, new hires, and appropriate places for food and rest	B
Nascimento et al.[32]/2021	Cross-sectional study Rio Grande do norte	Nurse, Nursing Technician	490 professionals, 59.6% were nurses and 40.4% were nursing technicians; 83.4% women, age 31–36 (33.6%), 43.9% white; 31.2% earn between 3 and 4 minimum wages; 37.5% work 60 hours a week; 74% with public employment; 34% work in secondary care	Fear of contracting and transmitting the disease, fear of persisting with exaggerated concerns regarding hygiene and prevention issues, working in a sector with a high risk of contamination	Reduction of overload, offering support, both in technical-operational and in psychosocial aspects	A
Horta el al.[33]/2021	Cross-sectional study Nova Hamburgo Rio Grande do Sul	Workers from different professional categories who worked in a public hospital	123 participants, 76% nursing professionals, 81% women, 50% aged 36 or under, 54% have a spouse	Long shifts without breaks, clothing, pressure and fatigue greater than usual, isolation in the hospital itself, risk of contamination itself and fears and guilt related to families, difficulty in dealing with the increase in adverse conditions that the pandemic brings	Team unity, prioritizing rest and breaks with different schedules, require adjustments to routines and physical spaces, expanding the offer of emotional support to teams	A

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Chart 1. Continuation.

Author/year	Study method and location	Areas of activity of professionals	Presentation	Complaints	Proposal	CASP classification
Fernandez et al.[35]/2021	Exploratory study	Physician Odontologist Psychologist Physical Therapist, Community Health Agent	2,138 participants, 445 Nursing professionals. 84.5% women; 52% white, mean age 34 years. 60% from the Southeast region, 20.6% work in more than one service, 53% are civil servants with a civil service exam, and 67% have professional experience of more than a decade	People who do not comply with safety standards and herculean work, social withdrawal, work overload; excessive tasks and worsening working conditions, fear of becoming infected and transmitting it to family members, persecution from management, broken romantic relationships, dismissal of professionals who worked in their homes (cleaners and nannies)	To rethink and produce improvements in working conditions, to guarantee PPE and provision of testing, to adapt the size of teams, to guarantee adequate rest hours, remuneration and workload appropriate to the duties, strengthening and solidifying labor ties	A
Anido et al.[36]/2021	Quantitative descriptive cross-sectional study São Paulo	Students (medicine, nursing, psychology, nutrition) and physicians, nurses, psychologists, nutritionists	371 participants. 77.36% women; 28.57% between 25 and 41 years old; 61% students. 70% with an income of 8 minimum wages or more. Among the students, 85% are studying medicine and among the professionals, 56% are physicians	Remote academic activities, direct contact with patients, impaired learning process, concern about the future and the ability to develop skills, excessive remote work, constant consumption of information about the pandemic, lack of PPE, impacts of government actions in Brazil, emotional suffering, prolonged and conflictual family life, social isolation and the uncertainty of the disease, reduced income, feeling of devaluation and helplessness, domestic work and asymmetrical division as a stressor and generator of overload	Coordinated government response, planned and guided by social justice and scientific evidence, thinking about the possibility of what was experienced during the pandemic as a teaching/ learning process	A

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Chart 1. Continuation.

Author/year	Study method and location	Areas of activity of professionals	Presentation	Complaints	Proposal	CASP classification
Ávila et al.[37]/2021	Cross-sectional study	Nursing professionals	3,249 participants, 85.9% technicians, 90.2% women, 36.9% from the Southeast region. The mean age was 37 years	Extensive demands from work and home, emotional exhaustion, concerns about their work and its impact on themselves, risk of becoming infected, and restrictions on personal freedom	Management and assistance actions that provide regular psychological support as a prevention strategy to deal with mental suffering and provide better working conditions	A
Silva-Junior et al.[38]/2021	Analytical cross-sectional study	Workers from different professional categories	437 participants, 5% nursing team workers, 71% women, 68% from the Southeast region, mean age of 38.4 years, the majority worked in the public network, in a single organization with a workload of 40 to 59 hours per week with a contract employment and most of the time working in Primary Care	Exhaustion at work, working hours equal to or longer than 60 hours, stress at work, low support from co-workers, unavailability of personal protective equipment and work overload, fear of contamination	To design actions to promote mental health and prevent emotional suffering at different levels of health care, face-to-face support to deal with psychological burden and the offer of telehealth services, improving working conditions, collective and individual interventions for workers	A
Fukuti and Barros-Filho[39]/2021	Qualitative experience report type study São Paulo	Nursing team Physicians Administration Physical therapists Laboratory technicians	395 participants, mostly females and from the Nursing team	Feelings of not being heard by the institution, lack of personal protective equipment, fear of being infected and infecting loved ones, lack of practical learning time related to your specialty of choice, feelings of injustice	To meet the basic needs of the workforce: food, rest, housing, less exhausting work shifts and providing relaxation and leisure activities, monitoring work-related complaints and sources of anxiety, providing psychoeducation and reception guides, encouraging physical activity	A

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Chart 1. Continuation.

Author/year	Study method and location	Areas of activity of professionals	Presentation	Complaints	Proposal	CASP classification
Peixoto et al.[40]/2021	Cross-sectional study	Odontologists	641 dentists, mean age 39 years, 74% female, 61.2% married	Poor quality of sleep, frontline work in hospitals, reduced income, decline in social relationships, working long hours under new circumstances, dealing with the fear of contamination and constantly worrying about preventative measures	-	B
Souza et al.[41]/2021	Reflective theoretical study	Nursing workers	-	Shortage of personal protective equipment, weaknesses in the description of protocols and flows for the hospital, effective infection control, prolonged working hours, inadequate professional training for the scenario, uncertainties regarding therapeutic measures, precarious work, insufficient material, quantitative and qualitative shortage of personnel, degradation of labor relations, low wages, unstable employment relationships, loss of labor rights and inadequate working conditions	Government coordination to provide priority items for the smooth running of services and the safety of workers, strengthen multidisciplinary teamwork, promoting efficient and effective communication between health work bodies, as well as within and between teams. Collective spaces for discussing cases and exchanging experiences to promote welcoming and cohesion among professionals	B
Helioterio et al.[42]/2020	Reflective theoretical study	Health workers	-	Fear of contaminating family members, precarious working conditions, scarcity of resources and materials, high workload, extended working hours, shift work and difficulty taking breaks and rest	To provide working conditions, guaranteeing and protecting the lives of workers, distributing the number of workers in environments and at times of greatest circulation, adapting processes and work environments to new scales and rotations, training to rationalize operating methods, and offering psychological support to professionals	B

Source: authors' elaboration.

the perception of being socially avoided due to work, which is a risk factor for post-traumatic stress for different categories of health professionals.[27]

From this perspective, research reveals a high prevalence of psychiatric symptoms and diagnoses during the pandemic among health professionals. All professional categories showed high levels (>36%) of mental illness,[27] prevalence was 61.6% in one of the studies39 and another identified that 88% of previously healthy professionals began to show symptoms of psychological illness during the pandemic.[29] The most frequent outcomes were anxiety, depression,[29,31,32,39] sleep disorders,[39] Burnout Syndrome[31,32], stress symptoms and general psychological impact.[29]

Regarding Burnout, 41% of professionals in one of the studies achieved scores compatible with the chart[33] and mainly the Nursing team in another one, with 68.2% of technicians affected, especially those working on the front line.[28] As for depression, around 50% of professionals presented scores suggestive of clinically significant depression, 68.7% among nursing technicians, the group with the highest incidence.[28] Another study corroborates this data by indicating that doctors, psychologists and nurses presented significantly lower scores for depression and anxiety.[29]

The workload was similar among nursing technicians, physicians, and nurses, which suggests that the most significant mental suffering among technicians is also conditioned by the way the workload is distributed among the professions.[28] It is also noteworthy that nursing technicians had the highest proportion of infected professionals and those in the high-risk group for COVID-19.[28] Higher levels of anxiety, depression, and insomnia were found among nursing professionals, mostly women, compared to other professional categories.[27] Prevalences of 48.9% for anxiety and 25% depression were identified in one of the studies,[30] while in another one, around 50% had a mild, moderate or severe degree of depression, anxiety or stress.[31] A single study stood out by finding minimal or absent symptoms of depression in most of the sample, and the following significant variables for symptoms were presented: gender, age group, marital status, region of the country, having contact with people with COVID-19, and not wearing masks.[37]

The different working conditions between categories of health professionals during the pandemic were also analyzed. Physicians and dentists needed greater adaptations to work and nutritionists, pharmacists, and psychologists started to work remotely, especially psychologists.[29] Physicians had the lowest level of unemployment, and dentists had the highest prevalence of interruption of work activities, which may have reduced stressors in the short term, but have the consequences of financial losses and changes in future work scenarios, demanding attention.[29] Furthermore, confinement may have a greater impact on professionals' mental health than the act of working, being significantly associated with depressive symptoms.[40] The following prevalences were found in dentists: 24.3% for depression, 58% for bruxism, and 53.8% for sleep and wakefulness disorders, with sleep being associated with psychological factors.[40]

Protective factors against mental illness for health professionals were identified as: support from co-workers;[27,33] positive professional perspectives and satisfaction with the protective measures adopted by the contracting institution, which is the most important protective factor for nursing professionals.[27] Protective measures among physicians included being older, male, and having more years of professional experience, as the chance of not reaching pathological levels of anxiety and stress increased from 3 to 5% with each additional year of experience.[27] Risk factors described were: female, age up to 40 years, working day longer than or equal to 60 hours, stress at work, and low support from colleagues.[38] Among the professional categories, worrying about SARS-CoV-2 infection and the extra workload were considered

the most significant risk factors regarding nursing professionals; for physicians, the most expressive ones were working on the frontline of COVID-19, wanting to leave their job, feeling socially avoided due to work, not having children or a spouse, and the workplace being a secondary hospital or COVID-19 center.[23] Positively, the majority of professionals denied wanting to leave their jobs and reported positive professional prospects.[27]

DISCUSSION

It is recognized that the COVID-19 pandemic reshaped contexts previously related to graduation and the health work process, promoting changes in provision of services, organization of health systems, surveillance, human interactions,[31] flow of patients, and number of deaths,[26] intensifying pressure[33] and work overload.[26,27,35,41] In this context, it was possible to observe changes in work processes, especially with regard to logistics and working hours. While in some professions there was a temporary stoppage of activities, for a portion of health professionals, central agents in this period, there was an increase in demand from both a physical and mental point of view. The increase in the number of hospitalizations and deaths,[26] the fear of what was previously unknown, the mandatory social distancing, the scarcity of personal protective equipment, the absence of therapeutic protocols, the precariousness of working conditions, as well as the fear of contamination of themselves and their families,[26,27] are factors that contributed to the mental illness of this class during the pandemic.

As previously mentioned, it was observed in the articles analyzed that health care in Brazil is characterized by the prevalence of women, in stable relationships or married, predominantly between 18 and 59 years of age, and of white color. This assistance is historically concentrated in services provided under the responsibility of physicians, nurses, and nursing technicians, with the last group being the one with the highest incidence of disorders such as Burnout and depression during the period considered.[28] It is clear that care work covers different spheres, among which the relationship between those who care and those who are cared for, as well as social relationships that aim to meet human needs, which demands extreme responsibility and emotional intelligence from caregivers,[39] especially in the pandemic context. However, poor working conditions, overload, low satisfaction with protective measures,[27] exposure to avoidable deaths, among other factors, directly contribute to the emotional exhaustion of these professionals.[25,26,33,37] In this context, this study showed a general worsening regarding aspects of the mental health of health professionals, with the most commonly reported outcomes being anxiety, depression, sleep-wake cycle disorders, and Burnout.[39,31,32,39]

Overload in the work environment emerges in studies in association with planning deficits, increased professional exposure to contamination risks, the population's disbelief in biosafety measures[26], and extended working hours.[27,33] Furthermore, the reference to professionals of health based on archetypes, such as superheroes, can be considered counterproductive because it disregards the real possibilities of intervention by these workers, their limitations and human needs,[26] which may have increased the pressure not to get sick, possibly underestimating symptoms of mental health.[29] However, financial losses,[25] funding cuts, dissemination of contradictory information, and demand for public policies and government actions also impacted professionals' self-perceptions of mental suffering.[26] This situation was intensified by the lack of political positioning and implementation of effective measures to control the spread of COVID-19

in Brazil,[25,31] which also increased the visibility and heightened the difficulties of public and private health services,[26] due to the shortage of personal protective equipment (PPE), fragility of protocols and flows in institutions, long working hours, insufficient professional training for the crisis, and uncertainty about therapeutic measures.[31]

Furthermore, the articles analyzed point out the following reasons for the mental illness of health professionals: labor issues; the fear of infecting family members; feeling of impotence and need for public policies and government action; dissemination of fake news; fatigue and emotional exhaustion in the pandemic and social isolation. It is inferred that labor issues encompass other reasons for mental illness, as these permeate the feeling of insecurity in working in an unhealthy environment — due to great exposure and the consequent possibility of personal and family contamination — as well as inadequate working conditions with a high flow of patients, hiring of insufficiently trained professionals, financial and salary issues, such as temporary employment, and uncertainty about future employability.

Another aspect that must be taken into consideration is that, unlike other occasions, in the COVID-19 pandemic there was a large number of deaths and uncertainty about the pathophysiology of the disease, treatments or vaccines. Due to socioeconomic and structural conditions, the lack of PPE was also a reality, increasing the risk of contamination and imposing even greater restrictive social isolation measures on these professionals. These aspects are directly related to the feelings most cited by the studies analyzed, namely: tiredness; fatigue; emotional exhaustion; insecurity; impotence; helplessness; irritability; sadness; and work-related stress. Thus, an increase in mental illness was noted in all professional categories discussed.[27] When comparing the data collected, a consonance of results is observed. Despite different percentages in the total prevalence of mental illness (>36;[27] 61.6;[38] 88%),[29] they all bring increased demands on mental health. The different percentages presented may be related to both selection bias and the method used to quantify cases. These aspects can be pointed out as possible causes for the only study that presents data that is not in line with what is discussed in the others: finding minimal or absent symptoms of depression in the majority of the sample.[37] However, when analyzing the general data, the results corroborate the hypothesis that the COVID-19 pandemic had as one of its consequences the worsening of the mental health status of healthcare workers.

Regarding collective and institutional strategies to reduce the suffering associated with work, donning and doffing are punctuated in accordance with the guidelines of safety standards, private quotas to obtain PPE and organization of the service so that professionals with longer working experience accompany newly hired employees to make the environment less threatening.[22] Collectively, it is up to managers to promote spaces for discussion and actions aimed at recovering the health of professionals,[31] paying attention to working hours and reducing occupational stressors;[42] as well as conversation circles between workers for mutual support,[34] meditations and/or prayers before shifts.[26] Individually, there are possibilities: reviewing flows and characteristics of care,[42] adopting protective measures, online psychotherapy, maintaining sleep patterns, participation in groups of specific interests, use of holistic relaxation resources, meetings in small groups, perception of support from the family nucleus, self-knowledge, changing residence to protect family members,[22] prioritizing rest and breaks.[33]

It is highlighted that the impacts resulting from the pandemic extend to the training of students in the health area; a study revealed that 87.84% of students believe that learning will be impaired, in addition to feeling overwhelmed,[36] therefore, interventions for this group are also important. It is

worth mentioning that the general analysis of the mental health panorama of health professionals is hampered by the lack of available literature, as this group is made up of a wide range of areas of activity and many of them are not included in the studies analyzed, such as physical educators, physical therapists, community health agents, among others. The articles also do not address professionals related to the provision of health services, such as secretaries, receptionists and cleaning professionals, for example, who were also more exposed to contamination and stress generated by the impacts of the pandemic on work relationships. Another point of relevance is the possibility of underdiagnosis with regard to mental disorders, since the availability of trained professionals for care and diagnosis, such as psychiatrists and psychologists, for example, does not cover all health workers. Thus, despite data analysis, it is not possible to consider the percentages presented as absolute, and the lack of systematization that analyzes the Brazilian scenario makes it impossible to compare the results found.

In the meantime, the verifications found here corroborate and support data so that the health care network can outline the sociodemographic profile of its health workers, in order to know signs or already established conditions of mental illness, considering that from this information it is possible to develop prevention strategies as well as health promotion. In this scenario, the development of moments of welcoming and therapeutic listening, supervised by mental health technicians, psychologists, and other necessary professionals, should be mentioned. The development of these actions therefore requires institutional formalization and a continuous assistance calendar, so that even outside public health emergencies, professionals are assisted based on their daily demands.

CONCLUSION

This review identifies, through the literature analyzed, strong correlations between the mental exhaustion of healthcare professionals in the context of the COVID-19 pandemic, with groups related to front-line care having higher rates of psychological distress. Of these, professionals with direct patient care contact, such as nurses and nursing technicians, had higher rates of illness when compared to other health professionals.

Considering the impact caused by Burnout Syndrome on healthcare professionals, different strategies were highlighted as possible interventions. In general, the relevance of analyzing testimonies from professionals in search of risk and protective factors for mental illness stands out, aiming at possible early intervention for clinical and emotional support as a preventive measure and implementation of assistance actions at occupational and institutional levels, in order to avoid long-term impacts on this population at different levels of health care. Furthermore, it is necessary to implement projects and policies aimed at recovering the mental health of these professionals, which has deteriorated during the pandemic period.

More studies on the subject are necessary, mainly focusing on the long-term mental health of workers who have experienced the COVID-19 pandemic, in addition to strategies that focus on the creation of programs or protocols aimed at the mental health of healthcare professionals continuously and in singular moments of health care, such as outbreaks, epidemics, and pandemics. Furthermore, it is important to highlight the need for studies that discuss the mental health, especially emotional exhaustion, of workers who are not in the healthcare field, but who work in these environments, such as receptionists, cleaning professionals, and administrators.

CONFLICT OF INTERESTS

Nothing to declare.

AUTHORS' CONTRIBUTIONS

GGCL: conceptualization, data curation, formal analysis, investigation, validation, visualization, writing – original draft, writing – review & editing. FBMM: conceptualization, data curation, formal analysis, investigation, validation, visualization, writing – original draft. AVG: conceptualization, validation, visualization, writing – original draft, writing – review & editing. MNS: conceptualization, methodology, investigation, validation, visualization, writing – original draft. QESG: conceptualization, methodology, investigation, validation, visualization, writing – original draft. HH: conceptualization, validation, visualization, writing – original draft. ISF: conceptualization, validation, visualization, writing – original draft. KMRA: conceptualization, supervision, validation, visualization, writing – review & editing.

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