

Mental health of nursing professionals during the COVID-19 pandemic: a qualitative analysis

Kíssyla Harley Della Pascôa França¹, Fernanda dos Anjos de Oliveira², Wini de Moura Miguel³, Maryana Brucker da Silva⁴, Andressa Pedreira Moraes⁵ e Mário Vinícius Latine Barros⁶

¹(Substitute Professor at the Medical-Surgical Department / Federal University of Rio de Janeiro, Brazil)

²(Substitute Professor at the Medical-Surgical Department / Federal University of Rio de Janeiro, Brazil)

³(Undergraduate student / Federal University of Rio de Janeiro, Brazil)

⁴(Undergraduate student / Federal University of Rio de Janeiro, Brazil)

⁵(Undergraduate student / Federal University of Rio de Janeiro, Brazil)

⁶(Undergraduate student / Estacio de Sa University, Brazil)

ABSTRACT: *INTRODUCTION:* Levels of anxiety, stress, panic syndrome, depression, among others, have increased significantly in the general population around the world during the New Coronavirus pandemic (COVID-19). Likewise, the scenario generated by COVID-19 affected the mental health of health professionals, who, surrounded by uncertainties, needed to perform their supportive care while also becoming ill. In this work, we give prominence to the professionals of the Nursing team. *OBJECTIVE:* This research aims to identify in the scientific literature, the factors that have compromised the mental health of nursing professionals, active in the period of the COVID-19 pandemic. *METHODS:* This is a descriptive study of integrative review of the literature of a qualitative nature. The following electronic bibliographic bases were consulted for literature research: Latin American Health Sciences Literature (LILACS), Medical Literature and Retrieval System Online (Medline/PubMed), Nursing Database (BDENF), Scientific Electronic Library Online (SciELO) and Virtual Health Library (CidSaúde/BVS). The time clipping was from the year 2020. The first selection of texts was made by reading the titles and abstracts of articles published in full text, in English and Portuguese. Twenty-seven articles were selected, based on the complete reading of the articles. *RESULTS:* Articles categorized by order of identification: MEDLINE/PUBMED (60- 72.28%); LILACS (23 - 27.72%); BDENF (0 - 0%), SciELO (0 - 0%), CidSaúde/BVS (0 - 0%). The major publications were: the impact of routine on the mental health of nurses, increased working hours, lack of individual protection equipment, uncertainties related to the disease, removal from the family, social isolation and the main strategies that were implemented in the services to minimize psychological effects of professionals. *CONCLUSION:* Interventions by health organizations are necessary in order to provide psychological and social support, follow-up and daily planning to each member of the Nursing team during and after the COVID-19 pandemic.

KEYWORDS - Coronavirus infections; Mental health; Nursing.

I. INTRODUCTION

Epidemics have always been part of human history. However, a large-scale pandemic such as COVID-19 is rare. For the first time in recent history, almost the entire world was confined. The mental and physical

health of health professionals, in particular, is at risk during epidemics⁽¹⁾. In a case-control study by Lee *et al.* , evaluated that in one year after the SARS epidemic, significantly higher levels of depressive symptoms and anxiety were found among health professionals compared to survivors who were not health workers.⁽²⁾

Nurses have been shown to have a primary role in infection prevention, infection control and public health, which makes them more frequently exposed to various diseases, a role that can cause stress and emotional exhaustion.⁽³⁾ During the new nCoV (New Coronavirus) pandemic, it was identified in a survey conducted in South Korea that professionals with suspected cases of Coronavirus recorded an increase in occupational errors, unexcused absences and reports of stress⁽⁴⁾. Given the importance of nursing professionals and their greater exposure, ensuring the team's physical and mental health will reduce occupational risks⁽³⁾.

Mental health is fundamental to an individual's general well-being and essential to a productive and efficient life⁽⁵⁾. The concept of psychological security refers to the component of biosafety that guarantees integrity, stability and psychological balance of the personnel in charge of managing patients in emergency health situations, and constitutes a fundamental premise for the quality compliance of the strategies developed in these circumstances. Professionals tend to postpone the management of their own fears and insecurities, which in times of great uncertainty, such as during the nCoV pandemic, can usually appear. Professionals generally associate the signs of physical exhaustion, stress and anxiety with the inefficiency of their work and disability, which is not true.⁽⁶⁾

Studies conducted with nurses who were working during the COVID-19 pandemic, increased the workload and added that the emotional changes resulting from changes in the dynamics of their functions were not only limited to damage to their health, but also directly affected the performance of their care⁽⁴⁾. Overwork seems to favor mental and physical illness in health workers, in addition to facilitating the occurrence of absenteeism, accidents at work, medication errors, exhaustion, work overload and absence of leisure⁽⁷⁾. The lack of support and supervision of these professionals increases tensions in the workplace and accelerates the progression of mental illness⁽⁴⁾. What corroborates with the results of Barbosa's literature review *et al.*⁽⁷⁾ (2020) who states that the health team showed high levels of anxiety and depression, with some of the factors causing the disorders being lack of support, communication and training.

According to the literature review by Preti *et al.*⁽²⁾ (2020) there are few studies that investigated the past psychiatric history of the health professionals interviewed and few reports of traumatic and stressful life events. Even if mental health attracts much less personnel for planning and resources, it is proven that the number of people suffering from mental health impacts after a catastrophe is many times greater than the number of people who are physically injured⁽⁸⁾. Although there are documents that address the management of mental health problems, there are no specifications and direct interventions for the emotional states of health professionals in situations of isolation and illness.⁽⁶⁾

Thus, this study aims to analyze the impacts of the COVID-19 pandemic on the mental health of all professionals who make up the Nursing team, with a view to knowing the problem and suggesting ways to mitigate the psychological impacts arising from acting on the line front of these professionals. As well as, bring another study on the mental health of health professionals in order to increase the visibility of the theme and encourage the production of more studies.

II. METHODS

It is an integrative literature review. For the development of this review, the following steps were employed: establishment of the guiding question; selection of articles and inclusion criteria; extraction of the articles included in the review; evaluation of included studies; interpretations of the results, and presentation of the integrative review. To guide the research, the following question was asked: What was the impact of the COVID-19 pandemic on the mental health of the Nursing team? The collection of articles occurred during the month of September 2020 and the following electronic databases were used in the selection of articles: Latin American Literature in Health Sciences (LILACS), *Medical Literature and Retrieval System Online* (Medline / PubMed), the Nursing Database (BDENF), *Scientific Electronic Library Online* (SciELO) and Virtual Health Library (CidSaude / VHL). The Health Sciences Descriptors (DeCS) were Coronavirus Infections; Mental

health; Nursing and resulted in a total of 83 articles. The titles and abstracts were read in order to verify the adequacy to the following inclusion criteria: full text available online, in the period from 2015 to 2020, of which the abstracts described the impacts of the routine on the mental health of nurses during the pandemic of the COVID-19 and its main causes, as well as, the main strategies that were implemented in the services to minimize psychological effects on these professionals. Articles that did not address the themes mentioned and duplicate articles were discarded. At the end, 27 articles were pre-selected, read in full.

III. RESULTS AND DISCUSSION

The 27 selected articles contemplate the world scenario, with China (14 / 51.9%) as the study site, followed by Brazil (5 / 18.5%), Germany (3/11, 1 %), Iran (2 / 7.4%), Italy (1 / 3.7%), Pakistan (1 / 3.7%) and Cuba (1 / 3.7%). Table 1 lists the articles that made up the final sample. Regarding the type of research, the prevalence of qualitative cross-sectional research (8 / 29.63%) and literature review (8 / 29.63%) was observed, followed by qualitative studies (4 / 14.81 %), three (11.11%) quantitative, two (2 / 7.41%) experience reports and two (2 / 7.41%) expository study. Among the 27 articles analyzed, the majority belonged to the MEDLINE / PUBMED database (60-72.28%); LILACS (23-27.72%), BDENF (0-0%); Scielo (0 -0%).

All selected articles were published in the year 2020, by 22 different journals, written in 4 different languages. Among them, the most published was in English (70.2%), followed by Portuguese (14.8%), German (7.4%) and Spanish (7.4%).

Despite the theme being comprehensive and multiprofessional, most articles were published in specialized journals in Nursing. The study made it possible to identify the production of constant knowledge in the literature in national and international journals about: the impact of routine on the mental health of nurses, increased working hours, lack of personal protective equipment, uncertainties related to diseases, isolation from family isolation and main strategies that have been implemented in the services to minimize psychological effects.

A screening study showed that one year after the SARS outbreak ended, healthcare professionals had a six times greater risk of experiencing psychiatric symptoms compared to those who were not healthcare workers.⁽²⁾, even finding Liu's results *et al.* ⁽⁹⁾ (2020), who found that health professionals who directly diagnosed, treated or cared for patients with COVID-19 were more stressed and psychologically impacted than workers who had no direct contact with COVID cases.

Researchers conducted a study in a Beijing hospital that shows high signs of post-traumatic stress in professionals who worked in high-risk environments during the nCoV outbreak (6). COVID-19 is highly infectious and spreads rapidly, with suspected and confirmed patients increasing daily, nurses feel anxiety and powerlessness due to so many patients (10). The study by Nascimento, V.F et al. (2020) conducted with Brazilian nurses, revealed that professionals suffer from the uncertainty of expanding confirmed cases and unexpected surprises. The fear related to the uncertainties regarding the behavior of the virus in face of the peculiarities of a tropical climate, extensive territory, socioeconomic inequalities and cordial relations between people prevailed among the nurses interviewed. The increase in the number of deaths (including health professionals), the absence of vaccine and/or approved drugs and the displacement of the disease epicenter to the American continent were also the main causes of fear and anxiety by the nurses (4).

Hoseinabadi *et al.* (2020) demonstrated that the highest level of *burnout* it was verified in the group of nurses working on the front line during the nCoV pandemic compared to the non-exposure group. Physical and mental fatigue, stress, anxiety and exhaustion among frontline nurses can be the result of a series of problems, such as resource limitations, longer shifts and sleep disorders.⁽³⁾

Analysis of data collected in Dal 'Bosco's research *et al.* (2020), show that nursing professionals with anxiety are mostly technicians in care positions (44.2%), working in critical sectors (Intensive Care Units, Surgical Center, etc.) (55.8%), are tendered (44.2%) and have worked in the health field for more than 10 years (27.9%).⁽¹¹⁾

In a study, the majority (31.8%) of nursing professionals with depression worked around 1 out of 5 years in the area. A large part, 69%, refers to a shorter period, up to five years, and in relation to the length of professional experience in nursing, 46% has been in it for less than five years. These data indicate a

considerable percentage of professionals with little experience in the profession, which is a risk factor for the development of psychological disorders. ⁽¹¹⁾

The results of an analysis with doctors and nurses showed that older workers enjoyed better mental, but not physical, health. The level of education provided physical and mental health. Studies suggest that there is a tendency to increase the reporting of mood symptoms and sleep disorders with younger age and shorter working time in nurses. A study of frontline nurses during the SARS outbreak also showed that age under 29 was associated with affective disorder and insomnia. Older age and shorter years of work mean lack of experience and knowledge about the treatment of patients with COVID-19, which can be related to a greater degree of concern about the pandemic and even more to cause psychological distress ⁽¹²⁾. Several scientific studies have concluded that the possibility of receiving treatment for depression decreases as individual's age and found that younger adults were more willing to seek mental health services compared to older ones. ⁽⁵⁾

Compared to 69.7% of employees who reported negative COVID-19 and 28.0% who were unsure of the diagnosis, the latter had higher rates of depression, anxiety and distress and less job satisfaction. Institutionally, health professionals from private institutions showed better mental health than professionals from public services ⁽¹⁴⁾. Evidence that meets the findings of Dal'Bosco *et al.* (2020) that points to the occurrence of anxiety among nursing professionals in private hospitals, due to working conditions, such as low wages, lack of job stability and sudden changes in function. While in public hospitals, professionals have stability in their jobs and layoffs are practically nonexistent, which would justify lesser occurrence of anxiety.

MO *et al.* (2020) showed in his research that nurses who are only daughters were the ones who most expressed stress. This result may be related to the fact that they are concerned about the health of their families and fear that, if they die of COVID-19, their parents will lose their only child. ⁽¹⁰⁾ Lai's results *et al.* (2020) indicated that being a woman and having an intermediate technical title were associated with depression, anxiety and severe suffering. ⁽¹⁵⁾

Health professionals to protect themselves against the disease caused by nCoV, need to wear personal protective equipment (PPE) for an extended period of time. A cross-sectional study showed skin lesion in 97% of the medical team, with the nasal bridge (83.1%) being the most affected site. The most common presenting symptom was dryness or tightness and flaking (70.3%), and these manifestations were associated with more than 6 hours of continuous use of PPE and more than 10 times / day with hand hygiene ⁽¹⁶⁾. Chinese nurses faced a completely stressful work routine: the use of the full set of protective clothing limited nurses' breathing to a certain extent and they reduced their trips to the bathroom and water consumption to avoid changing insulation clothes during work ⁽¹⁰⁾.

The lack of professionals prepared to handle mechanical ventilation equipment, respiratory physiotherapy and advanced nursing care directed to the clinical management of critically ill patients with COVID-19, extends the workday in the face of the growing number of critical cases. Professionals who had their working hours increased or who were relocated and started to perform activities that they had not previously performed, caused physical, mental and emotional overload on the entire team. ⁽⁷⁾

In Tu's study *et al.* (2020) the nurses' average sleep duration was 5.71 hours. A total of 34%, 43%, 19% and 4% reported sleeping ≥ 5 , 5-6, 6-7 and > 7 hours, respectively. Sleep latency was 33.49 minutes. In addition, 76% of nurses reported symptoms of difficulty in initiating sleep. Most nurses had trouble staying asleep or waking up early in the morning. About half of the participants had reports of nightmares (45%). 19% of nurses used hypnotics when treating patients with COVID-19 in Wuhan, China. The prevalence of poor sleep quality was 60%. The following reasons may be responsible for the higher prevalence of sleep disorders among frontline nurses in Wuhan: shortage of medical workers (especially nurses) at the beginning of the nCoV outbreak in Wuhan, leading nurses to overwork; Persistence of perceived negative feelings, such as fear of being infected and passing COVID-19 to family members and colleagues; Lack of knowledge about the disease; Deprivation of social support and distance from the family. ⁽¹²⁾

The Internet, with the dissemination of false and mismatched information, together with the lack of credibility in the Government and discontent with the health system, integrated some of the stressors in the context of professionals' work in the face of the pandemic. ⁽⁷⁾

Mental health is the critical component of personal development and growth, which is more than the absence of mental illness⁽⁵⁾. In order to face the problems caused to the nurses' mental health, some strategies have already been articulated and implemented in the world, which include the reduction of scales, the introduction of more rest intervals and to relieve tension. The constant education of professionals about COVID-19, as well as its progression, were also some of the strategies implemented, since more prepared professionals feel more secure (4).

In the pandemic context of COVID-19, many professionals reported the institutions' unpreparedness in providing the necessary resources for individual security. In view of the severity of many patients, without adequate Personal Protective Equipment (PPE), nursing professionals put their lives, that of patients, the entire health team and their loved ones at risk.⁽¹⁶⁾

In the Preti literature review *et al.* (2020), states that when health professionals receive adequate protective measures, their perception of risk is lower, and this could result in less harmful adverse psychological results. The feeling of being protected is associated with greater motivation at work. Therefore, the use of individual physical protection materials, together with the frequent provision of information, is associated with a better mental well-being of professionals.⁽²⁾

Psychological counseling has also been performed, as it assuages feelings of despair, panic, exaggerated fears and stimulates the development of collective solutions, favoring the development of social skills⁽⁴⁾. The research by Li *et al.* (2020) *apud* Barbosa *et al.*, (2020), combines the idea of Nascimento, V.F *et al.*, (2020), as it describes that psychological assessment and intervention are important factors to be taken into account during a pandemic, given the ease with which direct and indirect trauma can occur.^(4, 7)

Health professionals may exhibit some behaviors that are warning signs of the need for basic psychological interventions. These signs can be: Comments on the state of physical exhaustion; Attitude reserved for carrying out some actions that require a higher level of risk; Constant need to make calls to your family or friends; Frequent search for information about the disease from different sources and some credulity with unrealistic news; Reference to many problems left in your home or family; Change in the quality of the relationship that previously managed to establish with the patient or in the relationship between colleagues.⁽⁶⁾

It is essential that health institutions are prepared and aware that emotional states such as anxiety, fear and sadness are transmitted from person to person in the form of "contagion". Therefore, the emotional state of the leaders will be the first strategy to maintain the psychological security of the institution's employees. Knowing team members (to direct professionals to activities according to their psychological profile) and respecting the rest times of each member and the leader himself, also makes up the framework of interventions to be respected to ensure the psychological safety of professionals. It is important that leaders receive specialized help (who must be in constant communication with the teams) whenever they need it, as, like their team members, they will be exposed to stressful and, likewise, vulnerable agents⁽⁶⁾. L. Kang's study *et al.* (2020) ratifies the indispensability of continuous mental health services, even for milder psychological reactions during the pandemic, since the milder reactions can become increasing.⁽⁸⁾ There are negative consequences on the body of individuals subjected to pressure and acute psychological stress, caused by the activation of the sympathetic adrenal medulla system and the hypothalamic-pituitary-adrenal axis, a response that significantly affects physical and mental health. Ensuring a good diet for professionals, can be a determining factor in ensuring their good mental health.⁽⁶⁾

Actions such as that of the Chinese Government, such as sending more medical and nursing personnel to reduce the intensity of work, adopting strict infection control, providing PPE and practical guidance, were one of the main interventions aimed at reducing psychological pressure on medical and nursing teams during clinical management within hospitals during the nCoV pandemic.⁽⁸⁾

Compared to previous epidemics, during the COVID-19 pandemic, *Internet* and *smartphones* are widely available, so education *online* in mental health, services *online* counseling and virtual psychological self-help intervention systems can and should be developed⁽²⁾. Other strategies that can help to reduce psychological impacts during the nCoV pandemic are exchanges between colleagues who have experienced the same stress experiences (it is the responsibility of the institution's manager to create moments for these exchanges to occur).

Maintaining social contacts in the private sphere is an extremely important component for maintaining mental health. In cases, this is due to isolation / quarantine measures or fear of infection. If possible, the use of telecommunications can be beneficial for the professional⁽¹⁷⁾. Mo *et al.* (2020) supports the importance of the nurse's social support system and that it must be actively mobilized. The nurse must keep in touch with family and friends to obtain spiritual support.⁽¹⁰⁾

In a systematic literature review by Alvarez, AKG *et al.* (2020) it is possible to visualize which are the strategies proposed in the scientific articles for the management of the team's emotional states. In states of physical exhaustion of the professional, for example, in which there is a lack of concentration and memory that causes errors in the procedure, professionals should be instructed to rest, taking small intervals of 5 to 7 minutes, with ideal places to relax, one hour sleep or even the suggestion of changing the task. If the situation proves to be more serious, promote a work routine that begins with simpler and, later, more complex activities. States in which the employee is very anxious, it is suggested that he be accompanied to a quiet place and be heard, encouraged and let his emotions out, in order to help him identify the causes of the disease and find his own resources for deal with it. The individual must be accompanied until he feels better. A mental health team should be called as soon as possible.⁽⁶⁾

Early psychological intervention is particularly important for nurses in an epidemic. It is suggested to carry out a stress assessment and screening of nurses immediately after receiving epidemic prevention tasks and providing professionals who will make a flexible and continuous psychological intervention.⁽¹⁸⁾. A survey evaluated changes in anxiety symptoms in a sample of nurses with SARS over time. The results suggested a significant reduction in depressive and anxiety symptoms at 1-month follow-up, as well as a significant improvement in sleep quality.⁽²⁾

IV. TABLE

Chart 1 - Characterization of the articles collected in the Systematic Literature Review regarding the year, author, title, journal, language and database. Rio de Janeiro, 2020

No.	Year	Author(s)	Title	Official Organ	Language	Database
01	2020	Vagner Ferreira do Nascimento, Thalise Yuri Hattori, Ana Cláudia Pereira Terças-Trettel	Difficulties and fears of nurses in face of the COVID-19 Pandemic in Brazil (Dificuldades e medos dos enfermeiros frente ao Pandemia de COVID-19 no Brasil)	Center for the Development of Social and Humanistic Sciences in Health (Centro de Desenvolvimento de Ciências Sociais e Humanísticas em Saúde)	Portuguese	LILACS
02	2020	TahereSarboozihoseinabadi, SamanehKakhki, GholamheidarTeimori, SomayyehNayyeri	Burnout and its influencing factors between frontline nurses and nurses from other wards during the outbreak of Coronavirus Disease - COVID-19- in Iran	Investigation and Education in Nursing (Investigación y Educación en Enfermería)	English	LILACS
03	2020	Diogo Jacintho Barbosa, Márcia Pereira Gomes, Fabiana Barbosa Assumpção de Souza, Antônio Marcos Tosoli Gomes	Stress factors in nursing professionals to combat the COVID-19 pandemic: Synthesis of Evidence (Fatores de estresse nos profissionais de enfermagem no combate à pandemia da COVID-19: Síntese de Evidências)	Communication in Health Sciences (Comunicação em Ciências da Saúde)	Portuguese	PUBMED
04	2020	Ana Karina Gutierrez Alvarez, AymaraYusimy Cruz Almaguer, Elizabeth DignoraZaldivar Santos	Management of psychological security of the personal health in emergency situations by COVID-19 in the hospital context or the isolation (Gestión de seguridad psicológica de personal sanitario en situaciones de emergencia por COVID-19 en el contexto hospitalario o de aislamiento)	Cuban Journal of Nursing (Revista Cubana de Enfermería)	Spanish	PUBMED

05	2020	Joyce Soares e Silva, Ana Raquel Batista de Carvalho, Hilda Dandara Carvalho Santos Leite, Erika Morganna Neves de Oliveira	Reflections on occupational hazards in health workers in pandemic times by COVID-19 (Reflexiones sobre los riesgos ocupacionales en trabajadores de salud en tiempos pandémicos por COVID-19)	Cuban Journal of Nursing (Revista Cubana de Enfermagem)	Spanish	PUBMED
06	2020	Fernanda Moura D'Almeida Miranda, Leni de Lima Santana, Aline Cecília Pizzolato, Leila Maria Mansano Saquis	Working conditions and the impact on the health of nursing professionals in face of COVID-19 (Condições de trabalho e o impacto na saúde dos profissionais de enfermagem frente a COVID-19)	Cogitare Nursing (Cogitare Enfermagem)	Portuguese	PUBMED
07	2020	Lijun Kang, Yi Li, Shaohua Hu, Min Chen, Can Yang, Bing Xiang Yang, Ying Wang, Jianbo Hu, Jianbo Lai, Xiancang Ma, Jun Chen, Lili Guan, Gaohua Wang, Hong Ma, *Zhongchun Liu	The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus	The Lancet (Correspondence)	English	PUBMED
08	2020	Lijun Kanga, Simeng Maa, Min Chenb , Jun Yangb, Ying Wanga, Ruiting Lia, Lihua Yaoa, Hanping Baia, Zhongxiang Caic, Bing Xiang Yangd, Shaohua Hue, Kerang Zhangf, Gaohua Wanga , Ci Mag, Zhongchun Liua	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	Brain, Behavior, and Immunity	English	PUBMED
09	2020	Jens Bohlken, Friederike Schömig, Matthias R. Lemke, Matthias Pumberger, Steffi G. Riedel-Heller	COVID-19-Pandemie: Belastungen des medizinischen Personals	PsychiatPrax	German	PUBMED
10	2020	Moritz Bruno Petzold, Jens Plag, Andreas Ströhle	Umgang mit psychischer Belastung bei Gesundheitsfachkräften im Rahmen der Covid-19-Pandemie	Der Nervenarzt	German	PUBMED
11	2020	Emanuele Preti, Valentina Di Mattei, Gaia Perego, Federica Ferrari, Martina Mazzetti, Paola Taranto, Rossella Di Pierro, Fabio Madeddu, Raffaella Calati	The Psychological Impact of Epidemic and Pandemic Outbreaks on Healthcare Workers: Rapid Review of the Evidence	Current Psychiatry Reports	English	PUBMED
12	2020	Natasha Shaukat, Daniyal Mansoor Ali, Junaid Razzak	Physical and mental health impacts of COVID-19 on healthcare workers: a scoping review	International Journal of Emergency Medicine	English	PUBMED
13	2020	Giulia Zerbini, Alanna Ebigbo, Philipp Reicherts, Miriam Kunz, Helmut Messman	Psychosocial burden of healthcare professionals in times of COVID-19 - a survey conducted at the University Hospital Augsburg	GMS German Medical Science	English	PUBMED
14	2020	Wen Li, Yuan Yang, Zi-Han Liu, Yan-Jie Zhao, Qinge Zhang, Ling Zhang, Teris Cheung, Yu-Tao Xiang	Progression of Mental Health Services during the COVID-19 Outbreak in China	Journal of Biological Sciences.	English	PUBMED

15	2020	Yu-Tao Xiang, Yu Jin, Yu Wang, Qinge Zhang, Ling Zhang, Teris Cheung	Tribute to health workers in China: A group of respectable population during the outbreak of the COVID-19	Journal of Biological Sciences.	English	PUBMED
16	2020	Edmond Pui Hang Choi, Bryant Pui Hung Hui, Eric Yuk Fai Wan	Depression and Anxiety in Hong Kong during COVID-19	International Journal of Environmental Research and Public Health.	English	PUBMED
17	2020	Yuanyuan Mo MM, Lan Deng MM, Liyan Zhang BM, Qiuyan Lang BM, Chunyan Liao BM, Nannan Wang BM, Mingqin Qin BM, Huiqiao Huang MM	Work stress among Chinese nurses to support Wuhan in fighting against COVID-19 epidemic	Journal of Nursing Management	English	PUBMED
18	2020	Jianbo Lai, MSc; Simeng Ma, MSc; YingWang, MSc; Zhongxiang Cai, MD; Jianbo Hu, MSc; NingWei, MD; JiangWu, MD; Hui Du, MD; Tingting Chen, MD; Ruiting Li, MD; Huawei Tan, MD; Lijun Kang, MSc; Lihua Yao, MD; Manli Huang, MD; HuaifenWang, BD; GaohuaWang, MD; Zhongchun Liu, MD; Shaohua Hu, MD	Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019.	JAMA Network Open	English	PUBMED
19	2020	Qiongni Chen, Mining Liang, Yamin Li, Jincai Guo, Dongxue Fei, Ling Wang, Li He, Caihua Sheng, Yiwen Cai, Xiaojuan Li, Jianjian Wang, Zhanzhou Zhang	Mental health care for medical staff in China during the COVID-19 outbreak	The Lancet (Correspondence)	English	PUBMED
20	2020	Niuniu Sun Msc, Luoqun Wei MSc, Suling Shi BSc, Dandan Jiao, Runluo Song BSc, Lili Ma MSc, Hongwei Wang MSc, Chao Wang MSc, Zhaoguo Wang MSc, Yanli You MSc, Shuhua Liu BSc, Hongyun Wang BSc	A qualitative study on the psychological experience of caregivers of COVID-19 patients	American Journal of Infection Control	English	PUBMED
21	2020	Wanqiu Tan, Fengyi Hao, Roger S. McIntyre, Li Jiang, Xiaojiang Jiang, Ling Zhang, Xinling Zhao, Yiran Zou, Yirong Hu, Xi Luo, Zhisong Zhang, Andre Lai, Roger Ho, Bach Tran, Cyrus Ho, Wilson Tam	Is returning to work during the COVID-19 pandemic stressful? A study on immediate mental health status and psychoneuroimmunity prevention measures of Chinese workforce	Brain, Behavior, and Immunity	English	PUBMED
22	2020	Stephen X. Zhang, Jing Liu, Asghar Afshar Jahanshahi, Khaled Nawaser, Ali Yousefi, Jizhen Li	At the height of the storm: Healthcare staff's health conditions and job satisfaction and their associated predictors during the epidemic peak of COVID-19	Brain, Behavior, and Immunity	English	PUBMED

23	2020	Yu-Tao Xiang, Yuan Yang, Wen Li, Ling Zhang, Qing Zhang, Teris Cheung, Chee H Ng	Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed	The Lancet (Comment)	English	PUBMED
24	2020	Zhi-hao Tu, MD, Jing-wen He, MD, Na Zhou, MD	Sleep quality and mood symptoms in conscripted frontline nurse in Wuhan, China during COVID-19 outbreak	Medicine	English	PUBMED
25	2020	Tianya Hou, Taiquan Zhang, Wenpeng Cai, Xiangrui Song, Aibin Chen, Guanghui Deng, Chunyan	Social support and mental health among health care workers during Coronavirus Disease 2019 outbreak: A moderated mediation model	PLoS One.	English	PUBMED
26	2020	Eduardo Bassani Dal' Bosco, Lara Simone Messias Floriano, Suellen ViencoskiSkupien, Guilherme Arcaro, Alessandra Rodrigues Martins, Aline Cristina Correa Anselmo	Mental health of nursing in coping with COVID-19 at a regional university hospital (A saúde mental da enfermagem no enfrentamento da COVID-19 em um hospital universitário regional)	BrazilianJournalofNursing (Revista Brasileira de Enfermagem)	Portuguese	PUBMED
27	2020	Chen-Yun Liu, Yun-zhi Yang, Xiao-Ming Zhang, Xinying Xu, Qing-Li Dou, Wen-Wu Zhang, Andy S. K. Cheng	The prevalence and influencing factors in anxiety in medical workers fighting COVID-19 in China: a cross-sectional survey	Epidemiology and Infection	English	PUBMED

V. CONCLUSION

The Nursing team, according to published studies, has been one of the main ones to be affected by the impacts on mental health caused by the pandemic of COVID-19. Therefore, it is essential that these professionals pay attention to their mental well-being, so that they, essential to combat COVID-19, do not get sick.

Institutions need to recognize the importance of preserving the mental health of their professionals in order to improve the quality of care, organize themselves and provide their own working conditions, which includes, in addition to having all the resources to perform their functions, an environment where professionals feel their physical and psychological needs met and welcomed.

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