

Overview of publications on mental health in the context of the COVID-19 pandemic: scoping review*Resumen de publicaciones sobre salud mental en el contexto de la pandemia COVID-19: revisión de alcance**Panorama das publicações em saúde mental no contexto da pandemia por COVID-19: scoping review***Rodrigo Jacob Moreira de Freitas¹**

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The aim was to map the scientific literature on the mental health of the population in the context of the COVID-19 pandemic. Scoping review carried out by searching six electronic databases, electronic search engines and through the references of selected articles. Complete articles were included, in Portuguese, English or Spanish on mental health in the context of the COVID-19 pandemic. Articles that were published more than 1 year ago were excluded because there was no relationship with the beginning of the pandemic. 48 studies published in the year 2020 (100%) were mapped, 45 (93.75%) in English, 27 (56.25%) were from China; 30 (62.5%) were cross-sectional studies; 30 (62.5%) had evidence level IV. The data were organized into three themes: Mental health of the general population and vulnerable groups related to the impacts of the pandemic; Mental health of health professionals; Mental health strategies in the face of the COVID-19 pandemic. Knowledge of the mental health impacts of the population during the COVID-19 pandemic requires strategies for coping during and after the pandemic. Collaborative, multicenter, and interdisciplinary research is suggested to deepen the understanding of the health implications of the current crisis.

Descriptors: Mental Health; Mental Health Assistance; SARS Virus; Infection from Coronavirus; Pandemic.

Resumen

El objetivo fue mapear la literatura científica sobre la salud mental de la población en el contexto de la pandemia COVID-19. Revisión del alcance realizada mediante la búsqueda en seis bases de datos electrónicas, motores de búsqueda electrónicos y a través de las referencias de los artículos seleccionados. Se incluyeron artículos completos en portugués, inglés o español sobre salud mental en el contexto de la pandemia COVID-19. Se excluyeron los artículos que se publicaron hace más de 1 año porque no tenían relación con el inicio de la pandemia. Se mapearon 48 estudios publicados en el año 2020 (100%), 45 (93,75%) en inglés, 27 (56,25%) fueron de China; 30 (62,5%) fueron estudios transversales; 30 (62,5%) tenían nivel de evidencia IV. Los datos se organizaron en tres temas: salud mental de la población en general y grupos vulnerables relacionados con los impactos de la pandemia; Salud mental de los profesionales de la salud; Estrategias de salud mental ante la pandemia COVID-19. La conciencia de los impactos en la salud mental de la población durante la pandemia COVID-19 requiere estrategias para hacer frente durante y después de la pandemia. Se sugiere la investigación colaborativa, multicéntrica e interdisciplinaria con el fin de profundizar en la comprensión de las implicaciones para la salud de la crisis actual.

Descriptorios: Salud Mental; Asistencia de Salud Mental; Virus del SARS; Infección por Coronavirus; Pandemias.

Resumo

Objetivou-se mapear a literatura científica sobre a saúde mental da população no contexto da pandemia de COVID-19. Scoping review realizada através da busca em seis bases de dados eletrônicas, buscadores eletrônicos e por meio das referências dos artigos selecionados. Foi incluído artigos completos, nos idiomas português, inglês ou espanhol sobre saúde mental no contexto da pandemia de COVID-19. Excluiu-se artigos com publicação há mais de 1 ano por não haver relação com o início da pandemia. Mapeou-se 48 estudos publicados no ano de 2020 (100%), 45 (93,75%) em inglês, 27 (56,25%) foi proveniente da China; 30 (62,5%) eram estudos transversais; 30 (62,5%) tinham o nível de evidência IV. Os dados foram organizados em três temáticas: Saúde mental da população geral e grupos vulneráveis relacionados com os impactos da pandemia; Saúde mental dos profissionais de saúde; Estratégias de saúde mental diante da pandemia por COVID-19. O conhecimento dos impactos na saúde mental da população durante a pandemia por COVID-19 exige estratégias para enfrentamento durante e após pandemia. Sugere-se pesquisas colaborativas, multicêntricas e interdisciplinares a fim de aprofundar a compreensão das implicações para a saúde da crise atual.

Descritores: Saúde Mental; Assistência à Saúde Mental; Vírus da SARS; Infecção por Coronavírus; Pandemias.



Introduction

In December 2019, several cases of pneumonia of unknown origin occurred in Wuhan, China, causing concern among health officials. After ruling out other potential causes, a new pathogen was discovered and identified, the SARS-CoV-2 virus, named by the World Health Organization (WHO) responsible for COVID-19.¹

Since its recent discovery, there has been a rapid spread of the virus, declaring WHO a pandemic in March 2020, because of the more than 27 countries that have confirmed to have cases of COVID-19, including Brazil. The increase in the number of cases, mainly the increase in the number of deaths, is since the virus causes severe acute respiratory difficulty, in addition to causing infections that can lead to viral pneumonia.² In view of the high transmission power and the lack of treatments with established efficacy, the recommendations of the health agencies is that temporarily all remain in quarantine or social isolation.

Adopted as the main strategy in the contingency plan, social isolation consists of the functioning only of essential services for human survival in society, such as hospitals, supermarkets, pharmacies, among others, remaining the rest of the population, mainly the elderly, people with chronic diseases and children at home.²

This strategy of reducing the spread of the virus has generated many speculations about its impacts, ranging from the impacts on the economy, the livelihood of thousands of families, to the feelings that have arisen due to isolation in homes, the lack of social contact, concern for family members, the overload of health professionals, and the loneliness of those who are contaminated by COVID-19. Not only by isolation, but people affected directly or indirectly by the disease can suffer consequences on their mental health, which leads one to think that the context of the pandemic affects the mental health of all people, to a greater or lesser degree.

Thus, to understand the psychological repercussions of a pandemic, the emotions involved, such as fear, anger, anguish, must be analyzed. These emotions arise in response to the potentially threatening event for existence, which in this case is the pandemic, however, when it manifests itself in a chronic or disproportionate way, it becomes harmful and can be an essential component in the development of psychiatric disorders.³

Fear increases the levels of anxiety and stress in healthy individuals in addition to intensifying the symptoms of those who have a psychiatric disorder. Thus, the study is justified, because it is important to investigate about the mental health of people during the pandemic period, since the number of people whose mental health is affected during this period is greater than the number of people infected by COVID -19. The implications about the damage to people's mental health can last longer than the pandemic and have incalculable psychosocial and economic impacts if they consider the different contexts in which it affects.³

Thus, to know and evaluate the direct implications for the daily life and mental health of the population, it is necessary to question the psychological effects of the

pandemic. Through the PCC strategy (population, concept, and context) the research question was asked: What is known in the literature about the mental health of the general population in the context of COVID-19? Thus, the objective is to map the scientific literature on the mental health of the population in the context of the pandemic of COVID-19.

Methodology

It is a Scoping Review (SR), with an exploratory character and a qualitative approach, focusing on the mental health of individuals in the context of the COVID-19 pandemic. All existing review methods are useful for each specific situation, as they offer a set of tools for approaching the literature.

In this study, SR was chosen because it is a process of mapping the key concepts that support an area of investigation and the main sources of knowledge available.

The mapping refers to the summarization of information that allows the identification of evidence that transmits broad and deep knowledge of a given object.⁴ As it is a new phenomenon, it is necessary to map and clarify the relationships between mental health in the context of the pandemic by COVID-19.

To carry out the SR a priori, a research protocol was built that guided the construction of all stages. The following steps were taken identification of the issue and research, identification of relevant studies, selection of studies, mapping of data and collection, summary and reporting of results.⁴

The first stage was carried out from the construction of the research question and definition of the Population - Concept - Context (PCC) in which the study would be focused. As population (P) were listed: populations in general, such as children, adults, the elderly and health professionals. The concept (C) worked was that of mental health and the context (C) was the pandemic of COVID-19. It started from the following question: What is known in the literature on the mental health of the general population in the context of COVID-19?

For the search, the strategy recommended by the manual for Scoping Review built by the Joanna Briggs Institute was adopted.⁴ It started by means of a wide search in databases using controlled descriptors, later the verification was performed in an electronic search engine and finally, a reverse search in the references.

The databases used were Cochrane, Psycinfo, LILACS, Scopus, Pubmed and Web of Science. To obtain the articles, the search was carried out in pairs, at the same time and in separate devices from the controlled descriptors indexed in the Descritores em Ciências da Saúde (DeCS) and Medical Subject Headings (MeSH).

The following DeCS descriptors were used: 1 # (Mental Health; Mental Health; Mental Health), 2 # (SARS Virus; Virus del SRAS; SARS Virus), 3 # (Severe Acute Respiratory Syndrome; Severe Acute Respiratory Syndrome; Severe Acute Respiratory Syndrome). MeSH descriptors were also used: # 1 (Mental Health), # 2 (SARS Virus), # 3 (Coronavirus Infections) and # 4 (Pandemics).



2012. As it is an SR, it does not need to be sent to the Research Ethics Committee (CEP).

Crossings # 1 AND # 2 and # 1 AND # 3 were used, in the bases that use the DeCS descriptors. For those that use the MeSH descriptors, the crossings were used: # 1 AND # 2 OR # 3 OR # 4; # 1 AND # 3 AND # 4. For the verification in the electronic search engines "Google Scholar" and "Science Direct", the keywords "COVID-19" and "Mental Health" were used. The searches took place between April and May 2020.

After conducting the search, the eligibility process was initiated through the inclusion and exclusion criteria. Inclusion criteria were adopted: studies that have been developed with the general population (children, adults, the elderly, health professionals) in the context of the COVID-19 pandemic; studies that address mental health; studies that were carried out in the context of the COVID-19 pandemic; complete articles available in the selected databases; articles available in Portuguese, English or Spanish; studies that have been finalized and are published or in preprints. Exclusion criteria were editorials; letters to the editor; comments; abstracts; articles that do not address the relevant topic within the scope of the review objective; articles published over 1 year ago.

The method recommends that the information in the gray literature be aggregated in the study to map what is available by the theme, for this reason we opted for the inclusion of preprinted articles. However, it is noteworthy that only articles with peer review and approved by the journals were included in the review, excluding articles only in submission.

Each of the articles underwent an evaluation of methodological quality, for each of the designs an evaluation instrument or recommendation for writing was used. For the observational studies, the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) was used, for the experimental studies the Consolidated Standards of Reporting Trials (CONSORT), for the qualitative studies the Consolidated Criteria for Reporting Qualitative Studies (COREQ) and for the reviews the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). After the evaluation and approval obtained by peers, the study was integrated into the sample. The time frame was used so that the studies are related to the beginning of the virus circulation.

After selecting the sample, the search was carried out using the references of the selected articles, but there was no inclusion of any new articles.

For data extraction, an instrument was developed to assist in mapping, containing information related to the identification of the publication (title, authors, country, year of publication and language), methodological aspects and the content of the study (purpose of the investigation, methodology, type of approach, population, and sample, in addition to the main findings of the study) and aspects of people's mental health in the context of the COVID-19 pandemic. The data were extracted, mapped, synthesized, and organized by themes. The step-by-step of the quantitative identified is available in Figure 1.

The research was carried out following the ethical principles according to Resolution No. 466, of December

Results

Through the searches in the databases, 48 scientific studies were mapped that discussed on the theme of mental health during the SARS-CoV-2 virus pandemic, as shown in Figure 1.

The productions were published in the year 2020 (100%), which can be explained by the fact that the World Health Organization characterized the spread of the Coronavirus as a pandemic only in March of the current year, the English language was the predominant one (93.75%), the country with the greatest authorship was China (56.25%), the initial epicenter of COVID19; the primary studies (62.5%), with emphasis on the quantitative methodological design (cross-sectional) were the most reported, in relation to the types of publication, the majority (98%) are articles (paper), found only one manual; most studies were located using the academic search engine "Google academic" (50%); the level of evidence from the surveys is found in IV (62.5%) and VI (37.5). The details of the data are shown in Table 1.

According to the focus of the work, they were organized into three main themes: Mental health of the general population and vulnerable groups related to the impacts of the pandemic; Mental health strategies in the face of the COVID-19 pandemic; Mental health of health professionals.

Mental health of the general population and vulnerable groups related to the impacts of the pandemic

Posttraumatic Stress Disorder (PTSD), negative emotions (confusion, anger and stress), anxiety disorders, depression, obsessive compulsive disorder, sleep disorders, increased alcohol consumption, greater concern for family members and health were identified.⁵⁻¹⁶ Changes in behavior during the COVID-19 pandemic in relation to health have also been reported. Clear information on prevention and contagion prevented mental health problems.¹⁷⁻¹⁸ Positive feelings about family support and negative feelings due to the pandemic and exposure to the media.¹⁹⁻²²

It is pointed out the increase of anxiety in specific populations (students) and worsening of the picture of children with Hyperactivity Disorder and Attention Deficit (ADHD).²³⁻²⁶ There is a need for support from institutions to workers, since worse physical, mental health and anguish conditions were greater in those who stopped working.²⁷⁻²⁹ There is an urgent need for mental health care during and after the end of the pandemic.³⁰⁻³⁸

Mental health of health professionals

The impact on the mental health of health professionals is highlighted. The current health crisis affects the self and the identity of people who are confronted with the discrepancy between their usual psychological needs and current realities.³⁹⁻⁴⁰ Children, working hours per week and anxiety were the main factors that affect nurses' stress.⁴¹



Mental health strategies in the face of the COVID-19 pandemic

Government actions for emergencies in psychological crises are pointed out in addition to the use of theories to understand what has been lived and what to expect in the post-social isolation period.⁴²⁻⁴³ It is imperative that each individual take care of their physical and mental health. Some studies report the benefits of animal companionship in helping to alleviate physical, emotional,

Figure 1. Study eligibility flowchart, PRISMA ScR. Fortaleza, CE, Brazil, 2020

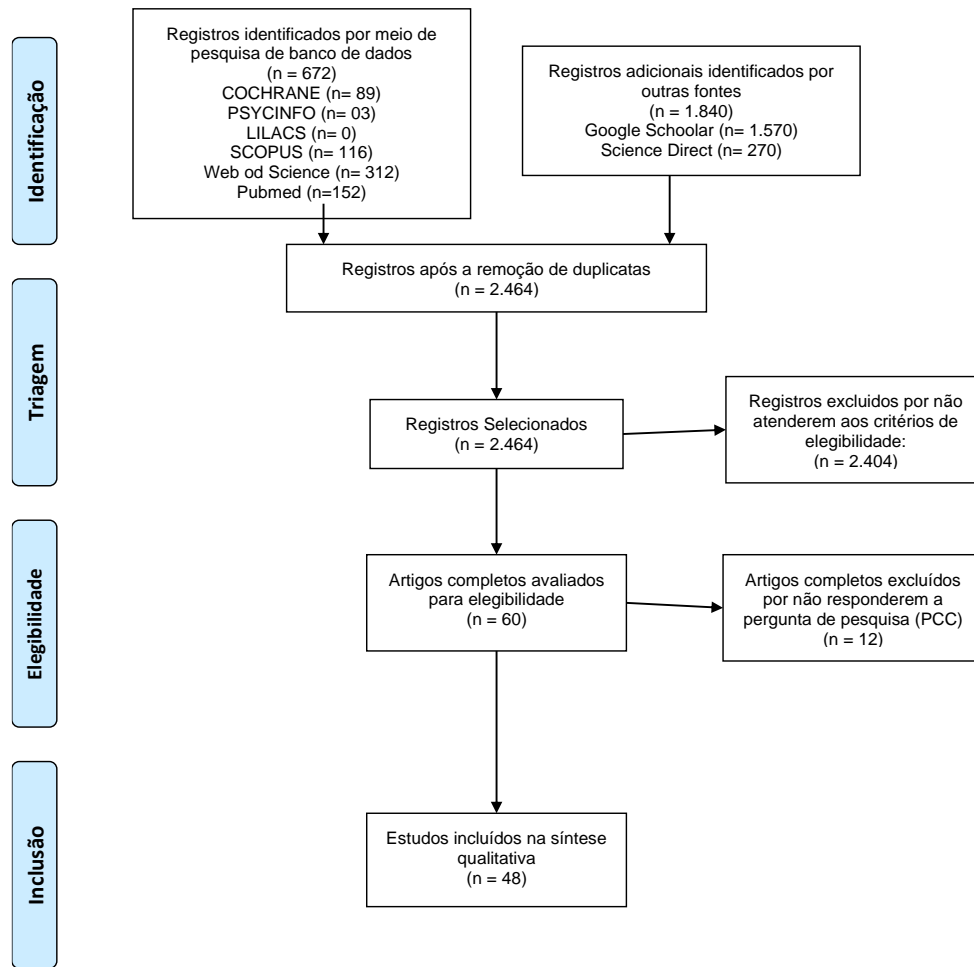


Table 1. Characterization of studies regarding language, year of publication, study location, methodological design / sample, online search. Fortaleza, CE, Brazil, 2020 (n = 48)

Variables	n (%)
Language	
English	45 (93,75)
Portuguese	2 (4,17)
Spanish	1 (2,08)
Study location	
China	27 (56,25)
USA	4 (8,33)
Europe (United Kingdom, Denmark, France)	5 (10,42)
India	3 (6,25)



Partnership between countries (Italy, Paraguay, and Brazil; Singapore, India, and USA; Italy and Canada)	3 (6,25)
Others (Brazil, Peru, Singapore, Iran, and Vietnam)	6 (12,5)
Methodological design / sample	
Primary studies	30 (62,5)
Literature review	9 (18,75)
Reflection / theoretical studies	6 (12,5)
Experience reports	2 (4,17)
Manual	1 (2,08)
Online search	
Google Scholar	24 (50)
Scopus	14 (29,17)
Science Direct	9 (18,75)
PubMed	1 (2,08)

Discussion

Psychological changes can affect individuals who have or have not had COVID-19. The presence of post-traumatic stress disorder, especially after the outbreak began in China⁵ and its association with negative feelings, such as anger and indignation were evidenced in the studies.^{6,7}

Anxiety and depression were widely reported in publications, moderate to severe levels of these two psychological events were detected during the pandemic situation,^{9,18,21} symptoms that can last and become chronic,⁶ there was an association between alcohol, anxiety, depression and decreased mental well-being,⁸ the stressors that have led to these symptoms can be considered as the quarantine time that can be prolonged, the fear of contracting the disease, among others, such as sleep disorders and having or having had the disease.^{6,11,12}

Anxiety risk was most seen in women and people over 40,^{14, 22} in contrast, Generalized Anxiety Disorder and depressive symptoms were found more in young people than in the elderly.¹² In relation to mental health, protective factors, such as positive attitudes, were also seen for people to comply with governmental guidelines for social distance and hygiene,¹⁷ in addition to having reliable information on how to take care of health, the degree of reliability in the health team and the chances of contracting the virus,⁹ another positive point was the fact that despite the distance they can feel supported by family and friends.¹⁷

The role of social media was seen as a stressor for exaggerating the dissemination of news and the situation of the pandemic, which may increase the feeling of fear and anguish, in addition to paranoia and sleep disorders.^{17,20,21}

The studies addressed the repercussions of the pandemic on the psychological state of students, children and adults who already suffered from some mental disorders, people in confinement due to being infected, those who continued to work remotely and those who had to seek psychological assistance due to the spread of the disease. SARS-CoV-2.

In university students, states of severe anxiety and psychological stress were found, mainly due to the knowledge of relatives or acquaintances who contracted

COVID-19, as positive factors for the protection of mental health, it was reported that they did not have financial problems, live with their parents and in urban areas.^{23,26}

Children with attention deficit and hyperactivity disorder were assessed by climbing by their parents, who identified worsening in their condition during the pandemic.²⁵ In a Psychiatric Hospital in China, several challenges were seen, such as continuing the treatment of patients who lived in the community, due to the limitation of public transport, having to control and prevent the spread of Coronavirus within the Hospital and the very exhaustion of the service.²⁴

It was identified that people who continued to work remotely from home needed to maintain social ties in order to maintain their long-term productivity, while people who stopped working had worse physical and emotional health outcomes.^{27,28}

The psychological work with people hospitalized and infected with COVID-19 took place in the context of emotional strengthening and information received, identified that people with the disease had higher levels of depression and lower quality of health. Anxiety and stress were well associated with poor sleep quality, even in the presence of good social capital, in people with Coronavirus who were isolated during the 14 days, showing the mental health disturbances due to pandemics.^{29,16}

The articles^{31-33,35-39,37-38} appoint health professionals as the main mentally affected subjects during the pandemic. Health professionals have a duty to care for infected patients, strengthen contact with the patients' families, and sometimes face public inquiries. Frontline health care professionals, especially those in Wuhan, have close contact with infected patients, excessive workload, isolation, and discrimination are often reported and are therefore highly vulnerable to physical exhaustion, fear, emotional disorders, and problems with sleep.⁴²

This is in line with the literature review^{35,39} on the psychological aspects of previous epidemics, such as SARS, MERS, influenza, and Ebola, where individuals who were infected and health professionals were the most affected psychologically.



In the article³² 5,3% (N=48) had a positive result for moderate to very severe depression, 8.7% (N = 79) for moderate to extremely severe anxiety, 2.2% (N = 20) for moderate to extremely severe stress and 3.8% (N = 34) to moderate to severe levels of psychological distress.

The most common symptoms reported by professionals were headache (289, 31.9%), sore throat (N = 304, 33.6%), anxiety (N = 242, 26.7%), lethargy (N = 241, 26.6%) and insomnia (N = 190, 21.0%). The same article pointed to the positive association of these symptoms with mental health problems such as depression, anxiety, stress, and Post-traumatic Stress Disorder (PTSD). Similar results were obtained in the articles^{31,36-38} where depression, stress, fear, anxiety, insomnia, anguish, obsessive-compulsive symptoms, and somatization were pointed out.

It can also be highlighted the psychological suffering resulting from actions, or the lack of them, that violate the professional moral or ethical code, negative thoughts about themselves or about others (for example, "I am a terrible person" or "my bosses don't care about people's lives"), as well as intense feelings of shame, guilt, or disgust, and even suicidal ideation.³⁰

Of the health professionals, the medical team working in the respiratory, emergency, ICU and infectious diseases sectors was twice as likely to suffer from anxiety and depression than administrative staff with little chance of contact with positive COVID-19 patients.³⁷ The reasons may be related to overload with situations that have personal relevance, such as caring for someone who reminds them of a relative or friend,³⁰ the many difficulties of being safe at work, the insufficient understanding of the virus, the lack of knowledge of prevention and control, the long-term workload, the high risk of exposure to patients with COVID-19, the shortage of protective equipment lack of rest and exposure to critical life events, such as death.³⁶

In addition, the profile of professionals most likely to be mentally ill were seen in nurses, women who work at the front line of COVID-19.³¹ This involvement may be associated with the working hours per week and the nurses' stress load;⁴¹ the scarcity of protective equipment, resulting in fatigue and discomfort; failing to meet the patients' physical and psychological needs brought a feeling of helplessness; fear, for working in the specific sector for COVID-19; concern for patients in an isolated environment, with few caregivers and many patients; concern about the impact of the outbreak on the health of their families.³³

In the same study, they point out that nurses developed psychological defense mechanisms, such as speculation, isolation, depression, distraction, self-awareness, humor, rationalization, etc. As protective factors were listed, help and support among team members, nurses felt the goodwill, respect, active cooperation and gratitude of the patient, and the support of the family.

Although most nurses have negative emotions, such as fear, anxiety and worry, positive emotions started to appear progressively, as the protective factors were being strengthened. Nurses also assessed progress in preventing and controlling the epidemic and felt confident in the government's medical capacity.³³

Problem identification and early support are essential. It is necessary to adequately prepare the team for the work and the associated challenges, reducing the risk of mental health problems. In addition, support from teammates and managers, support from managers, avoiding talking about guilt and shame and focusing on other stressors during therapy, can protect professionals from mental health problems.³⁰

These resources are important for alleviating acute mental health disorders and improving your perceptions of physical health. Greater investment is needed in mental health tools, doctors, society, and an arsenal to protect and care for future medical and nursing teams who are unexpectedly on the dangerous frontlines of disease responses.³⁸

The articles^{42-43,49} point out that global strategies are needed to deal with mental health problems related to this context. The mental health strategies addressed are mostly in China since it is possible to predict the expected consequences on the mental and physical health of the most vulnerable parts of the population from the experiences of previous epidemics lived by that country.

In the article⁴⁵, in a report published in the country, highlights the importance of releasing substantial official updates at regular intervals during a crisis event and monitoring social media to reduce exposure to misleading information. Mental health support and monitoring should be provided within 6 months of release from isolation for individuals with previous vulnerable mental health status. Support should include accurate information, as well as adequate supplies for subjects, including food, clothing, and accommodation, if necessary.

Actions by the Chinese government included understanding the state of mental health in different populations influenced by the outbreak of COVID-19, identifying people at high risk of suicide and aggression, and providing appropriate psychological interventions for those in need.⁴²

In this way, a document entitled "Guidelines for the Psychological Assistance Helpline during the Prevention and Control of New Coronavirus Pneumonia" was prepared for psychiatrists in psychiatric hospitals and psychological departments in general hospitals to be able to guarantee psychological assistance in response to the outbreak.^{42,44}

The guidelines should be implemented under the guidance of trained mental health professionals and adopt emergency psychological crisis interventions, psychological counseling and establish groups of specialists in psychological assistance to provide professional guidance and coordinate with health authorities.⁴⁴

Because different populations are affected by the epidemic to varying degrees, psychiatrists have identified high-risk populations to prioritize their efforts in order to avoid extreme events, such as suicide and impulsive behavior. Of the general population, priority was given to infected and sick patients, their families and colleagues; individuals and their relationships with the community; individuals with pre-existing medical conditions (physical and / or physical); health professionals, especially nurses and



doctors who work directly with sick or quarantined people.^{44,45}

From this, main target groups and priorities were established according to criteria: 1) Patients with severe symptoms of COVID-19, frontline medical staff, researchers or administrative staff; 2) Patients with mild symptoms of COVID-19, close contacts, suspected patients or patients with fever arriving at the hospital for treatment; 3) People related to the first and second-level population, such as family, colleagues or friends; rescuers, commanders, administrative or volunteer employees; 4) People in affected areas, susceptible groups or the general public.⁵¹

The National Health Commission of China (NHC) integrated the Psychological Crisis Intervention (ICP) into disease prevention actions. The aim of the ICP is to minimize psychological damage and provide timely assistance in the prevention and control of the epidemic. Implementation must follow strict guidelines to reduce people's exposure to stress and trauma. ICP provides on-site services for first and second level populations and remote, real-time psychological support (telephone and internet) for third and fourth level populations.^{42,44}

For remote assistance, a free 24-hour hotline was made available, designed for the public to get answers to questions and concerns, relieve concerns and panic, and eliminate rumors or misinformation.⁵⁰ These services hotlines should be established by psychiatric institutions, student mental health counseling and education centers at universities, mental health associations and academic societies.⁴²

In addition, online educational articles and videos were created to be released to the public; psychological help to deal with COVID-19 for specific populations, including the elderly, children and adolescents, pregnant women, and health professionals; mental health education videos for the public through WeChat and other Internet platforms in the early stages of the outbreak.⁴²

At the level of actions by health professionals, psychological support requires the establishment of multidisciplinary mental health teams, clear communication with regular and accurate updates on SARS-CoV-2, outbreak plans and treatment and use of devices and applications professional electronics to avoid close contact with each other.⁵¹

In general, these actions included measures to prevent the psychological risks inherent in confinement: maintenance of regular sleep, physical exercise, social interactions, stress management and coping strategies, addiction prevention. In addition to training for the population and health professionals themselves to prevent, detect and treat early warning of symptoms of post-traumatic stress disorder.⁴⁸

In the article⁴⁷ it will reinforce the role of health professionals such as: educating the public about the common psychological effects of a pandemic; motivate the public to adopt strategies for disease prevention and health promotion; integrate mental health services with available health services; teach problem-solving strategies to deal with the current crisis; train COVID-19 patients and their

caregivers; and provide mental health assistance to health professionals.

The article also points out the need to develop teams of qualified specialists to deal with emotional stress; training community health professionals in basic aspects of mental health care; the use of online surveys to assess the scope of mental health problems; the development of online materials for mental health education; the provision of online counseling and self-help services; the development of telemedicine services for diagnostic and counseling purposes; and the need to make online mental health services accessible to individuals from lower socioeconomic strata.⁴⁷

Similar measures have also been taken by the Indian Government, including measures to reduce financial tension. An educational booklet was prepared for the population containing individual measures to prevent anxiety, deal with loneliness, difficulty concentrating, stress, despair, panic, and fear, during the quarantine and Lockdown period in the country.⁴⁶

The article⁴⁹ brings the importance of using pets to provide an invaluable resource of comfort, physical contact, motivation for activities and connection with other people. However, such a study lacks more scientific evidence.

It is also important to highlight the changes that China's mental health services had to undergo to assist the population in mental distress during the pandemic. The article⁴² reports that hospitalized patients, especially those who needed prolonged hospitalization in closed wards, had their routines modified.

In this sense, the actions were implemented by the government, such as: mental health institutions had to address the prevention of nosocomial infections; health departments had to provide timely treatment and care to mentally ill patients infected with COVID-19; and the integrated mental health management unit at the municipality / sub-district level had to provide management, treatment, and community care to mentally ill patients at home.⁴²

Psychiatric hospitals had to reduce outpatient visits, restrict admission criteria, and decrease hospital stay. For newly admitted psychiatric patients, isolation wards should be set up and the visit suspended, to minimize the potential risk of nosocomial infection. Psychological counseling and professional guidance in hospitals was offered to those in more serious psychological conditions, using the necessary protective measures. For all other cases, online mental health services have been widely adopted, such as hotlines and mobile application platforms.⁴²

Online consultancy and crisis response teams have been assigned to provide mental health education to patients and frontline medical staff. Psychological counseling was provided via hotline, WeChat and video for isolated people and strategies were adopted to relieve stress through social media.⁴²

The articles^{42,44} also criticize the psychological call center systems, since unified management and coordination policies are still inadequate in the country, which resulted in unequal distribution and waste of medical resources, not to



mention the evaluation of the effectiveness of these services, because historical data were missing medical, psychometric data, body language and effective follow-up observation. Some people (for example, older adults) had limited access to smartphones and broadband internet, not benefiting from the services. And the fact is added that health professionals, who are more affected psychologically, are not available after hours on call to access remote services.

Thus, global health measures must be employed to deal with psychosocial stressors, particularly related to stigma, use of isolation / quarantine, fear, and vulnerability among the population. A response to the pandemic worldwide must include a focus on the impact on the mental health of patients and the general population.⁴⁵

The main limitation of the study concerns the number of published articles with greater evidence that they are still scarce, which requires more in-depth clinical studies and that would take longer. In contrast, many preprinted articles, without peer review, of questionable quality available online may disclose erroneous information on the topic. In addition, COVID-19 is not yet a controlled descriptor, which makes searches difficult and limited. It also points out the gap in national production that needs to scientifically disclose its findings in the area (still restricted to reflective articles), since the experiences of mental health in China may not reflect the national context. Another important gap to be cited is the mental health of vulnerable and marginalized groups in society, requiring more robust research with these populations.

Conclusion

This scoping review achieved the objectives by mapping publications on aspects of mental health in the population due to the COVID-19 pandemic. Thus, it is essential to be concerned with the impacts on the mental

health of the population during the COVID-19 pandemic, requiring strategies to face these problems.

With a view to preventing subsequent pandemics, it is necessary to ensure that mental health is included in the design of emergency plans through a multidisciplinary mental health team. This context reinforces the need to strengthen the Unified Health System as a public policy capable of responding to health, physical and mental demands, during the pandemic period.

It is necessary to develop comprehensive, equitable and universal mental health actions that include vulnerable populations, knowing the mental health reality of children and adolescents, people in mental distress, on the street, in the black community, LGBTQ + people, people in remote areas and / or rural people who face barriers to access health care and those belonging to lower socioeconomic levels.

In addition, it is necessary to train health professionals, volunteers, managers, so that they can contemplate aspects of mental health in addition to the physical symptoms of COVID-19. For nursing, it is important to think about mental health care strategies for subjects during and after the pandemic. It is worth highlighting the need for attention and care to health professionals, especially nurses, since it is the frontline workers of the pandemic who are most affected by mental health problems. Thus, managers are advised to carry out care strategies for workers who care for the population.

It is suggested that, once developed, these interventions should be tested, so that information on effective therapeutic strategies can be widely disseminated among those working in this field. In addition, collaborative, multicenter and interdisciplinary research (nursing, biology, psychology, psychiatry, social policy, qualitative and quantitative methods) is suggested to deepen the understanding of the health implications of the current crisis.

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