SELF-CARE PRACTICES IN MENTAL HEALTH OF NURSES IN THE COVID-19 PANDEMIC

PRÁCTICAS DE AUTOCUIDADO EN SALUD MENTAL DE ENFERMERAS EN LA PANDEMIA DE COVID-19

PRÁTICAS DE AUTOCUIDADO EM SAÚDE MENTAL DE ENFERMEIROS NA PANDEMIA DA COVID-19

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ABSTRACT
Aim: To synthesize scientific evidence on self-care practices in mental health adopted by nurses during the COVID-19 pandemic. **Method**: Integrative review, with a search carried out in the Virtual Health Library, Medical Literature Analysis and Retrieval System On-line, Cumulative Index to Nursing and Allied Health Literature and Web of Science databases, in June 2022. The analysis and synthesis of the results were carried out in descriptive form. **Results**: The final sample consisted of 11 studies. The productions presented the main coping strategies, aimed at self-care in the nurse's mental health: relaxation and breathing exercises, improvement of eating habits, physical activity, maintenance of sleep quality, leisure activities, resilience and support Social. **Final Considerations**: Nurses, faced with the new scenario brought about by the COVID-19 pandemic, have used different coping and self-care strategies. The adoption of measures understood as positive was observed. It is inferred that these professionals have individually sought ways to minimize the physical and mental strain resulting from changes in their work scenarios.
Keywords: Self-Care; Nurses; COVID-19; Mental Health; Occupational Health.

RESUMEN
Objetivo: Sintetizar evidencias científicas sobre las prácticas de autocuidado en salud mental adoptadas por enfermeros durante la pandemia de COVID-19. **Metodología**: Revisión integrativa, con búsqueda realizada en las bases de datos Biblioteca Virtual en Salud, Medical Literature Analysis and Retrieval System On-line, Cumulative Index to Nursing and Allied Health Literature y Web of Science, en junio de 2022. Se realizó el análisis y síntesis de los resultados en forma descriptiva. **Resultados**: La muestra final consistió en 11 estudios. Las producciones presentaron las principales estrategias de enfrentamiento, dirigidas al autocuidado en la salud mental del enfermero: ejercicios de relajación y respiración, mejora de los hábitos alimentarios, actividad física, mantenimiento de la calidad del sueño, actividades de ocio, resiliencia y apoyo social. **Consideraciones Finales**: Las enfermeras, ante el nuevo escenario provocado por la pandemia, han utilizado diferentes estrategias de afrontamiento y autocuidado. Se observó la adopción de medidas entendidas como positivas. Se infiere que individualmente estos profesionales han buscado formas de minimizar el desgaste físico y mental derivado de los cambios en sus escenarios de trabajo.
Palabras clave: Autocuidado; Enfermeras; COVID-19; Salud Mental; Salud Laboral.

RESUMO
Objetivo: Sintetizar as evidências científicas sobre as práticas de autocuidado em saúde mental adotadas por enfermeiros durante a pandemia da COVID-19. **Método**: Revisão integrativa, com busca realizada nas bases de dados Biblioteca Virtual em Saúde, *Medical Literature Analysis and Retrieval System On-line*, *Cumulative Index to Nursing and Allied Health Literature* e *Web of Science*, em junho de 2022. A análise e a síntese dos resultados foram realizadas de forma descritiva. **Resultados**: A amostra final foi composta por 11 estudos. As produções apresentaram as principais estratégias de enfrentamento, direcionadas para o autocuidado em saúde mental do enfermeiro: exercícios de relaxamento e respiração, melhora dos hábitos alimentares, prática de atividade física, manutenção da qualidade do sono, atividades de lazer, prática da resiliência e apoio social. **Considerações Finais**: O enfermeiro, diante do novo cenário trazido pela pandemia da COVID-19, tem utilizado diferentes estratégias de enfrentamento e autocuidado. Observou-se a adoção de medidas compreendidas como positivas. Infere-se que esses profissionais têm buscado de maneira individual formas de minimizar o desgaste físico e mental advindo das mudanças em seus cenários de trabalho.
Palavras-chave: Autocuidado; Enfermeiros; COVID-19; Saúde Mental; Saúde do Trabalhador.

INTRODUCTION

The psychic sequelae caused by the COVID-19 pandemic exceed the number of deaths and will remain, for a long time, negatively influencing the mental health of the world's population. The constant fear of being contaminated by a virus with a high power of dissemination and potentially lethal has affected the psychological well-being of people, especially health professionals. This group of workers, during epidemics and pandemics, work for long periods and under intense pressure, which can lead them to experience fatigue and exhaustion[1-3].

Data released by the Oswaldo Cruz Foundation (FIOCRUZ) indicate that around 3.5 million Brazilian workers in the health sector face uncertainties, anxieties and concerns during this period. In addition to the fear of contagion itself, factors related to concern about the risk of infecting other people, work overload, threats and aggression, limitations in access to Personal Protective Equipment (PPE), frequent changes in care protocols, among others, they can trigger and/or intensify mental problems[4,5].

It is in this context that Nursing professionals are inserted, working in general care or in Intensive Care Units, rescues, emergencies, Primary Care, Emergency Care Units (UPAs) and wards. Specifically, in disaster/calamity situations, such as this pandemic, nurses usually sublimate their own needs to act actively in health care and humanitarian work. Their altruistic contributions are guided by moral, ethical and professional responsibility, above all, in defense and protection of life[6-10].

The nurse who works on the front line sees himself in complex dualistic and complementary perspectives: as a professional in the midst of a crisis situation, he needs more critical and rational behavior to manage the circumstances and provide adequate assistance; and, as a human being, he maintains his more emotional and collective perspective, of belonging to a family, with social relationships outside of work and with the desire to stay alive. Knowing that life is permeated by unpredictability and that social facts allow different meanings, professionals often find themselves between the limits of living and getting sick[11].

Negligence of nurses' health is related to a greater propensity for illness and is associated with inadequacies ranging from the management process of teams and shifts to the availability of adequate infrastructure and working conditions and attention from institutions and managers. In a survey carried out in the United States with nurses working in intensive care units, during the course of the pandemic, the presence of moderate to severe symptoms of moral distress, exhaustion, anxiety and depression, as well as a risk of developing Post-traumatic Stress Disorder, was revealed Traumatic[12].

In a constant perspective of maintaining care for the other, professional nurses neglect their own care; self-care is a fundamental strategy for maintaining mental health in the face of crisis situations. Strategies aimed at this

context need to be worked on together with traditional solidarity networks, such as family, friends, community and among co-workers[13].

Interest in the topic arose from the experiences of nurses who study phenomena in the field of Work-Related Mental Health (SMRT), in which, from investigations, evidence was found about the mental illness of nurses during the pandemic. However, research related to strengthening the mental health care of these workers is limited, especially with regard to their self-care.

Thus, this study aims to synthesize scientific evidence on self-care practices in mental health adopted by nurses during the COVID-19 pandemic.

METHODS

This is an integrative literature review study based on the theoretical framework proposed by Whittemore and Knafl[14]. For this, six steps were followed: (1) identification of the theme and elaboration of the research question; (2) sampling and literature search; (3) definition of the information to be extracted from the included articles; (4) critical analysis of results; (5) synthesis of knowledge and (6) presentation of the review.

A protocol developed by the researchers guided the study. In order to elaborate the research question, the PICo (Population, Interest, Context) strategy was used. The following structure was considered: P: nurses; I: self-care practices in mental health; Co: COVID-19 pandemic. In this way, the following research question was elaborated: what are the self-care practices in mental health adopted by nurses in the context of the COVID-19 pandemic?

The search and selection stage of the articles took place in June 2022, by consulting the electronic databases: Biblioteca Virtual em Saúde - BVS, in which there was no return of productions when applying the search strategies, Medical Literature Analysis and Retrieval System Online (MEDLINE via PubMed), Cumulative Index to Nursing and Allied Health Literature (CINAHL) and Web of Science. To carry out the search, descriptors indexed in the vocabularies Health Sciences Descriptors (DeCS), Medical Subject Headings (MeSH) and CINAHL Subject Headings were used: Nurses and Nurses/Nurses, Self Care/Self Care, Mental Health/Mental Health and COVID-19, as well as related keywords. The combination was performed using the Boolean operators OR and AND. Chart 1 presents the terms, as well as the search strategies adopted.

Chart 1- Descriptors used to carry out the search.

Database	Descriptors/Search expression
BVS	((mh:("Enfermeiros e Enfermeiras")) OR ("Enfermeiro e Enfermeira") OR (Enfermeira) OR (Enfermeiras)) AND

	((mh:(Autocuidado)) OR (Autoajuda)) AND ((mh:("saúde mental")) OR ("higiene mental")) AND ((mh:(covid-19)) OR (covid-19) OR ("pandemia por covid-19"))
MEDLINE/PubMed	("nurses"[All Fields] OR "nurses"[MeSH Terms] OR "nurses"[All Fields] OR "nurse"[All Fields] OR "nurses s"[All Fields]) AND (("self care"[MeSH Terms] OR ("self"[All Fields] AND "care"[All Fields]) OR "self care"[All Fields]) AND ("mental health"[MeSH Terms] OR ("mental"[All Fields] AND "health"[All Fields]) OR "mental health"[All Fields])) AND ("covid-19"[All Fields] OR "covid-19"[MeSH Terms] OR "covid-19 vaccines"[All Fields] OR "covid-19 vaccines"[MeSH Terms] OR "covid-19 serotherapy"[All Fields] OR "covid-19 serotherapy"[Supplementary Concept] OR "covid-19 nucleic acid testing"[All Fields] OR "covid-19 nucleic acid testing"[MeSH Terms] OR "covid-19 serological testing"[All Fields] OR "covid-19 serological testing"[MeSH Terms] OR "covid-19 testing"[All Fields] OR "covid-19 testing"[MeSH Terms] OR "sars cov 2"[All Fields] OR "sars cov 2"[MeSH Terms] OR "severe acute respiratory syndrome coronavirus 2"[All Fields] OR "ncov"[All Fields] OR "2019 ncov"[All Fields] OR (("coronavirus"[MeSH Terms] OR "coronavirus"[All Fields] OR "cov"[All Fields]) AND 2019/11/01:3000/12/31[Date - Publication]))
CINAHL	(Nurses AND ((Self Care) AND (Mental Health)) AND (COVID-19)
Web of Science	(ALL=(Nurses)) AND (ALL=(Self Care) AND ALL=(Mental Health)) AND (ALL=(COVID-19))

Source: Elaborated by authors, 2023.

For the inclusion of studies, the following criteria were considered: productions from primary studies developed with nurses and that addressed self-care practices in mental health adopted by these professionals in the context of the COVID-19 pandemic, indexed in the databases consulted, in English, Portuguese and Spanish and with a year of publication between 2020 and 2022. The time frame was based on the period corresponding to the emergence of COVID-19 cases. Exclusion was conditioned to editorials, letters to the editor, experience reports, theses and dissertations. Duplicate productions were considered only once. The

Rayyan QCRI application was used to assist in the selection, ordering and exclusion of records.

Access to the productions took place through the Journal Portal of the Coordination for the Improvement of Higher Education Personnel in an area with Internet Protocol (IP) recognized at the Federal University of Piauí and the search, selection and inclusion were carried out by two reviewers and independently. When in a divergent situation, a consensus was sought with the support of a third reviewer, who issued an opinion for the decision regarding the inclusion of the study.

With the strategy carried out, 450 articles were retrieved. Of these, 11 productions were included as a review sample. Figure 1 shows the process of identification, selection, eligibility, inclusion and composition of the sample, which followed the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)[15].

Figure 1 – PRISMA flowchart for selection of studies included in the integrative review.
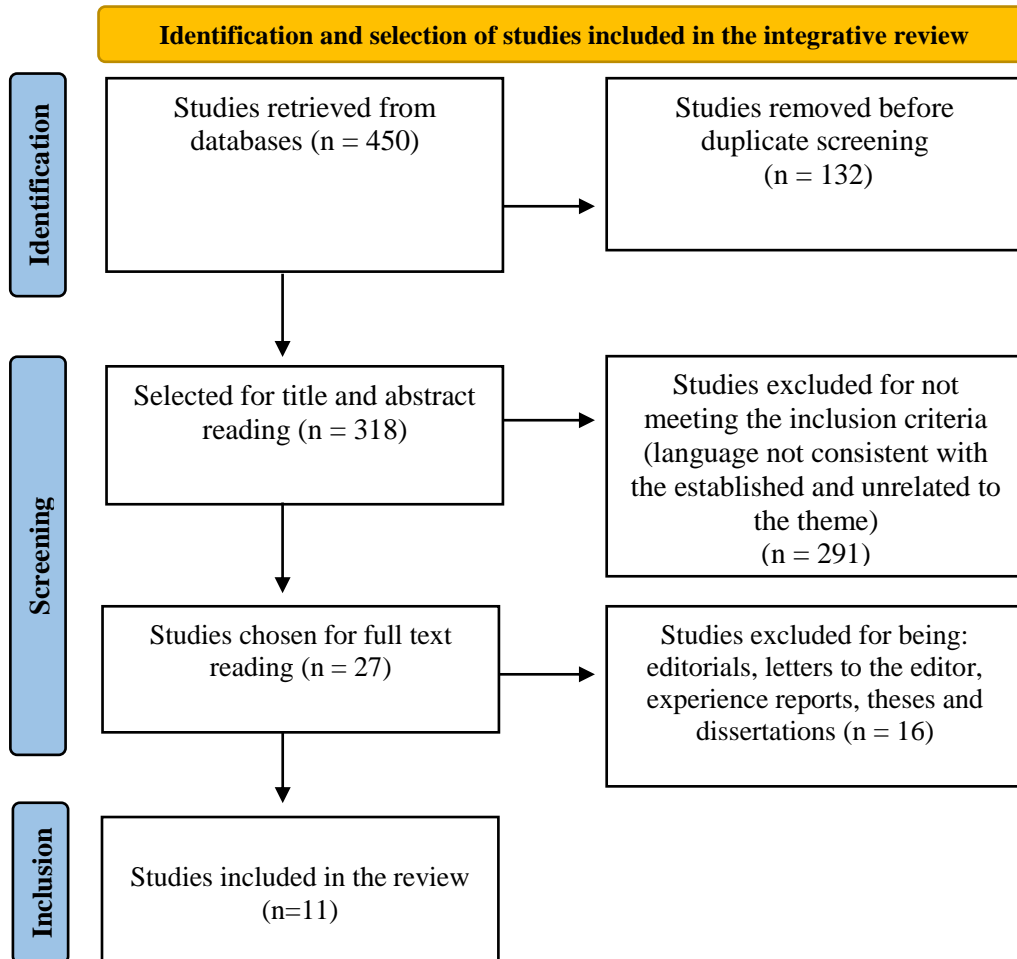
Source: Elaborated by authors, 2023.

For data collection, the authors developed an instrument that prioritized variables related to the identification of studies (title, authors, year and country), methodological aspects (design and level of evidence), self-care practices in mental health identified and the main conclusions.

The level of evidence (LE) was determined by the Hierarchical Classification of Evidence for the Evaluation of Studies, which considers the following levels of classification: I) systematic review or meta-analysis; II) randomized controlled trial; III) controlled study without randomization; IV) cohort or case-control studies; V) systematic review of descriptive or qualitative studies; VI) descriptive or qualitative study; VII) evidence from the opinion of authorities and/or report of expert committees[16].

The analysis of the findings was carried out descriptively, using the calculation of relative and absolute frequencies, as well as the characterization, synthesis and presentation of results in tables. Because it does not involve human beings, this study was not submitted to the Research Ethics Committee.

RESULTS

The descriptive analysis of the 11 findings showed the growing interest of researchers in identifying the self-care practices adopted by nurses during the COVID-19 pandemic, thus constituting an expressive phenomenon of investigation in different contexts of the literature. However, it was observed that, at the level of Brazil, there were no publications of studies related to the theme.

China, considered the country of origin of the first cases of the disease caused by the new coronavirus, stood out for concentrating the largest number of productions (54.5%).

Articles were published in English (100%). As for the year of publication, there was a prevalence of studies published in 2021 (54.5%). Based on the evidence classification system used for the evaluation, the framing of all selected studies at evidence level VI was delimited, which corresponds to scientific productions that bring evidence from a single descriptive or qualitative study. Chart 2 presents the general characterization and methodological outlines of the productions included.

Chart 2 - Characterization of the productions included for the review according to their general and methodological aspects. Teresina, PI, Brazil, 2022.

Title	Author/year	Country	Methodology
A qualitative study on the psychological experience of caregivers of COVID-19 patients[17]	Sun *et al*., 2020	China	Cross-sectional survey of 20 nurses at a hospital affiliated with the Henan University of Science and Technology, China.
Voices from the COVID-19 frontline: Nurses' trauma and coping[18]	Foli *et al*., 2021	United States	Qualitative study with 135 nurses.
Nurses' pandemic lives: A mixed-methods study of experiences during COVID-19[19]	Gray *et al*., 2021	United States	Cross-sectional, mixed-method research, carried out with 110 nurses who answered objective and open questions about COVID-19.

Nurses' experiences of caring for people with COVID-19 in Hong Kong: a qualitative enquiry[20]	Chau *et al*., 2021	China	Qualitative research with 39 nurses in intensive/acute care hospitals and a department of public health in Hong Kong.
A cross-sectional study of mental health status and self-psychological adjustment in nurses who supported Wuhan for fighting against the COVID-19[21]	Chen *et al*., 2020	China	Cross-sectional prospective study with 178 frontline nurses in Wuhan.
The Transformational Experience of Junior Nurses Resulting from Providing Care to COVID-19 Patients: From Facing Hurdles to Achieving Psychological Growth[22]	Yip, Yip e Tsui, 2021	China	Qualitative cross-sectional study carried out with 40 nurses who worked in direct care) to patients with COVID-19 in public hospitals in Hong Kong.
Resilience of frontline nurses during the COVID pandemic in China: A qualitative study[23]	Huang *et al*., 2021	China	Qualitative study carried out with 23 nurses who worked in the front line of care for patients with COVID-19 in Shanghai, China.
Explaining nurses' experience of stresses and coping mechanisms in coronavirus pandemic[24]	Ghorbani *et al*., 2022	Iran	Descriptive, qualitative study with fourteen nurses who worked in the direct care of patients with COVID-19 in hospitals linked to the University of Medical Sciences in Tehran, Iran.
Nurses' psychological changes and coping strategies during home isolation for the 2019 novel coronavirus in China: A qualitative study[25]	Zhang *et al*., 2021.	China	Qualitative study carried out with 10 nurses isolated in their homes.

Title	Author	Country	Method
The Mindfulness and the Emotional Regulation Skills in Italian Nurses During the COVID-19 Pandemic: A Descriptive Survey-Correlational Study[26]	Vitale, 2021	Italy	Descriptive correlational study carried out with 200 Italian nurses directly involved in the care of patients with COVID-19.
Emotional intelligence of nurses caring for COVID-19 patients: A cross-sectional study[27]	Moradian *et al.*, 2022	Iran	Descriptive cross-sectional study carried out with 2011 nurses who provided care to patients with COVID-19.

Source: Research data.

The selected studies presented the main coping strategies, aimed at self-care in mental health, which were used by nurses during the COVID-19 pandemic. It can be seen that these measures were adopted as a way to alleviate negative emotions related to psychic suffering resulting, for example, from the stress caused by working on the front line during this period. In this perspective, Chart 3 summarizes the self-care strategies developed by these professionals and presents the main conclusions of the investigations in relation to these techniques.

Chart 3 - Delimitation of self-care strategies and main conclusions found. Teresina, PI, Brazil, 2022.

Title	Self-care strategies	Main conclusions
A qualitative study on the psychological experience of caregivers of COVID-19 patients[17]	• Active or passive use of psychological techniques (journal and letter writing, breathing exercises, mindfulness, meditation, music, yoga and mindfulness). • Increased affection and gratitude. • Team support and social support.	The self-confrontation style and psychological growth were important allies in maintaining well-being during this period.
Voices from the COVID-19 frontline: Nurses' trauma and coping[18]	• Practicing resilience. • Social support.	Some narratives reflected self-care behaviors, the benefit of previous experiences and the support of their co-workers, family and friends in the period of coping with the COVID-19 pandemic.

Nurses' pandemic lives: A mixed-methods study of experiences during COVID-19[19]	• Moments of relaxation and humor with co-workers. • Encouragement among colleagues. • Rest. • Social support. • Improvement in the patient's clinical conditions. • Precautionary measures. • Filter access to news about COVID-19. • Chat with family and friends. • Engage in recreational activities.	Nursing managers and educators should use these lessons to protect these professionals with adequate training in self-care techniques, ethics and moral resilience when faced with major health crises, current and future.
Nurses' experiences of caring for people with COVID-19 in Hong Kong: a qualitative enquiry[20]	• Precautionary measures. • Social support. • Support among professionals, hospital environment and management team.	Nurses have demonstrated remarkable resilience and adaptability despite resource shortages and threats to mental and physical health while caring for patients with COVID-19. Coping is mainly related to social and peer support, to the action of health care managers and public health policy makers, and the participation of the local community in prevention.
A cross-sectional study of mental health status and self-psychological adjustment in nurses who supported Wuhan for fighting against the COVID-19[21]	• Positive and optimistic thinking. • Strengthening of communication. • Knowledge about the disease. • Team work. • Regular rest. • Practice of exercises.	Counseling and strengthening of effective psychosocial support are important tools for strengthening nurses' mental resilience and self-adjustment capacity.
The Transformational Experience of Junior Nurses Resulting from Providing Care to COVID-19 Patients: From Facing Hurdles to Achieving Psychological Growth[22]	• Psychological self-defense mechanisms (distraction, humor and rationalization). • Social support. • Meditation. • Practice of physical exercises.	The self-transformation process began with the use of coping and self-care strategies, bringing greater resilience, a gradual increase in self-confidence and recognition and appreciation of the social support system provided.

Resilience of frontline nurses during the COVID pandemic in China: A qualitative study[23]	• Social support. • Self-regulation (relaxation exercises, listening to soft music, talking to family and friends, writing on social networks, sleeping and/or practicing physical exercises).	The factors that enhanced nurses' resilience during the COVID-19 pandemic were familiarization with infectious disease protocols, a sense of professional achievement, social support, trust in the team, and the use of self-regulation strategies.
Explaining nurses' experience of stresses and coping mechanisms in coronavirus pandemic[24]	• Social support. • Self-support: (prioritization of physiological needs). • Positive thinking. • Spirituality.	Health professionals positively used coping measures to deal with exposure to COVID-19. However, it is essential that the support and importance of workers' mental health be prioritized in the management of crisis situations.
Nurses' psychological changes and coping strategies during home isolation for the 2019 novel coronavirus in China: A qualitative study[25]	• Self-support: positive verbalizations to form positive self-support and achieve a calming psychological effect. • Healthy lifestyle habits. • Social support.	Coping strategies were presented as relevant actions to alleviate negative emotions, which can contribute to improving mental health in coping with COVID-19.
The Mindfulness and the Emotional Regulation Skills in Italian Nurses During the COVID-19 Pandemic: A Descriptive Survey-Correlational Study[26]	• Mindfulness skills. • Mindfulness. • Emotion regulation skills.	Training on the basic principles of mindfulness was considered a priority to improve emotions. Mindfulness can be considered a protective factor against suffering related to the COVID-19 pandemic.
Emotional intelligence of nurses caring for COVID-19 patients: A cross-sectional study[27]	• Emotional intelligence (self-awareness, self-management, social awareness and relationship management).	It is evident that emotional intelligence can be effective in the resilience and stability of the psychological state of nurses.

Source: Research data.

DISCUSSION

The tensions caused by the COVID-19 pandemic led nursing professionals to use their

theoretical and practical knowledge to develop coping strategies against mental suffering at work. Evidence shows that these strategies can relieve stress and promote health. In general, nurses can adjust their cognitive rationality to adapt to crisis situations, which may also be related to the rich knowledge of health professionals and a more rational and positive attitude[28].

Nurses caring for patients on Severe Acute Respiratory Syndrome wards have employed various approaches to managing stress and pressure. When operating in these situations, these professionals continually modified their cognitive assessment, applying their knowledge to seek support from their team members, encourage autopsychological harmony, perform altruistic acts and take active measures to reduce stress, modify their attitudes to respond to changes in the internal and external context and avoid stress-related impacts on their health and ability to perform their nursing functions [29-31].

In a study that investigated the suffering and moral damage faced by health professionals during the COVID-19 pandemic, it was possible to conclude that these workers are at potential risk of developing post-traumatic stress as a result of their professional activities. The authors delimit, from this context, the importance of self-care and coping methods for building moral resilience; the use of reflective listening, clarification and reassessment of perceptions can be important allies to the mental health of nurses who work on the front line of care for infected patients[32].

Several factors trigger stress during a disease outbreak, which can endanger the physical and mental health of nurses. Ignoring their physiological needs, the ambiguity caused by the unknown disease and the lack of information about it are considered triggers for this suffering[33].

These professionals described the use of various techniques employed as self-care strategies, such as: therapeutic writing (diaries and letters), breathing exercises, mindfulness, music for meditation and emotional expression/outburst. Another highlighted point was the search for the best quality of sleep and rest, as well as eating habits and the adoption of regular physical exercise. The demonstration of empathy was also mentioned, as the professionals stated that they supported each other as a way of relieving tension, seeking team cohesion and strengthening, altruism and solidarity[17].

Nurses caring for patients with confirmed COVID-19 in public hospitals in Hong Kong reported relying on their own self-care methods to manage work challenges that frequently arise in their clinical setting, as well as their emotions (including ups and downs) during pandemic. All engaged in their own psychological self-defense mechanisms, including distraction, humor, and rationalization. Many channeled their emotions into trusting colleagues and trusted companions. They relieved their stress and addressed their complaints directly or indirectly through psychological tactics, such as: writing a diary,

rhythmic breathing, meditation and listening to music[22].

The same participants in the previous study achieved self-transformation when they went through the process of initially becoming stressed, fearful, and anxious and then staying strong through psychological adjustment. They ended up moving towards positivity, building courage by adopting self-care coping strategies, sustaining their psychological growth and becoming more prepared for the tasks ahead in their clinical practice[22].

Nurses' psychological adaptability plays important roles in their self-transformation. When acting under stress and pressure, nurses can adopt psychological modifications to gain confidence and build courage and resilience for emerging challenges[34].

Amidst the negativity brought about by the COVID-19 pandemic, there was a need to awaken resilience in health professionals. A qualitative study developed in 2020 brought some narratives from nurses that reflected on self-care behaviors. They reported that in previous experiences, the support of their co-workers, family and friends was essential to maintain positive thinking. Many stated that past traumas and exposures contributed to thinking about coping mechanisms that helped them to deal with the burden of work during the COVID-19 pandemic[18].

Globally, nurses are a major force in the fight against COVID-19. Resilience not only affects your mental health, but also the quality and safety of patient care. Specifically, nurses

with mental resilience can continue to provide care to patients in need[21,23,35].

Nurses, when reflecting on their own values, found positive strengths, such as expressing more appreciation for health and family and gratitude for social support. The sense of responsibility brought by professional ethics in an epidemic encouraged these workers to actively participate in anti-epidemic tasks and boosted their professional identity and pride. Therefore, actively guiding and inspiring them to carry out their own psychological growth can have numerous benefits[18,9,36].

A study carried out with 110 nurses listed other frequent measures adopted to reduce stress: sharing jokes with co-workers, encouraging and motivating the team, resting or having free time, recognition and support from the community, improvement in the patient's conditions, adopting measures of protection, acquire knowledge about the disease and get involved in recreational activities[19].

It was also found that increasing the level of coping with COVID-19 and reducing emotions of fear through positive autosuggestion proved to be effective. Nurses can, through repeated verbalizations, guide the subconscious in the brain to form a positive autosuggestion in order to achieve a calming psychological effect. Healthy protective behaviors contribute to maintaining an optimistic mood[25].

When confronted with their own feelings of despair and unease due to the ambiguity and unpredictability associated with COVID-19, nurses emphasized effective cooperation and

teamwork strategies as a means to ensure safety and tranquility among colleagues. Regardless of the negative feelings and loneliness resulting from working on the front lines of the pandemic, professionals emphasized their sense of professional duty, pride and responsibility, reinforced by the support of colleagues, friends and family[20].

Research with 178 front-line clinical nurses who worked at the Peking University People's Hospital and who supported the special isolation ward (for patients in serious condition) brought into their results the self-adjustment approaches used by these professionals, such as: improvement of communication with family and colleagues, learning about the disease, teamwork, regular rest and adequate exercise. Psychological self-adjustment is highly helpful in dealing with stress, increasing psychosocial support, and improving mental resilience. It is worth considering that there may be some obstacles to the implementation of these coping skills, such as the lack of training resources for mental self-crisis interventions[21,37].

Some researchers argue that health service administrators should be attentive to professionals' complaints, listen patiently to them, guide them effectively, encourage them to balance work and life, strengthen peer support, reduce pressure and stress, create a relaxing atmosphere in the team and help them understand and rationalize their psychological conflicts[38].

The symptomatology related to mental stress in health workers can be caused by the feeling of deprivation when wearing protective clothing, so targeted training can help them with compensation strategies to increase sensory stimuli and encourage them to adopt methods of mental adjustment according to your personal and actual preferences. In addition, cognitive-behavioral skills, stress reduction strategies (mindfulness, deep breathing, gratitude), self-administered acupressure, and emotional freedom techniques (derived from key principles of traditional Chinese medicine) can be effective in improving mental health[26.38].

Emotional Intelligence (EI) was also a psychological factor evaluated in 211 nurses who cared for patients with COVID-19 in Tehran, Iran, showing that it can be effective in promoting resilience, reducing stress at work and stabilizing the psychological state of these professionals. EI has a protective role for negative emotions such as fear, anxiety and sadness. In terms of clinical performance, improving EI will improve the quality of nursing care[27,39].

Self-support is one of the most important methods of dealing with the stress caused by the Covid-19 pandemic. Participants in a cross-sectional study conducted in Iran used a variety of coping methods, such as prioritizing their needs, creating a positive perception of a vague future, adapting to stress over time, increasing information in response to the crisis, and believing to count. with divine help. They also mentioned that social support was the main source for dealing with the situation and reducing negative emotions, such as family

support. This type of support is an important part of the social support system and can effectively alleviate negative emotions and promote positive responses[24].

In summary, the study carried out presented important limitations regarding the variability of the scientific productions found. The majority prevalence of Chinese studies is understood as a result of the country being the epicenter of the COVID-19 pandemic. However, the included studies present a reality restricted to a certain location and sample, and it is not possible for the results found to be generalized. The evaluation of measures applied in other countries would increase the quality of the results by presenting strategies from different contexts and cultures. It is suggested the construction of studies with a higher level of evidence on the phenomenon and with a more diversified aspect regarding the study sites.

The absence of national studies represented a gap in this integrative review and made investigations about the health situations and contexts to which Brazilian nurses are exposed and the possible self-care strategies that were or are being applied by these professionals during the pandemic unfeasible. Thus, it is expected that this research will boost the interest of investigations that present the outline of self-care and coping strategies carried out in Brazil.

This integrative review synthesized self-care practices in mental health, which can help maintain the physical and mental well-being of nurses, in addition to being a potential source of information for managers to structure plans and interventions aimed at workers in health institutions.

FINAL CONSIDERATIONS

The review identified that nurses, given the new scenario brought about by the COVID-19 pandemic, have been using different coping and self-care strategies. The main self-care strategies identified in this review are limited to: use of psychological techniques (breathing exercises, mindfulness, meditation and mindfulness), social support, psychological self-defense mechanisms (distraction, humor and rationalization), self-regulation strategies (relaxation exercises, talking to family and friends, sleeping and/or practicing physical exercises), support among professionals, hospital environment and management team, in addition to self-support (positive verbalizations to form a positive self-support and reach a calming psychological effect) .

Therefore, it was evident that the aforementioned strategies were important in the development of positive skills to face the COVID-19 pandemic. Thus, it can be inferred that nurses have individually sought ways to minimize the physical and mental strain arising from changes in their work scenarios.

The need to support the worker's mental health is highlighted, in order to strengthen positive strategies and minimize the search for coping mechanisms that pose a risk to health. There is a need for further studies capable of identifying the self-care strategies that best apply

to health workers, in different sociocultural contexts, in crisis situations in public health.

It should also be noted the absence of studies on the subject in Brazil and the greater number of studies carried out in China. Thus, there is a need for greater investment in research on the national scene, aimed at understanding the needs for coping and the possible strategies that have been used by Brazilian nurses.

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