

Mental health of healthcare professionals in China during the new coronavirus pandemic: an integrative review

Saúde mental dos profissionais de saúde na China durante pandemia do novo coronavírus: revisão integrativa
Salud mental de los profesionales de la salud en China durante la pandemia del nuevo coronavirus: una revisión integradora

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ABSTRACT

Objective: to identify publishing related to the mental health of health professionals working in the front line of the COVID-19 pandemic. **Methods:** an integrative review that included primary articles indexed in the Latin American and Caribbean Literature in Health Sciences, Medical Literature Analysis and Retrieval System Online, Cumulative Index to Nursing and Allied Health Literature, Scopus, Embase, Web of Science, Science Direct databases and US National Library of Medicine databases. The result analysis was performed descriptively, in four analytical categories. **Results:** The publishing involved aspects related to insufficient personal protective equipment, feelings of fear and stigma, the need for psychological and psychiatric support and the possibility of post-outbreak mental disorders. **Conclusion:** All mentioned aspects have a direct impact on the mental health of professionals, demanding the creation of strategies that minimize the emotional burnout of workers, considering that each country and culture reacts differently to the disease.

Descriptors: Health Personnel; Coronavirus; Mental Health; Nursing; Review.

RESUMO

Objetivo: identificar as publicações relacionadas com a saúde mental dos profissionais de saúde atuantes diante da pandemia de COVID-19. **Métodos:** revisão integrativa que incluiu artigos primários indexados nas bases de dados Literatura Latino-Americana e do Caribe em Ciências da Saúde, Medical Literature Analysis and Retrieval System Online, *Cumulative Index to Nursing and Allied Health Literature*, Scopus, Embase, Web of Science, Science Direct e *US National Library of Medicine*. A análise descritiva dos resultados foi realizada em quatro categorias analíticas. **Resultados:** As publicações envolveram aspectos relacionados com a insuficiência de equipamentos de proteção individual, sentimentos de medo e estigma, necessidade de apoio psicológico e psiquiátrico e a possibilidade de transtornos mentais pós-surto. **Conclusão:** Todos estes aspectos impactam diretamente na saúde mental dos profissionais e demandam o desenvolvimento de estratégias que minimizem o desgaste emocional dos trabalhadores, levando em conta que cada país e cultura reage de forma diferente em relação a doença.

Descritores: Trabalhador de Saúde; Coronavírus; Saúde Mental; Enfermagem; Revisão.

RESUMEN

Objetivo: identificar publicaciones relacionadas con la salud mental de los profesionales de la salud que trabajan frente a la pandemia de COVID-19. **Métodos:** una revisión integradora que incluyó artículos primarios indexados en las bases de datos de Literatura Latinoamericana y del Caribe en Ciencias de la Salud, *Medical Literature Analysis and Retrieval System Online*, *Cumulative Index to Nursing and Allied Health Literature*, Scopus, Embase, Web of Science, Science Direct e *US National Library of Medicine*. El análisis descriptivo de los resultados se realizó en cuatro categorías analíticas. **Resultados:** las publicaciones incluyeron aspectos relacionados con la falta de equipo de protección personal, sentimientos de miedo y estigma, la necesidad de apoyo psicológico y psiquiátrico y la posibilidad de trastornos mentales posteriores al brote. **Conclusión:** Todos estos aspectos tienen un impacto directo en la salud mental de los profesionales y exigen el desarrollo de estrategias que minimicen el agotamiento emocional de los trabajadores, teniendo en cuenta que cada país y cultura reacciona de manera diferente a la enfermedad.

Descriptor: Personal de Salud; Coronavirus; Salud Mental; Enfermería; Revisión.

INTRODUCTION

Human history has been noted by the impact of many infectious disease pandemics. At the beginning of the 21st century, the international community faced a public health emergency, on a global scale, with the spread of Severe Acute Respiratory Syndrome (SARS). Due to its high infectious potential and the mortality rate of the disease, the disaster of the SARS epidemic caused panic and anxiety in the population of the affected countries. Health professionals were at high risk of being infected with SARS and represented more than 20% of those who became infected with the disease⁽¹⁾.

As health professionals are directly responsible for the care of infected people and in serious illnesses, they may experience stress when managing disease outbreaks. During this period, there are changes in the work process of these professionals, such as extra shifts, unpredictable working hours, performing tasks that do not belong to their daily routine, change of unit and team, besides the need for a reorganization of private and social life. Also the risk of exposure to highly infectious pathogens while working, these aspects can cause fear of contamination and be a source of infection for close contacts, such as family members⁽²⁻⁴⁾.

In November 2019, a new coronavirus disease (COVID-19) was first reported in Wuhan, capital of Hubei province, China⁽⁵⁾. The disease has spread rapidly throughout China and several other countries, making it a global health emergency⁽⁶⁾. The mental health of the medical and nursing staff has been greatly challenged during this pandemic, and just as during the SARS outbreak, psychological distress among health professionals, fear and anxiety started immediately and decreased in the early stages of the epidemic, but depression, the psychophysiological symptoms of post-traumatic stress appeared later and lasted for a long time, leading to great impacts. Being isolated, working in high-risk positions and having contact with infected people are common causes of trauma⁽⁷⁾.

Facing this situation, health professionals who are directly involved in the diagnosis, treatment, and care of patients with COVID-19 are at risk of developing psychological distress and other mental health symptoms. The increasing number of confirmed and suspected cases, work overload, stress due to the lack of personal protective equipment, broad media coverage, absence of specific protocols and medications can interfere with the mental health of professionals⁽⁸⁾.

Additionally, and considering the need for researches that address the mental health of health professionals in coping with the pandemic of COVID-19, this study sought to answer the following research question: what are the existing publishings related to mental health of health professionals working against the COVID-19 pandemic? We believe that by answering this question, it is possible to contribute with strategies to fill the gaps in the mental health of health professionals, now and in upcoming pandemics.

OBJECTIVE

To identify publishings related to the mental health of health professionals working against COVID-19 pandemic.

METHODS

The research method applied was the Literature Integrative Review, which was based on six stages for its elaboration: definition of the research question, establishment of inclusion and exclusion criteria and based on the literature search, the definition of the information to be extracted from the studies, evaluation of included studies, interpretation of results and data synthesis⁽⁹⁾.

The research question was designed according to the Population Interest Context strategy (PICo)⁽¹⁰⁾. The following structure was considered: P – Helth Professionals; I – Mental Health; Co – Covid-19 pandemic. Thus, the following question was elaborated: “What are the publishings related to the mental health of health professionals working during the Covid-19 pandemic?”

The search for the studies was carried out in the first fifteen days of April using the Capes Periodical Portal with access through the Federated Academic Community (CAFe). The studies were selected from the following electronic databases: Latin American and Caribbean Literature in Health Sciences (LILACS); Medical Literature Analysis and Retrieval System Online (MEDLINE); *Cumulative Index to Nursing and Allied Health Literature* (CINAHL); Scopus; EMBASE; Web of Science; Science Direct and *US National Library of Medicine* (PubMed).

The following inclusion criteria were adopted: primary articles, available in full, published from 2019 to 2020, in any language. The exclusion criteria were: non-primary articles, such as opinion articles, letters to the editor, brief communications, editorials and review articles, those already selected in the search in another database and that did not answer the research question.

The search and selection of studies were carried out by two researchers, simultaneously. To perform the search, combinations with the following Health Sciences Descriptors (DeCS) were used and Medical Subject Headings (Mesh): Coronavirus; Mental Health; Health Personnel combined using the Boolean operator “AND”.

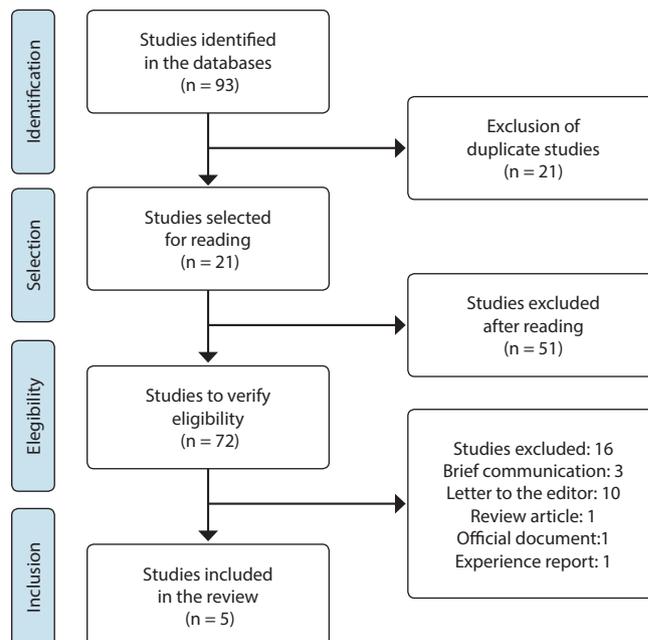


Figure 1 - Flowchart of the selection process identification of the selected studies to make the integrative review, 2020

For the categorization of the level of evidence, the following classification was considered: level I, a meta-analysis of controlled and randomized studies; level II, experimental study; level III, quasi-experimental study; level IV, descriptive/non-experimental study or with a qualitative approach; level V, case report or experience; level VI, consensus and expert opinion⁽¹¹⁾.

A total of 93 studies were found, of which: 15 at Scopus, 11 at Science Direct, 31 at EMBASE, four at Web of Science, 11 at CINAHL, nine at Medline, one at LILACS and 11 at PubMed.

After analyzing the title and summary, a total of 72 works were selected for analysis. Of these, 51 were excluded after reading. The search and selection process of the studies was simplified through the flowchart recommended by the Transparent Reporting of Systematic Reviews and Meta-Analyses⁽¹²⁾ and is represented in Figure 1.

The critical analysis and qualitative synthesis of the five selected studies were carried out descriptively, in four categories. As this is an integrative review, the research was not submitted to the Research Ethics Committee, but the concepts of the authors of the publications used in this study were kept.

RESULTS

In this review, five articles were selected, all published in international journals, two (40%) from biology sciences journals, one (20%) from infection control, one (20%) from the American Medical Association and one (20%) from the nursing field, of which one (20%) was identified at Scopus, two (40%) were identified at Science Direct and two (40%) at EMBASE. All texts were written in English, and from China.

Regarding the professional category of the authors, one article (20%) was written by only doctors, another (20%) by doctors in partnership with nurses, one (20%) only by nurses, one (20%) by a multidisciplinary team with doctors, computer professionals, nurses and health sciences professionals and one (20%) by doctors, psychologists and nurses.

Concerning the design of the studies, two of them (40%) were surveys with a qualitative approach and three of them were cross-sectional surveys (60%). As for the level of evidence, all five (100%) publications included in this review were classified as level IV (Chart 1).

Chart 1 – Characteristics and categorization of selected articles

	Title	Year/Country/ Journal	Objective/Design of Study	Outcome	Level of Evidence
A1	A study on the psychological needs of nurses caring for patients with coronavirus disease 2019 from the perspective of the existence, relatedness, and growth theory ⁽¹³⁾	2020/ China/ International Journal of Nursing Sciences	To explore the psychological needs of nurses who care for patients with coronavirus 2019 (COVID-19) and offer adequate interventions. Qualitative study	It is observed that the needs for existence, relatedness and growth coexist in clinical nurses. Effective interventions should be invested to meet the needs of nurses, that care patients with COVID-19 if they could be perceived well	IV
A2	Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019 ⁽⁸⁾	2020/ China/ JAMA Network Open	To estimate the magnitude of mental health outcomes and associated factors among health professionals who treat patients exposed to COVID-19 in China. Cross-sectional study	In this survey of health professionals in hospitals equipped with clinics or nursery for patients with COVID-19 in Wuhan and other regions of China, participants reported experiencing psychological burden, especially nurses, women, people in Wuhan and frontline health care workers directly engaged in the diagnosis, treatment, and care for patients with COVID-19.	IV
A3	A Qualitative Study on the Psychological Experience of Caregivers of COVID-19 Patients ⁽¹⁴⁾	2020/ China/ American Journal of Infection Control	To explore the psychological aspects of nurses who care for patients with COVID-19. Qualitative study	During an epidemic outbreak, the positive and negative emotions of the front-line nurses interweaved and coexisted. In the early stage, negative emotions were dominant and positive emotions appeared gradually. Self-coping styles and psychological growth played an important role in maintaining mental health of nurses	IV
A4	Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: A cross-sectional study ⁽¹⁵⁾	2020/ China/ Brain, Behavior, and Immunity	To identify the mental health status of the medical and nursing staff in Wuhan, the effectiveness of the psychological care provided and the needs for psychological care. Cross-sectional study	A large proportion of workers are experiencing mental health disorders. They would benefit from mental health care. Greater investment in mental health tools to protect health professionals would be among the measures needed to prepare for future outbreaks of infectious diseases.	IV
A5	Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control ⁽¹⁶⁾	2020/ China/ Brain, Behavior, and Immunity	To evaluate vicarious traumatization scores using a questionnaire based on a mobile application in the general population and health workers. Cross-sectional study	Increased attention should be paid to the psychological problems of the health team and the general population, under the situation of spread and control of COVID-19. Early strategies to prevent and treat vicarious traumatization are extremely necessary.	IV

Note: *Article

Chart 2 - Categorization of selected articles according to content similarity

Categorias	Articles				
	A1	A2	A3	A4	A5
1. Insufficient training and personal protective equipment to combat COVID-19	X	X	X	X	
2. Feelings of health professionals in the fight against COVID-19	X	X	X		X
3. Need for psychological/psychiatric support to professionals	X	X	X	X	
4. Post-epidemic consequences for the mental health of health professionals				X	X

Out of the five included studies, a table was created containing the categorization of articles according to the similarity of content (Chart 2).

DISCUSSION

In the battle against COVID-19, health professionals have been facing several stress-generating situations in their daily lives. Thus, it is meant, based on the selected articles and through the scientific literature, to verify the mental health of health professionals who experienced this reality.

1. Insufficient training and personal protective equipment to combat COVID-19

Despite efforts to reduce the pressure suffered by the medical and nursing staff, with the appropriate supply of personal protective equipment, infection control strategies and the hiring of health professionals to reduce the intensity of work⁽¹⁵⁾, it is observed that the growing flow of suspected and confirmed cases of the disease contributes to the professionals' pressure and concerns⁽⁸⁾.

One example of the pressures experienced is reported that the nursing team needed to preserve protective clothing for as long as possible, since the equipment for individual use was scarce. This ended up generating a lot of discomfort and fatigue for workers⁽¹⁴⁾.

Besides the distribution of personal protective equipment, suitable training for health professionals for the prevention and control of COVID-19 is crucial to reduce psychological panic and insecurity in the provision of care⁽¹³⁾. In the study carried out in a hospital that treated COVID-19 patients⁽¹⁴⁾, it states that because of the sudden outbreak of the epidemic, the nursing team had to go through three stages of training before taking care of patients: pre-work training, training general for all nurses and training in the negative pressure ward. After these steps, it was observed an increase in confidence and the ability for self-prevention and control by the participating professionals⁽¹⁴⁾.

In this sense, assisting and treating COVID-19 patients requires training and access to equipment, however the availability of beds in general wards and intensive care for patients is essential. About this, a study carried out in India⁽¹⁷⁾ with professionals in direct contact with patients with COVID-19, highlighted that in the public health system there are not enough ICU beds to meet the demand of infected patients and the private sector is not yet ready to manage these patients.

It is known that the COVID-19 transmission to the health team when providing care to infected people is high, especially due

to the length hospitalization⁽¹⁸⁾. An issue that requires concern from all managers involved is whether the continuous supply of PPE and equipment, for example, respirators, will be sufficient to treat everyone who needs it. Even in developed countries such as the United Kingdom and the USA, PPE provided by the government is inadequate or insufficient. In China, many health professionals bought protective equipment with their resources or appealed for donations⁽¹⁷⁾.

Regarding the use of PPE, health professionals, especially those working in the ICU, are experiencing changing levels of stress and anxiety. Besides the discomfort of the protective equipment itself, professionals after being dressed cannot eat or go to the bathroom for about six hours to avoid contaminating the equipment. Also, training is required, to avoid self-contamination on removing PPE after the working hours. When getting back home, family contact should be avoided, or contact with any item in the house, before having a complete cleaning, a moment that also generates anxiety for fear of contaminating the family⁽¹⁹⁾.

The shortage of PPE in the United Kingdom has been causing extreme concern among healthcare professionals when providing care to COVID-19 patients. In India, some intensive care workers have resigned due to a lack of PPE and inadequate work conditions. However, despite all these problems, most health professionals keep working and risking their own lives⁽¹⁷⁾.

The challenges in complying with universal precautions and the use of safety equipment by health professionals, have already been reported during the outbreak of the Ebola virus⁽²⁰⁾, seeing that the use of PPE in health care settings should be considered mandatory by international health organizations and by health policies in countries at risk and imminent of epidemics. The experience of this pandemic discloses the demand for financial investments in the public health system, so that it is strong and can support situations like the one we are experiencing with COVID-19, besides providing investments in basic sanitation, job security for professionals health and surveillance system⁽²⁰⁾.

Apart from the correct use of PPE (protective clothing, N95 mask or above and effective goggles), it is necessary to invest in safety engineering devices, proper disposal of contaminated items and the correct handling and management of medical equipment and hospital waste. Regular training for health professionals on safety practices services must be invested and implemented⁽²⁰⁾. Training, reminding, and insisting that health professionals use PPE correctly, reduce the fear of being infected. Placing physical barriers, infection control measures, environmental engineering and social distance are measures that can also reduce the risk of infection⁽¹⁸⁾.

2. The emotions of health professionals in the battle against COVID-19

The psychological experience of nurses that care for patients with COVID-19 can be described by negative emotions in the initial stage of the pandemic, consisting of fatigue, discomfort and helplessness, caused by high-intensity work, fear, anxiety and concern for patients and relatives⁽¹⁴⁾. Being female was an especially high-risk factor for depressive symptoms, anxiety, insomnia and agony⁽⁸⁾. It was also observed⁽¹⁴⁾ that during an epidemic outbreak, health professionals might experience positive and negative emotions at the same time. In the initial stage, negative emotions are dominant and positive emotions tend to appear on people who have better self-control, self-reflection, professional responsibility, altruistic and team support acts and better rational cognition.

However, after experiencing a period of continuous stress, individuals may develop symptoms of indirect traumatization, manifested through the loss of appetite, fatigue, physical deterioration, sleep disorders, irritability, inattention, drowsiness, fear, and despair. In these cases, when the degree of damage exceeds the psychological and emotional tolerance of the professionals involved, it is possible the onset of mental disorders⁽¹⁶⁾. This way, it is necessary to provide more attention to the physical and mental health of the health team⁽¹³⁾.

The fact that COVID-19 is transmissible from person to person along with high morbidity and potential fatality increases the perception of danger among people. The psychological response of health professionals to an epidemic of infectious diseases can include feelings of vulnerability, loss of control, concerns about the patient's health, the spread of the virus and anxiety about changes in the work routine⁽²¹⁾.

Health professionals in Wuhan had a higher risk of depressive symptoms and anxiety, particularly being female, less professional experience and providing direct assistance to patients⁽²²⁾. Nearly 14% of doctors and almost 16% of nurses described moderate or severe depressive symptoms. Most general hospitals in Wuhan have established a shift system so they could rest and take turns⁽²³⁾.

Research during the H1N1 outbreak in 2009⁽²⁴⁾, found out that the average rate of psychological distress among exposed health professionals was nearly 40%. According to a systematic review⁽²⁵⁾, risk factors for psychological distress during an epidemic included the duration of exposure⁽²⁶⁾, little professional experience⁽²⁶⁾, being single⁽²⁷⁾, nurse⁽²⁸⁾, a part-time job⁽²⁸⁾, female⁽²⁹⁾, physical health problem⁽²⁹⁾, difficulty in carrying out activities due to precaution measures⁽²⁸⁾ and absence of psychological support at work⁽²⁹⁾.

At the peak of the SARS epidemic in Singapore in 2003, 27% of health professionals reported having psychiatric symptoms⁽²⁷⁾. Fear and apprehension were the distressing experiences reported by health professionals that cared for patients with Middle East respiratory syndrome (MERS-CoV) in Saudi Arabia⁽³⁰⁾. These findings show that the mental health problems of nurses that fight these new infectious diseases need to be considered⁽³¹⁾.

It is remarkable that in the outbreak scenario in Wuhan, the increasing number of infected and suspected doctors and nurses has triggered a significant shortage of medical staff, with increased further work pressure and mental burden on health workers that

would keep the health labor, besides to expressively reducing the critical thinking of the professionals⁽¹⁸⁾.

Another aspect worth mentioning is related to the psychological suffering experienced by health professionals during the SARS epidemic in 2003, because of the stigma of being considered by the population as a possible source of infection, when compared with other professionals⁽²⁹⁾. Stigmatization has been shown to have long-term effects on the psychological well-being of individuals. A study conducted in Canada⁽³²⁾ reported that some of the health professionals that were stigmatized during the SARS outbreak in Toronto continued to fear for the prejudice of the population even after the epidemic ended.

A research carried out in the same period in Taiwan shows that health professionals involved in the SARS outbreak felt rejection in their neighborhoods⁽³³⁾. In Singapore, 49% of health workers suffered because of their jobs⁽²⁾. The results of these studies^(2,33-34) suggest the need for greater support from society for health professionals, even if they are amid in so many adverse environments.

This way, it is up to government officials to provide citizens with accurate information about diseases and teach them about prevention. The media has an important role in publishing information to the population, clarifying the risk level and the precaution of the affected areas. If the risk of disease is reported without a severity rating, it will frighten people, and the fear of infection will worsen the prejudice against healthcare professionals. So, the formation of a mature public sense helps to manage diseases more efficiently⁽³⁵⁾.

3. The need for psychological/psychiatric support to professionals

In response to the COVID-19 outbreak, psychological assistance services, including telephone, internet, and application counseling, have been broadly used by local and national mental health institutions. On February 2nd of 2020, the State Council of China announced that it was establishing hotlines throughout the country to assist during the epidemic⁽⁸⁾.

During the quarantine period in Wuhan, the need for interpersonal relationships reflected especially the nurses' desire to communicate personally with family, colleagues, and friends. The adjustment of psychological coping strategies with the help of the nursing department and specialists in psychology, and the creation of psychological support platforms to provide community sustain to health professionals, contributed to achieving the psychological needs of nurses⁽¹³⁾.

Therefore, through periods of stress, nurses cared for others and took care of themselves. More than 70% of surveyed mentioned that professional responsibility led them to be part of the mission to prevent the epidemic. Most nurses reconsidered the value nursing profession and saw themselves in the chosen profession⁽¹⁴⁾.

The investment of actions towards the medical and nursing staff, especially when facing epidemics, becomes crucial, though both face-to-face counseling or digital platforms, to protect the mental health of these workers in the short and long term. This last-mentioned method, at this moment, is extremely important, as it lowers the exposure of workers to COVID-19⁽¹⁵⁾.

Psychological intervention teams were created by Wuhan University and Mental Health Center, covering four groups of health professionals. The first group consisted of a psychosocial team (composed by hospital managers and press spokesman), the second group was composed of a psychological intervention team, the third one was composed of a medical intervention team, with mostly psychiatrists, and the fourth group was composed by psychological assistance teams (made up of volunteers that received training to deal with the epidemic) guiding via telephone⁽²³⁾.

Some studies and guidelines describe mental health care in the context of major emergency situations, mass trauma events or disasters⁽³⁶⁻³⁷⁾. This way, it becomes crucial to the psychological monitoring of health professionals to prevent the onset of future psychiatric disorders⁽²¹⁾.

Interventions targeting psychological crises are being provided for the general population, however, people are exposed to different levels of mental suffering. To avoid extreme behavior, such as suicide, psychiatrists have identified and prioritized high-risk populations. Shanghai government has used online platforms to offer consultations and psychotropic medications depending on the case⁽³⁸⁾. Early intervention of psychological stress for the general population and the health team, as well as the clear information presented by the media, can help psychological treatment and control of COVID-19⁽¹⁶⁾.

The use of psychiatric and psychological interventions and various group activities for employees, through relaxation environments for stress relief was another experience carried out in a Chinese hospital. The psychology team made regular visits to the professionals' rest area, to listen to the struggles and provide the appropriate support. Besides, the hospital provided a way for workers to record their routines on video, to share with their family members as a method to reduce concerns⁽³⁹⁾.

Technologies should be encouraged to be used, as they offer safe communication channels among professionals and family members, such as smartphones and the WeChat, to reduce isolation. As in any situation of an epidemic, feelings of fear, uncertainty and stigmatization are common and can interfere, professional and personal life, in addition to one's performance⁽⁴⁰⁾.

4. The post-epidemic consequences for the mental health of health professionals

Investment in mental health actions for the team of health professionals involved in care is among the necessary measures for better coping with future disease outbreaks⁽¹⁵⁾. It is observed that there are negative consequences according to the stimulation suffered by professionals during the coping with an outbreak of disease, since acute psychological stress is known to activate the sympathetic system of the adrenal medulla and the hypothalamic-pituitary-adrenal-axis, and this stress response affects physical and mental health in the short or long term⁽⁴¹⁾. Therefore, continuous mental health services are essential for professionals who deal with critical situations daily to mitigate the possibility of mental disorders⁽¹⁶⁾.

Healthcare professionals do hard work daily, in stressful environments, to save lives, all over the world. The cost that this type

of service requires, though, must also be considered⁽²²⁾. Based on past experiences, such as the SARS outbreak in 2003, the Wenchuan earthquake in 2008 and during infections by the human avian influenza A (H7N9) virus in 2013, it is estimated that after the outbreak, most of the Health professionals involved developed some type of mental disorder being the most reported one the post-traumatic stress disorder (PTSD)⁽³⁸⁾.

As reported by the study, PTSD symptoms were significantly higher among healthcare professionals, of which 40% reported persistent symptoms after three years of exposure to the SARS outbreak in 2003 in China. Among the risk factors mentioned are high-risk exposures⁽⁴²⁾, quarantine during the outbreak⁽³³⁾, living alone⁽⁴³⁾, having an infected family member/friend⁽⁷⁾, being a nurse⁽⁴²⁾, feel forced to care for infected patients due to work position⁽⁴⁴⁾, stigmatization/social isolation⁽⁴²⁾, overwork⁽⁴²⁾ and inadequate psychiatric/psychological support⁽²⁶⁾.

Depression was also detected during the SARS outbreak in Hong Kong⁽²⁹⁾. Health professionals who experienced working directly with infected patients had relatively high levels of depressive symptoms one year after the outbreak. Insomnia, alcohol and other drug abuse, PTSD symptoms, depression and anxiety have also been reported⁽²⁵⁾. All these factors require caution in evaluation, because of the effects on the quality of life of professionals. Protecting the mental health of health workers is essential during the pandemic, to keep them away from short- and long-term harm⁽²³⁾.

Limitations of the study

It is pointed out that the possible restrictions of this study refer to the sample, since the mental health of health workers in coping with pandemics, especially COVID-19 are still under construction, considering that the period of exposure is still recent. Also, it is emphasized that all texts selected for this article are Chinese, and it is not possible to generalize the impact on the mental health of health workers in other locations, given that although a pandemic is global, the psychological impact of diseases is different in each country.

Contributions to the field

Concerning these findings, it is suggested to the managers a redirection in the managing of practices related to the mental health of the health workers within the work environment, mainly of the nursing team because it is one of the categories most affected psychologically, especially because they dedicate themselves to direct care for patients. Therefore, it is necessary to strengthen and invest in mental health actions for these professionals, so that they do not become ill in the future and can keep managing care and the team.

FINAL CONSIDERATIONS

When facing a pandemic, especially COVID-19, health professionals may face situations that directly impact their mental health, such as those related to lack of PPE, experienced stigma, feelings of fear, helplessness, hopelessness, need for psychological and

psychiatric support and the possibility of the onset of mental disorders after an epidemic outbreak.

As to ensure the safety of working professionals several measures have been reported. Subject measures such as psychosocial support at work, support for family, friends and co-workers, placement of physical barriers and infection control measures related to PPE, investment in environmental engineering at work and the implementation of social distance to prevent the spread of the pandemic.

Strategies turn to be necessary, considering all exposed factors, especially the heavy amount of work for long hours, absence of rest and psychological counseling, to avoid emotional exhaustion of workers. Moreover, besides local strategies, it is necessary

that in the scenario of the unit, managers follow the instructions recommended by the World Health Organization (WHO) and provide a safe work environment so that professionals can carry out their activities with quality and with their mental health preserved, considering that each person, country and culture reacts differently concerning the disease.

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