

Mental health interventions implemented in the COVID-19 pandemic: what is the evidence?

Intervenções em saúde mental implementadas na pandemia de COVID-19: quais as evidências?

Intervenciones de salud mental implementadas en la pandemia de COVID-19: ¿cuál es la evidencia?

Wanderson Carneiro Moreira^I

ORCID: 0000-0003-2474-1949

Kayo Henrique Jardel Feitosa Sousa^{II}

ORCID 0000-0002-0901-7752

Anderson Reis de Sousa^{III}

ORCID: 0000-0001-8534-1960

Thiago da Silva Santana^{IV}

ORCID 0000-0003-0987-0814

Regina Célia Gollner Zeitoune^I

ORCID 0000-0002-0276-8166

Maria do Perpétuo Socorro de Sousa Nóbrega^I

ORCID: 0000-0002-4974-0611

^I Universidade de São Paulo. São Paulo, São Paulo, Brazil.

^{II} Universidade Federal do Rio de Janeiro. Rio de Janeiro, Rio de Janeiro, Brazil.

^{III} Universidade Federal da Bahia. Salvador, Bahia, Brazil.

^{IV} Universidade Estadual de Feira de Santana. Feira de Santana, Bahia, Brazil.

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Corresponding author:

Wanderson Carneiro Moreira
E-mail: wanderson.moreira@usp.br



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ASSOCIATE EDITOR: Antonio José De Almeida Filho

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ABSTRACT

Objective: to map the evidence on mental health interventions implemented during the COVID-19 pandemic. **Method:** this scoping review was carried out in the MEDLINE/PubMed, SCOPUS, Web of Science, PsycINFO, and Science Direct databases and in the medRxiv, bioRxiv, and PsyArXiv preprints servers using the descriptors "Covid-19", "coronavirus infection", "coronavirus", "2019-nCoV", "2019 novel coronavirus disease", "SARS-CoV-2", "health personnel", "general public", and "mental health". **Results:** eight articles were selected and categorized into mental health interventions for the population, among which mental health interventions were for people diagnosed with suspicion/confirmed COVID-19 and mental health interventions for health professionals. **Conclusion:** telemonitoring, virtual games and strategies focused on social support and muscle relaxation techniques, characterized as non-pharmacological and low-cost, were shown as interventions, which, since they are effective, need to be encouraged and included in mental health care practices.

Descriptors: Pandemics; Sars-Cov-2; Coronavirus Infections; Mental Health; Public Health.

RESUMO

Objetivo: mapear as evidências sobre intervenções em saúde mental implementadas durante a pandemia de COVID-19. **Método:** *scoping review* realizada nas bases de dados MEDLINE/PubMed, SCOPUS, *Web of Science*, PsycINFO e *Science Direct* e nos servidores de preprints medRxiv, bioRxiv e PsyArXiv, usando os descritores "Covid-19", "coronavirus infection", "coronavirus", "2019-nCoV", "2019 novel coronavirus disease", "SARS-CoV-2", "health personnel", "general public" e "mental health". **Resultados:** oito artigos foram selecionados e categorizados em intervenções em saúde mental à população, dentre as quais intervenções em saúde mental às pessoas com diagnóstico de suspeita/confirmado de COVID-19 e intervenções em saúde mental aos profissionais de saúde. **Conclusão:** evidenciou-se como intervenções o telemonitoramento, jogos virtuais e estratégias focalizadas no suporte social e em técnicas de relaxamento muscular, caracterizadas como não farmacológicas e de baixo custo, que, por se mostrarem eficazes, precisam ser incentivadas e incluídas em práticas de atenção à saúde mental.

Descritores: Pandemias; Covid-19; Infecções por Coronavirus; Saúde Mental; Saúde Pública.

RESUMEN

Objetivo: mapear la evidencia sobre las intervenciones de salud mental implementadas durante la pandemia de COVID-19. **Método:** revisión de alcance realizada en las bases de datos MEDLINE/PubMed, SCOPUS, Web of Science, PsycINFO y Science Direct y en los servidores de preprint medRxiv, bioRxiv y PsyArXiv, utilizando los descriptores "Covid-19", "coronavirus infection", "coronavirus", "2019-nCoV", "2019 novel coronavirus disease", "SARS-CoV-2", "health personnel", "general public", "mental health". **Resultados:** se seleccionaron ocho artículos y se categorizaron en intervenciones de salud mental para la población, incluidas intervenciones de salud mental para personas con diagnóstico presunto/confirmado de COVID-19 e intervenciones de salud mental para profesionales de la salud. **Conclusión:** se mostraron como intervenciones la telemonitorización, los juegos virtuales y las estrategias enfocadas al apoyo social y técnicas de relajación muscular, caracterizadas como no farmacológicas y de bajo costo que, por su eficacia, deben ser alentados e incluidos en las prácticas de atención de la salud mental.

Descritores: Pandemias; Covid-19; Infecciones por Coronavirus; Salud Mental; Salud Pública.

INTRODUCTION

SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2) was detected in December 2019 in Wuhan, capital of Hubei Province, China, and spread rapidly and indiscriminately around the world, which led the World Health Organization (WHO) to declare, on March 11, 2020, a pandemic situation and a state of emergency public health of international concern, the infection caused by this virus, known as COVID-19 or novel coronavirus disease⁽¹⁻⁵⁾.

In order to control the spread of COVID-19, it is of paramount importance that state heads monitor the epidemic curve and promote measures of quarantine, distancing or social isolation, with the determination of good practices to assist those who have become infected⁽²⁾. However, control measures associated with false information (fake news/pseudo information) and absence of proven effective and safe treatment lead the population to experience moments of uncertainty, insecurity, panic, and fear, directly reflecting on their mental health⁽⁶⁻⁸⁾.

Among the impacts generated on mental health reported in literature are fear, stress, feelings of helplessness, abandonment and insecurity, boredom, loneliness, insomnia, anger, depression, anxiety, posttraumatic stress, suicidal ideation, attempts, and suicide⁽⁵⁻¹³⁾. These conditions may be especially prevalent in quarantined patients, whose psychological distress tends to be greater⁽⁷⁾. In some cases, uncertainty about infection and death or about infecting family and friends can potentiate dysphoric mental states. Moreover, stigmatization feelings are common with suspected or confirmed individuals with COVID-19, negatively impacting mental health^(8,12,14).

However, the feeling experienced by people with positive testing for COVID-19 may also be present among health professionals and essential services that are in their places of care as well as being experienced by the general population. Everyone is experiencing the feeling of becoming contaminated and being a source of infection. The doubt and uncertainty in the COVID-19 pandemic reality are one of the feelings of the entire population. In previous outbreaks and symptoms, as is the current case, health professionals have developed emotional problems and psychiatric symptoms, anxiety, depression, posttraumatic stress disorder, and burnout, being mediators for absenteeism⁽¹⁵⁻¹⁸⁾.

Considering the crisis scenario caused by the pandemic, in which entire populations are impacted, interventions in the mental health field become essential for proper management in order to avoid prolonging psychological distress and secondary problems in the pandemic and post-pandemic period. WHO and many health institutions have proposed guidelines to provide psychological assistance to the general population and health professionals during the pandemic⁽¹⁹⁾. However, it is important to ensure that evidence-based intervention programs are employed so that already overburdened health care resources can be maximized.

Many obstacles limit implementing conventional evidence-based interventions in this emerging scenario, as it is difficult to propose immediate face-to-face mental health care due to quarantine policy to prevent transmission of the virus⁽²⁰⁾. Furthermore, not all health professionals voluntarily participate in online mental health interventions targeted at the population, as evidenced by recent experiences from China⁽²¹⁾. Thus, current evidence-based interventions generally refer to unique mental disorders, while literature reveals a variety

of psychosomatic symptoms and mental disorders experienced by the population in the current pandemic scenario⁽²⁰⁾.

In this context, it is necessary to develop evidence-based mental health care interventions that consider the pandemic context as a distress-triggering factor, allowing the population to protect their mental health during the COVID-19 pandemic and prevent post-pandemic injuries.

OBJECTIVE

To map the evidence on mental health interventions implemented during the COVID-19 pandemic.

METHOD

This scoping review was carried out according to the method proposed by the Joanna Briggs Institute Reviewers in five stages, namely: 1) research question identification; 2) relevant study identification; 3) study selection; 4) data analysis; 5) data grouping, summing up, and presentation⁽²²⁾.

PCC strategy⁽²²⁾ was used, acronym for "population" (P), "concept" (C) and "context" (C). The research question was established: what is the overview of the research on mental health care interventions available during the COVID-19 pandemic? For inclusion in this review, the studies should be published in any language from December 2019 to May 10, 2020 and discuss mental health interventions implemented during the COVID-19 pandemic, involving any type of participants. Studies that were not in article format and/or that referred to other types of coronavirus were excluded.

Search strategies were built in three stages. Initially, "Covid-19" AND "Mental health" was used in the Medical Literature Analysis and Retrieval System Online via the US National Library of Medicine (MEDLINE/PubMed) databases to find uncontrolled descriptors contained in the articles of interest. Then, controlled descriptors were performed, obtained in the Medical Subject Headings (MeSH), and not controlled, obtained in the initial search, plus the Boolean operators "OR" and "AND". Finally, this strategy has been adapted for each database (Chart 1).

Study search and selection took place between March and May 2020 and were carried out by two independent reviewers, and divergences were resolved by a third reviewer. The MEDLINE/PubMed, American Psychological Association (PsycINFO), SCOPUS (Elsevier), Science Direct (Elsevier), Web of Science (WOS) databases and the medRxiv, bioRxiv and PsyArXiv preprints servers were selected.

After identifying the articles, these were exported to the Endnote® reference manager software, seeking to identify duplicate articles and gather all publications found. The list of references was consulted in order to find additional studies. Study selection followed the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) recommendations⁽²³⁾.

The data were organized and analyzed using a data collection instrument validated by Ursi⁽²⁴⁾ and adapted for this study, containing identification, journal, place of performance, methodological design, mental health care interventions, and methodological rigor assessment. It is emphasized that the scoping reviews do not predict the exclusion of articles according to methodological quality criteria; therefore, no articles were excluded based on this criterion.

Chart 1 - Search strategies used by databases, 2020

Database	Search strategy
MEDLINE/ PubMed	• (("covid 19") AND ("mental health")) • (((("coronavirus infection") OR ("coronavirus") OR ("2019-nCoV") OR ("2019 novel coronavirus disease") OR ("COVID-19") OR ("SARS-CoV-2")) AND ("Mental health"))
PsycINFO Web of Science	• (((("coronavirus infection") OR ("coronavirus") OR ("2019-nCoV") OR ("2019 novel coronavirus disease") OR ("COVID-19") OR ("SARS-CoV-2")) AND ("Mental health"))
SCOPUS	• TITLE-ABS-KEY (((("coronavirus infection") OR ("coronavirus") OR ("2019-nCoV") OR ("2019 novel coronavirus disease") OR ("COVID-19") OR ("SARS-CoV-2")) AND ("Mental health"))
Science Direct	• (("coronavirus infection" OR "coronavirus" OR "2019-nCoV" OR "2019 novel coronavirus disease" OR "COVID-19" OR "SARS-CoV-2") AND (Mental health) AND ("General public" OR "Health Personnel"))

To identify the study drawings by level of evidence (LoE), the following classification was used: Level I - systematic reviews or meta-analysis of relevant clinical trials; Level II - evidence of at least one well-designed randomized controlled trial; Level III - well-delineated clinical trials without randomization; Level IV - well-delineated cohort and case-control studies; Level V - systematic review of descriptive and qualitative studies; Level VI - evidence derived from a single descriptive or qualitative study; Level VII - opinion of authorities or expert committees including interpretations of non-research-based information⁽²⁵⁾. Based on these criteria, evidence can be classified into strong (levels I to II), moderate (levels III to IV), and weak (levels V to VII)⁽²⁶⁾ levels.

After assessing the texts in full, a descriptive analysis of the results evidenced was performed, in which the synthesis of each study included in the review was presented as well as comparisons between studies.

RESULTS

Initially, 1,168 studies were identified, excluding 974 because they were duplicated, remaining 194 studies. After reading titles and abstracts, 166 studies were withdrawn because they did not meet the inclusion criteria, remaining 28 articles. Of these, 20 articles were read in full and excluded for not answering the question that guides this review. Thus, at the end of this analysis process, eight articles were selected that met the inclusion criteria and constituted the final sample. Figure 1 describes the process of selecting and including articles.

Chart 2 - Characteristics of the studies included in the sample, 2020

ID	Country	Journal	Methodological design	Target audience	Intervention	LoE
A1 ⁽²⁷⁾	China	Precision Clinical Medicine	Descriptive	Health professionals (n= not informed)	Face-to-face and online support	VI
A2 ⁽²⁸⁾	Germany	Journal of Public Health	Descriptive	General population (n= not informed)	Cope it	VI
A3 ⁽²⁹⁾	UK, Canada, Australia, USA, Abu Dhabi and Netherlands	International Journal Eating Disorders	Descriptive	Health professionals (n= unreported)	Online Support Cognitive-behavioral therapy	VI

To be continued

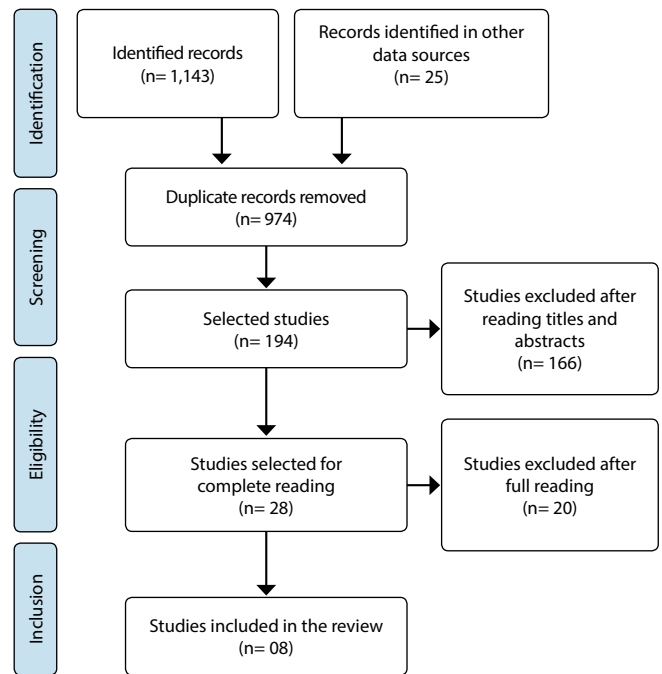


Figure 1 - PRISMA-ScR flowchart for selecting articles, 2020

Characteristics of the studies included

The articles included in this review were published in 2020, in English and in eight separate journals (100%)⁽²⁷⁻³⁴⁾. Regarding location and origin of studies, four (50%) were held in China^(27,31,33-34), the others were in Germany⁽²⁸⁾, Australia⁽³²⁾, Brazil⁽³⁰⁾, and a multicenter⁽²⁹⁾ (United Kingdom, Canada, Australia, United States of America, Abu Dhabi, and the Netherlands). As for study design, we had a randomized clinical trial⁽³¹⁾, one cross-sectional⁽³⁴⁾, five descriptive^(27-29,32-33) and a literature review⁽³⁰⁾. Sample sizes ranged from 13 to 1233 subjects, with the mean being 254 participants of both sexes. The studies included adult populations in various age groups, and the average age was 67 years. Regarding level of evidence, one study presented level II⁽³¹⁾, one presented level V⁽³⁰⁾, and six presented level VI^(27-29,32-33).

Chart 2 presents the synopsis of studies included in the review, containing country, journal, methodological design, target audience, intervention, and level of evidence.

With regard to the population groups that are responsible for the interventions, the records found in mental health interventions to the general population were categorized^(28,30), among them inserted mental health interventions for people with suspicion or confirmation for COVID-19⁽³¹⁻³²⁾ and mental health interventions for health professionals^(27,29,33-34).

Chart 2 (concluded)

ID	Country	Journal	Methodological design	Target audience	Intervention	LoE
A4 ⁽³⁰⁾	Brazil	Games Health Journal	Review	General population	Exergames (physical activity and digital games)	V
A5 ⁽³¹⁾	China	Complementary Therapies in Clinical Practice	Randomized clinical trial	People with COVID-19 (n=51)	Progressive muscle relaxation	II
A6 ⁽³²⁾	Australia	Asian Journal of Psychiatric	Descriptive	General population and people with COVID-19 (n= not informed)	Online support	VI
A7 ⁽³³⁾	China	Psychiatry Research	Descriptive	Health professionals (n= unreported)	Face-to-face and online support	VI
A8 ⁽³⁴⁾	China	Medical Science Monitor	Cross-sectional	Physicians and nurses (n= 180)	Social support	VI

Mental health interventions: possibilities for health care of the population

As a way to face the impacts generated by social isolation and promote the protection of mental health through psychological well-being, a study⁽³⁰⁾ showed opportunities and challenges in the use of exergames that integrate physical activity with digital games. This practice is configured as a strategy for preventing and treating anxiety disorders in the domestic sphere of the general population affected by the pandemic. Exergames proved to be easy-to-use tools that would reduce isolation. They are an effective activity in the control of anxiety disorders and reduction of sedentary behavior.

A study⁽³⁰⁾ points to the possibility of adapting the home environment to perform exercise during the quarantine period; contributes to the improvement of self-image and interpersonal relationships; improves physical fitness, as it allows involvement in practices of various modalities, such as walking, running, climbing stairs, cycling, swimming, rowing, baseball, ping-pong, balance, boxing, canoeing, stretching, yoga, dance and others, both simulated in the game, capable of performing at home.

Another study⁽²⁸⁾ developed a self-guided mental health intervention for people under psychological distress due to the new coronavirus. This intervention was named CoPE-It and is based on psychotherapeutic intervention techniques to reduce stress, based on attention and cognitive behavioral therapy, aiming to reduce distress, improve coping strategies and self-efficacy and activate personal resources. CoPE-It is available free of charge in virtual environment, in four modules, each lasting about 30 minutes, which must be performed every day by users over two weeks.

In the context of the health care of the population and patients with COVID-19, another intervention describes the development of a telemedicine program dedicated to initial referral or screening in situations of pre-existing non-urgent consultations revised according to clinical parameters and risk for mental health impairment, implemented by telephone with the consent of patients⁽³²⁾. The model adopted aims to promote additional monitoring in mental health during the cataclysm of COVID-19.

The central focus of this intervention was to apply multifaceted approach strategies, through a mental health care program, which seeks to overcome the emerging setbacks regarding mental health care maintenance, once altered with the emergence of the pandemic. Acute care teams were composed of psychiatrists,

psychologists and social workers who provided screening care to COVID-19, through screening with their own instruments, specifically designed for mental health care, related to COVID-19, directing the population to emergency departments or maintaining home isolation. The program also offers the assessment of the individual capacities of the population to go to an emergency service during a crisis, to perform coping strategies in critical situations or to use the telemedicine service⁽³²⁾.

Clinical parameters and risk analysis were used as a reference to care for pre-existing emergencies, and a classification was given to the population assisted such as acute care and high risk, being, therefore, two types of classification employed. All interventions had the consent of the people receiving the service, being performed by telephone confirmation and/or via e-mail. Moreover, the program provided guidance on medication use, precautions to prevent relapses from serious mental illnesses, and control of exposure to stigma by confirming the disease⁽³²⁾.

For psychiatric emergency conditions, a separate group of professionals was in charge of providing support in different sectors and shifts as a way to guarantee social distance. For this, direct calls to health services, contacts with relatives and ambulances were made in case of need. In order for professionals to perform remote care, which occurred health services' facilities, recommendations were adopted for repositioning and rearranging the physical structure, use of personal protective equipment, hand hygiene, disinfection of surfaces and equipment among the members of the service team of the model employed to the population⁽³²⁾.

There was acceptance by patients of the new health care program employed in the Australian context. This program also generated changes in the provision of face-to-face services such as prescription drugs – tele-medication – causing a decrease in exposure of patients and health workers to contamination by the new coronavirus. It was observed in the study the help and facilitation of the program used regarding the development of public emergency interventions, which is effective for this type of circumstance. Due to the uncertain period of the pandemic context, it is necessary to delve into the feasibility and adaptability of it in future scenarios⁽³²⁾.

With regard to mental health interventions exclusive to patients with COVID-19, a⁽³¹⁾ randomized clinical trial study with 51 patients who were in isolation wards for COVID-19 conducted an experimental test using progressive muscle relaxation technology. It is a technique that is based on the sequential contraction of a

specific group of muscles associated with deep breathing, until the whole body is more relaxed.

The technology was used in patients for a period of 30 minutes for five consecutive days. As results, the level of anxiety and sleep quality of patients who received the intervention was satisfactory. To assess anxiety and sleep quality, Spielberger's State-Trait Anxiety Inventory (STAI) and the Sleep Status Self-Assessment Scale (SRSS)⁽³¹⁾ were used. These scales were validated in the context employed.

The intervention used proved to be effective in a pandemic context in which there are significant repercussions caused by isolation. Considering the possibility of the onset of respiratory depression caused by sleep-promoting medications, applying muscle relaxation in a preventive manner can contribute to anxiety relief and improved sleep quality of patients with COVID-19⁽³¹⁾.

Mental health interventions directed to health professionals

By predicting the impacts caused by the pandemic in health workers, an⁽³⁴⁾ observational study conducted with 180 teams of medical professionals working in treatment of patients with COVID-19 infection measured anxiety, self-efficacy, stress, sleep quality, and social support levels. Scales and questionnaires validated in mental health were used, such as Self-Assessment Anxiety Scale (SAS), General Self-Efficacy Scale (GSES), Social Support Rate Scale (SSRS), Stanford Acute Stress Reaction (SASR), and Pittsburgh Sleep Quality Index (PSQI) questionnaire.

Based on the findings, a study⁽³⁴⁾ pointed to the potentiality of social support levels accessed by health professionals along with the high significance responses to self-efficacy and sleep quality. When they were weak, negative responses were recognized in association with high degree of stress and anxiety.

The⁽³⁴⁾ study also revealed the direct association between the levels of anxiety to stress experienced by the professional category during the work to cope with COVID-19 in China between the months of January and February 2020, intimately impacting the self-efficacy and quality of sleep of these professionals. It has been undertaken that this data may be related to the need for the use of special protective clothing routinely, including waterproof clothing, special protection against hazardous or potentially contaminated materials (Hazmat Suits), continuous work and long hours in isolation, high work intensity and exposure to work under pressure, which generate additional stress, in addition to the high mortality of patients.

Thus, the study⁽³⁴⁾ indicates that the teams of health professionals who provide assistance to patients with COVID-19 have high levels of anxiety, stress and compromises in self-efficacy and quality of sleep, and social support should be enhanced for the purpose of achieving satisfactory results in terms of minimizing the impacts generated by the pandemic context.

Anchored in this need, another study⁽³³⁾ that composed the review, conducted in Shanghai, employed the development of a telemonitoring program aimed at mental health support via telephone and internet for health professionals who were working on the so-called *frontline*. The study showed efficacy in minimizing the risks of contamination by professionals, strengthening the professional support network, minimizing fear and anxiety.

Telemonitoring for professionals promotes psychological support and counseling, providing technical guidance focused on the performance of care activities together with patients with COVID-19, the control of stress and tension levels, performed remotely in real time. The investigation⁽³³⁾ identified that there was a need for the inclusion of psychology and psychiatry professionals to assess the psychological state of the monitored groups.

Online platforms were used to promote telemonitoring as a means of conducting consultations and issuing prescriptions, which were operationalized with the organizational and financial guarantee supported by the State. If there were indications of hospitalization, recommendations were also issued, providing referral to specialized units present in the vicinity of the beneficiary's place of residence. In order to ensure contamination control, remote monitoring actions ensure dweller and safety from using practices in safe environments⁽³³⁾.

On the other hand, the study⁽³³⁾ pointed out limitations to this remote monitoring, such as the absence of data on the client's medical history, body language and effective face-to-face observation, given the context of isolation between researchers and study participants, in this case, the professional health teams, not replacing face-to-face psychological support services, recognizing the applicability of this type of assistance to temporary emergency situations in exceptional circumstantial contexts, but not in the long term.

Also in the context of the development of remote interventions, a model of mental health crisis management of health professionals was created in Western China. The structure of the model involved the participation of a multidisciplinary team and the use of interventions focused on difficulty of adaptation, severe mental disorders such as violence and suicidal behavior and psychiatric management. The actions were carried out jointly by a team of experts, with psychological rescue actions, psychological assistance and community volunteer actions⁽²⁷⁾.

The themes worked with health professionals for the purpose of protecting mental health included knowledge about the prevention and control of the coronavirus, the adequate consumption of information, the survey of psychological adjustment skills, the maintenance of stability and/or emotional regulation, abdominal breathing techniques, handling anxiety, and fear. Among the actions, the promotion of counseling carried out by team specialists, the provision of telephone service for professionals, the provision of consultancy and online assessment and the application of scales for the assessment of mental health problems were still privileged. The model also created carried out administrative actions, such as: performing summaries and daily reports and meetings, supervision and training of the operational team of the model⁽²⁷⁾.

Another strategy dedicated to conducting online monitoring for teams of health professionals, especially medical teams, was investigated by another study⁽²⁹⁾. The intervention was based on a telehealth program aimed at coping with eating disorders caused by the COVID-19 pandemic, observed in scientific evidence produced on the topic, disseminated, a posteriori, through the sharing of suggestions/recommendations by the professionals themselves.

The professional medical development program involved the practice of cognitive-behavioral therapy, which, in substitution

of face-to-face medical meetings, created a referral flow of suggestions and concerns of professionals in caring for patients with eating disorders through an email channel and an online platform made available via Google. The meeting of all clinical observations reported by more than 70 professionals from various parts of the world, such as the UK, Canada, Australia, USA, Abu Dhabi and the Netherlands, resulted in a set of guidelines⁽²⁹⁾.

DISCUSSION

Few studies answered the guiding question; however, by mapping the available evidence on mental health care interventions implemented during the COVID-19 pandemic, possibilities for good mental health care practices in a pandemic context were presented. The publications reveal a rapidly rising area of research, given the social impact of the current pandemic and the policies to encourage scientific publication proposed by journals, which aim to fill the gaps in the production of existing knowledge when it comes to the reflexes, in people's mental health, coming from the pandemic.

The studies included in this review were conducted with small samples. Although they cannot be generalized, there were positive results regarding the interventions carried out in the COVID-19 pandemic context.

Different successful interventions were mentioned, which need to be encouraged and included in the mental health care scenarios of infected or not people, as well as to be directed to health professionals.

Health professionals are being recognized as "heroes" in this situation of the COVID-19 pandemic, which resembles a war situation where decision-making needs to be quick and efficient; many times, these professionals have little time to organize themselves, to plan, becoming very vulnerable to contamination and even reaching death. Heroism, according to this review study⁽³⁵⁾, exemplifies the peak of a self-fulfilled professional, this feeling being common in professions considered altruistic.

A study⁽³⁶⁾ carried out with nurses showed that they feel negative and positive emotions simultaneously, involving high intensity feelings such as fear and anxiety, fatigue and helplessness, as well as experiencing altruistic acts and that need self-control to face the adversities, which culminated in positive responses of professional development and self-knowledge.

It is emphasized that the interventions developed had varied duration, but were beneficial to the participants. Most of them dealt with interventions planned for remote execution performed by professionals qualified for this^(23,25,28-29). It was also possible to identify interventions focused on social support⁽³⁴⁾ and on muscle relaxation techniques⁽³¹⁾ that presented satisfactory results in minimizing stress levels, anxiety and sleep quality.

With regard specifically to social support, this proved to be an important contribution to the control of anxiety and stress of health professionals involved in the management of patients with COVID-19, being effective in improving their self-efficacy⁽³⁴⁾. It is perceived that this support offered by friends and/or family members and co-workers should be extended to the entire population, in order to strengthen the structuring of bonds and networks of affection, security and social protection based on the

expansion of the psychosocial care network, social and religious movements, neighborhood associations and other devices/devices for the production of mental health care. Emotional control and shared empathy can also be considered as important measures to reduce mental health damage, as they can contribute to the reduction of negative emotions, enhancing mood and minimizing feelings and/or perceived threat.

The emergence of possible stressors and inappropriate physiological responses/behaviors that trigger stress-based outcomes, in this pandemic scenario, is inevitable, and social support can be an effective strategy for coping⁽³⁷⁾.

In this sense, adopting interventions that expand and strengthen social support, it can have an impact on the promotion of advances in personal and professional self-efficacy, and can be configured as a powerful element of response to the impacts generated by the pandemic, since they can enhance individuals' internal control. With this, the presence of satisfactory perception on the part of health workers regarding the understanding of the pandemic has been observed, through the interventions in mental health that have been used, encouragement, sense of involvement, professional self-realization and courage to remain steady in coping.

Consequently, strengthening self-efficacy, contributions can also be learned in the field of trust to perform functions at work, especially when there is a combination of the social support learned by families and friends and that offered through labor relations⁽³⁴⁾.

In the context of social isolation, telehealth proved to be an efficient alternative to intervene in mental health^(23,25,28-29). Its use made it possible to provide timely advice to health professionals from the gathering of clinical and practical domains of a general nature that met the main demands of patients and therapists. We highlight the emergence of technical issues in the management of telehealth, changes in the environment and the use of clinical methods that contribute to the realization of collaborative clinical guidance, flexible application of protocols and use of better evidence.

As a practical implication for the use of telehealth, it is considered that health facilities, audit bodies and health insurance are attentive to the regulations that support health care in this modality. Another implication is directed to health professionals who should pay due to the implications on the patient's health in the face of any change in the method of administration of therapy. Furthermore, in cases where health care is covered by insurance, the eligibility of telehealth sessions for reimbursement should be checked to ensure that patients do not receive an unexpected charge for their psychological therapy, for instance. However, it is emphasized the possibility that professional groups act in a network for the sharing of cases and targeting of conducts.

Considering such notes, state or national guidelines should be considered. For instance, the American Telemedicine Association guidelines⁽³⁸⁾ should be considered when working in the U.S. In Brazil, since 2002 the Federal Council of Medicine⁽³⁹⁾ authorizes the use of digital resources for medical care in specific and emergency cases, such as the issuance of reports and diagnostic/therapeutic support. In March of this year, the Brazilian Ministry of Health regulated telemedicine on an exceptional and temporary basis. These actions include only "pre-clinical care, care support,

consultation, monitoring and diagnosis, through information and communication technology, within the Scope of the SUS, as well as in supplementary and private health⁽⁴⁰⁾.

Another aspect to be raised about the use of telemedicine is the work problems beyond the geographical borders; for example, a clinician may work properly in his own state or country, but his license may not automatically extend to perform the same work when patients are in a different regulatory area. Similarly, the web platform to be used must comply with employer and licensing regulations. This time, this review pointed out several ethical implications that involve the use of telemedicine as an intervention in mental health, and, therefore, should be better explored.

Study limitations

As for the study limitations found, the following stand out: a) the absence of research with robust designs, considering that the best evidence is obtained through studies of high methodological quality; b) the search strategy was limited to a single term to characterize mental health interventions. Such a choice is justified by making the strategy more comprehensive. It is reinforced that these initial studies reveal important ways for future investigations. They highlight the need to explore the potential and limitations of telemedicine, the need to design interventions supported by social support measures and the formulation of public policies aimed at promoting post-pandemic mental health.

Contributions to public health

Studies are considered to have implications for practice. Although they were mostly characterized as weak evidence, they point to strategies for mitigating the impacts of the pandemic

on the mental health of various population groups, especially through the use of information and communication technologies. In a pandemic situation like the one we are experiencing today, it is understandable that many strategies still need to be better explored from an ethical and operational point of view. Governmental actions are needed to control the epidemic curve, as well as strategies to face the factors that trigger psychic symptoms in the population, aiming at more mental health.

CONCLUSION

This review synthesized the evidence on mental health care interventions targeting diverse population groups in the pandemic context of COVID-19, namely: telemonitoring, virtual games and interventions focused on social support and muscle relaxation techniques. Such interventions have varied duration and are characterized as non-pharmacological and low cost and need to be encouraged and included in mental health care scenarios.

It is salutary to also consider the individual potential of each person. Many will not feel mental damage from this situation, and these may be of paramount importance to others, through empathic, supportive and fraternal attitudes. It is reinforced that in addition to thinking about the present situation, it is important to promote health thinking about the post-pandemic context – the *new normal*, because it will still be felt very much in terms of psychosocial damage, and the use of these interventions can be paramount in coping.

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