

Mental health linked to the quality of life of health professionals, from the perspective of SARS-Cov2

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Summary

Purpose of the study: To analyze the state of the art on the mental health and quality of life of health professionals who worked on the SARS-CoV-2 frontline. **Method:** This is an integrative literature review study. **Results:** Regarding the content of the works selected to compose the corpus of this study, it was possible to extract that the main reasons that affect well-being are correlated with levels of stress and anxiety. In addition, the articles linked depression and anguish as one of the determining factors tangent to the quality of life axis, despite the fact that, as explored, aspects such as physical activity were a determining factor for improving the quality of life. **Conclusion:** The work environment directly influences the worker's mental health, and thus reveals the high overload in which to carry out their work activities without resources and without support, consequently affecting the quality of life.

Descriptors: Mental Health; Quality of Life Indicators; COVID-19; Health Personnel; Psychological Exhaustion; Professional Exhaustion.

Mental Health linked to Quality Working life of health professionals, in the perspective concerning SARS-Cov2: Review study

Introduction

In Brazil, nursing as a profession is admittedly new, if we consider the Exercise Law 7498/86, which has 04 decades of recognition. This fact organizes the profession in terms of rights and duties, vis-à-vis the population and the State, leading nursing and its professional dichotomies to precarious working and salary conditions ⁽¹⁾.

On the other hand, we have a profession that has an absurd representation in the health universe, in the composition of the multidisciplinary team structure, with a commitment to treatment, recovery and maintenance of health/life in all its cycles. Historically, studies show passages in which nursing professionals, for a long time, fight for recognition, rights and representation in the labor market. Corroborating the theme, work is characterized by low wages, lack of a career plan, weakened employment relationships, high workloads and insufficient permanent education actions that target workers ⁽²⁾.

Concurrent with the aforementioned facts, our social fabric is devastated by COVID-19, a disease caused by SARS-CoV-2 that emerged at the end of 2019 in Wuhan, China, declared by the World Health Organization (WHO) as the sixth emergency of public health that requires attention, being designated as pandemic ⁽³⁾. Infectious disease caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2), from the English Severe Acute Respiratory Syndrome-Associated Coronavirus 2 ⁽⁴⁾.

Although the lethality of the disease caused by SARS-CoV-2 is lower compared to other coronaviruses, its high transmissibility has caused a greater absolute number of deaths than the combination of epidemics produced by SARS-CoV and MERS-CoV ⁽⁵⁾.

The transmission of SARS-CoV-2 occurs predominantly through contaminated droplets of oropharyngeal secretions from an infected person to a person free of the infection, although the role of transmission by aerosols, contact with surfaces and surfaces is still unknown. contaminated objects, where the virus can remain viable for up to 72 hours ⁽⁶⁾, or through the fecal-oral route ⁽⁷⁾. According to Kraemer ⁽⁸⁾ the transmission of SARS-CoV-2 is aggravated by the high average incubation time, of approximately 5-6 days (ranging from 0 to 24 days), due to people without symptoms, pre-symptomatic or with mild symptoms. able to transmit the disease ⁽⁹⁾.

However, health professionals directly and indirectly involved in fighting the pandemic were and are exposed on a daily basis to the risk of falling ill from the corona virus. Problems such as physical tiredness and psychological stress, insufficiency and/or negligence regarding the protection measures and health care of these professionals, do not affect the different categories in the same way, and it is necessary to pay attention to the specificities of each one, in order to avoid the reduction of work capacity and the quality of care provided to patients ⁽¹⁰⁾.

In this scenario, health professionals are the main actors in coping activities. With the high demand, it brings consequences for changes in physical/mental health (stress/anxiety), in addition to the demand for increased workload, directly reflecting on physical performance, which consequently directly interferes with the quality of life of these individuals ⁽¹¹⁾.

In this context, it is necessary to approach information regarding quality of life (QoL). The word quality of life does not have just one meaning, it is used in a more generalized and comprehensive way, requiring a better understanding, reflection and determination ⁽¹²⁾. It is often compared or confused with the word health, in which they are usually expressed with the same meaning ⁽¹³⁾.

Faced with this reality, health is not simply the lack of illness, but a state of physical and mental well-being as a whole., which can only be determined by the subject himself, covering several aspects, such as physical,

mental, emotional, social, spiritual and economic ⁽¹²⁾. Being evaluated and diversified from person to person and from circumstance to circumstance, it may involve culture, values and lived experiences ⁽¹⁴⁾.

With the advent of COVID-19, a decrease in the quality of working life (QWL) of these professionals is observed, due to work overload and long hours. This scenario has contributed to an increase in the physical and mental strain of nurses and their dichotomies who continue to work, even in the absence of sick colleagues. Other factors that aggravate health and QWL are related to structural insufficiency, absence and/or quality of personal protective equipment (PPE), in addition to exhaustion in health systems, caused by the increase in bed occupations due to hospital admissions ⁽¹⁵⁾.

The study is based on the object of study: Mental health and quality of life of health professionals in the context of the SARS-Cov2 pandemic.

The study in question is based on the justification that the health professional is responsible for providing recovery, the promotion/maintenance of health and well-being to clients/patients, due to the fact that they are directly linked to care, the probability of contamination by the SARS-Cov2 virus, becomes greater in sync with physical and mental exhaustion. Therefore, since the study provides a bias for new studies/research, it will be developed with the aim of providing content for the protection and promotion of the physical and mental health of this working class. This fact is in line with the social return, because with the decrease of these professionals, everyone, society/State will become fragile in the maintenance of health/life, resulting in a problem. The relevance of the study on screen is transfigured, considering that the scientific productions related to the theme are still shy in terms of quantity. Considering that these sick actors cannot be left unmotivated and left to their own devices, studies will have to take place to bring a new look to everyone who works with health.

Through the problem, In view of the concomitant working conditions, there is all the inconvenience that the pandemic brought to the working class of health professionals, in addition to the excessive information disseminated by the media, often even erroneous, the research question was generated: What has the literature revealed about the perspective of mental health and quality of life of health professionals who worked on the SARS-CoV-2 frontline?

Therefore, the objective of the study: To analyze the state of the art on the mental health and quality of life of health professionals, who worked on the SARS-CoV-2 front line.

Methodology

The study is based on a review of the integrative type of narrative literature, which enables the synthesis and analysis of the scientific knowledge already produced on the investigated topic ⁽¹⁶⁾. In order to search for the knowledge produced on the subject, the research question was formulated: What has the literature revealed

from the perspective of mental health and quality of life of health professionals who worked on the SARS-CoV-2 front line?

From the question presented, the main issues were identified and systematized by the elements Participant, Interest and Context, known as the PICO strategy ⁽¹⁷⁾

P – Population;

I – Interventions;

C – Control;

O - Outcome

Mapping terms for search in databases.

PEAK	MESH and synonyms
P-Patient	Nursing professionals
I-Interventions	Mental exhaustion
C-Control	Not applicable
O-Outcome	Mental health

Source: PubMed

COVID-19 front line and quality of life of nurses in the pademia union of compound terms and/or grouping of synonyms and NOT exclusion operator, used in the PubMed library.

The study followed the elaboration steps of the Prisma method.

In the first stage, the guiding question was selected: What has the literature revealed from the perspective of mental health and quality of life of health professionals who worked on the SARS-CoV-2 frontline?

In the second stage, the works were identified. The search performed in February 2023 PubMed. The studies covered complete articles available free of charge.

In the third stage, 344 studies with the interterms were initially identified; quality of life of nurses in the pademia and with the entreterms; COVID-19 front line and quality of life 42, together they add up to 386 studies. With the application of the free filter, 306 studies were eliminated. After reading the titles, 77 studies were excluded, as they did not suit the object of study and presented duplicity of some works. For further expansion of the study, it was decided to bring the 344 studies with the terms quality of life of nurses in the pademia, only those that dealt with the reality of health professionals in Brazil (n=3). While the 42 with COVID-19 front line and quality of life were selected with the approach of professionals of any other nationality as long as they were health workers (n=6).

Mental health linked to the quality of life of health professionals, from the perspective of SARS-Cov2

In the fourth stage, the selection began based on previously defined criteria. Documents exported and organized in an Excel spreadsheet, comprising the data: Year of publication; Author training; Methodology; Place of publication; Level of Evidence and Summary of Results. Nine studies were selected to compose the corpus of this study.

As you can see, with the application of the FREE filter, a total of 306 studies were eliminated, out of the 386 found. Next, 77 studies were eliminated, for having questions in the title such as; quality of life and/or mental health of children, adolescents, students, patients/clients. This was followed by the reading of the abstracts, in order to understand the theme if it went against the object of study, delimited here.

Of these, all that were directed to health professionals, who brought quality of life linked to psychic illness, were separated. This selection resulted in 09, who were eligible for the study on screen. For an illustrative question and quick and visual understanding below, see Table 01, with the selection stages of the studies that were elected.

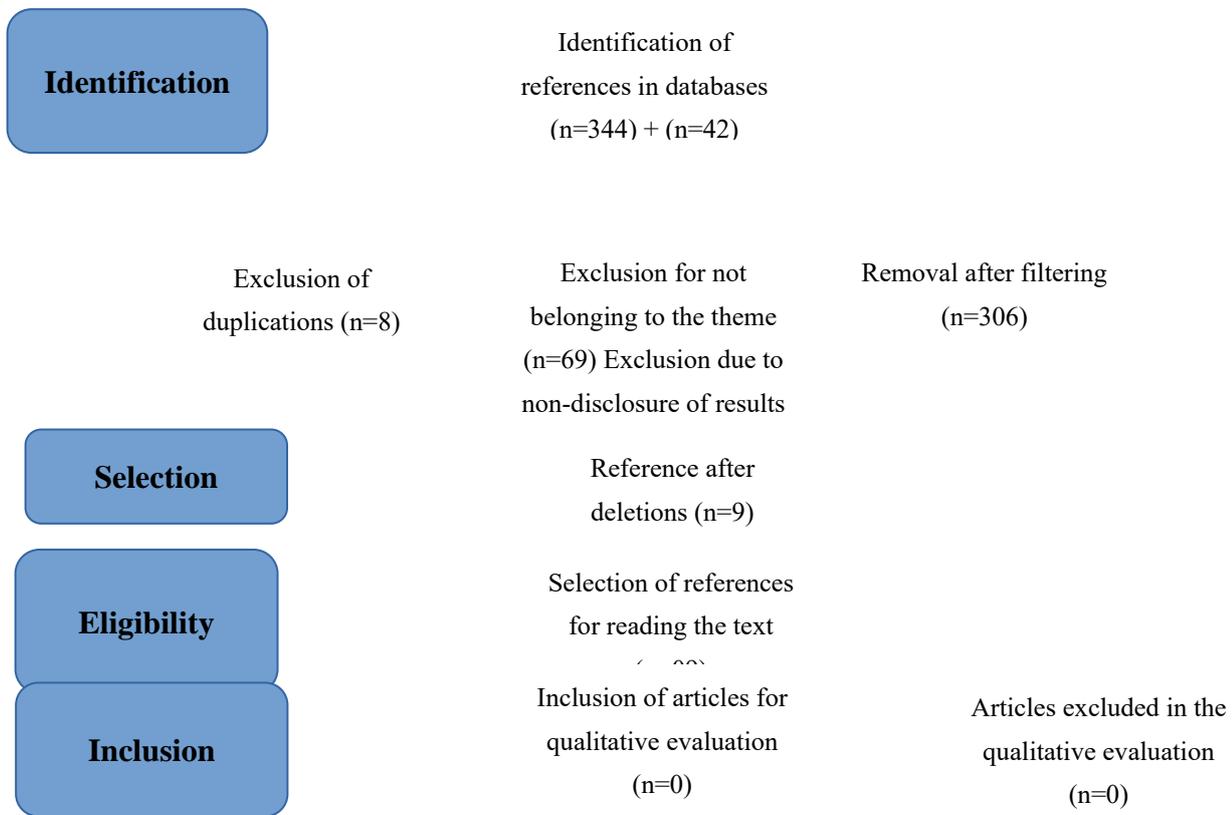
Table 01: Representation of the exclusion steps of the studies found in the search

HEADINGS	Quantity	Filter	Quantity Eliminated	Eliminated by title	deleted after reading	Selected
COVID-19 front line and quality of life	42	FREE	28	14	08	06
Quality of life of nurses in the pademia	344		278	66	63	03
TOTAL	386		306	80	71	09

Source: The authors, 2023.

The figure below shows the flow of selection of primary studies included in the review, according to the consulted library

FIGURE 01: Search process flowchart Based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyse (PRISMA) flowchart



Source: GALVÃO, et al. ⁽¹⁸⁾

The fifth stage corresponded to the critical analysis of the selected works, comparing theoretical knowledge, identifying conclusions and implications resulting from the integrative review.

Sixth stage, after analyzing and interpreting the data, the synthesis of the knowledge obtained in the publications was carried out, which produced 09 results in narrative form, describing common findings and divergences, represented in table 02.

Table 02: Summary of studies.

No.	Year	Author training	Method	Region	level of evidence
01	2020	Doctors and Pharmacists	Descriptive quantitative cross-sectional research, a web-based study	India	two
02	2021	infectologists Health researchers	Cross-sectional study	Vitina	two

		(biomedical, biology, medicine and medical engineering)			
03	2021	nurses Doctors	Correlational cross-sectional design with an online survey and adhered to the STROBE guideline for cross-sectional studies	Irbid, Jordan	4
04	2021	nurses	Descriptive cross-sectional study	China	1
05	2022	Psychiatric doctor	Cross-sectional study	China	two
06	2022	Social Assistance and Education	Mixed methods (online questionnaire, focus groups/ face-to-face interviews) to collect data	London	two
07	2022	nurses	Multicenter, mixed methods study with concomitant triangulation of quantitative and qualitative data	Brazil	two
08	2021	Doctor	The editorial followed the STROBE form for cross-sectional studies	Brazil	two
09	2021	Professionals from the Science and Technology Group at the University of MG	Cross-sectional and analytical study	Brazil	two

Source: The authors, 2023

The level of evidence represents the quality of the available scientific evidence and defines the confidence in the information used, which makes it possible to define a certain recommendation, following figure No. 02, was brought to support the classification of the selected studies, in relation to evidence.

Figure 02: Level of Scientific Evidence by Type of Study



Level	Example of Evidence
Level 1	Meta-analysis of Homogenous RCTs Randomized Control Trial
Level 2	Meta-analysis of Level 2 or Heterogenous Level 1 Evidence Prospective Comparative Study
Level 3	Review of Level 3 Evidence Case-control Study Retrospective Cohort Study
Level 4	Uncontrolled Cohort Studies Case Series
Level 5	Expert Opinion Case Report Personal Observation
Foundational Evidence	Animal Research <i>In Vitro</i> Research Ideas, Speculation

Source: Prepared by the authors based on the “Oxford Center for Evidence-based Medicine ⁽¹⁹⁾

Results

Regarding the content of the works selected to compose the corpus of this study, it was possible to extract that the main reasons that affect well-being are correlated with levels of stress and anxiety. In addition, 1 (one) of the articles linked depression and anguish as one of the determining factors tangent to the quality of life axis, despite, as explored, aspects such as physical activity was a determining factor for improving the quality of life. The impacts of the pandemic on social and family life demonstrated mental disorders.

With regard to the use of methodologies in the studies, 7 (seven) cross-sectional studies, with this, this type of method favors research in view of the low cost, however, it is possible to measure the prevalence without the researcher putting the public at risk studied. In addition, 1 (one) field study which had limited positive impacts on aspects of compromised well-being at a personal level and a statistically significant improvement in quality of life in general. And, 1 (one) quali-quantitative study with the aim of evaluating the mental disorders of nursing workers in COVID-19 units. Of a total of 09(nine) productions, 5(five) were published in the year 2021, 3 in the year 2022 and 1(one) in the year 2020.

Concerning the professions of the authors, it is necessary to point out that the number of authors is greater than the productions, considering that some studies have more than one author/departments in their constitution, being subdivided into 5 (five) medical authors, 3 (three) authors nurses, 1(one) pharmacist, 1(one) biomedical, 1(one) social worker and 1(one) unspecified profession being identified as an entity.

To support the analysis, we sought to base the content analysis method, which is described as:

... set of communication analysis techniques aimed at obtaining, through systematic procedures and objective description of the content of messages, indicators (quantitative or not) that allow the inference of knowledge regarding the conditions of production/reception (inferred variables) of these messages ⁽²⁰⁾

To support the analysis, we sought to base the content analysis method, which is a technique for analyzing communications and data, with the aim of promoting indicators based on systematic procedures. Thus, content analysis can be of two types: analysis of “meanings” (thematic analysis) and analysis of “signifiers” (procedural analysis) ⁽²¹⁾

With regard to this research, the chosen analysis technique was the thematic categorical analysis. This technique allowed us to condense the data, categorizing and standardizing them in order to make their interpretations more accessible.

Category 01- Nursing presents greater psychic suffering.

Category 02- Nursing professional resilience, as a contributory factor

Category 03- the stress of the medical professional becomes greater

Discussion

Category 01-Nursing presents greater psychic suffering.

Constructed by 04 studies, arising from approaches of studies that converged to the presentation of mental health disorders of nursing professionals.

Studies point out the wear and tear, the service overload of these professionals at the height of the Covid-19 pandemic. This fact changed the routine of life, at home and in the work unit, which, added to the financial crisis that plagues nations in general, increasingly flattening the income of families, was a summation, as the vast majority began to accumulate more shifts to maintain financial life. Bearing in mind that nursing is a profession mostly composed of females, who often assume the role of family/household provider

Corroborating with the PAHO discussion ⁽²²⁾, it strongly points out that the pandemic has greatly altered the lives of health professionals, with emphasis on nursing, which is increasingly etherizing the illness, the need for continuous treatment of professionals to maintain the balance between linear mental health, bringing the need for the State to care for those who care.

Studies launched based on PAHO ⁽²²⁾ point out that the COVID- 19 pandemic caused an increase of approximately 25% in the prevalence of anxiety and depression worldwide, mitigating human mental illness, this in 2020.

Faced with this reality, it is clear that nursing, who spends more time with clients seeking health care, becomes much more vulnerable to all possibilities of infection, viral/bacterial/fungal. In addition to direct exposure to contamination by the virus, they also suffer the psychosocial impacts resulting from this context.

The studies showed the occurrence of symptoms suggestive of mental disorders (anxiety and depression) related to female nursing professionals, color or brown race, with a monthly income of less than 05 minimum wages who worked in the private sector, having symptoms of Down Syndrome Burnout and living with parents.

In this formed scenario, we can infer the idea of deficiency or even lack of emotional and financial support, on the part of the State/health companies, added to the fear of infecting family members, a mental zone of conflicts and emotions was formed between the need of job maintenance and drastic changes in job management functions.

On the other hand, there was a “certain” confidence that the government and health companies would be able to overcome the pandemic through research/vaccines, in addition to joining forces with co-workers, in addition to considering religious support, which supplied these actors inserted and a confusing and complex scenario, without knowing what they were facing and what weapons to use in this installed war.

Luz, et al. ⁽²³⁾, describe that the work of the nursing team has technical complexity, which demands greater scientific knowledge and control in making immediate decisions, thus maximizing professional exhaustion during the workday. In addition to the scientific side, nursing has another unique role in patient care: humanization. Within the hospital staff, nurses become the closest bridge to patient recovery, evaluating and mediating care services.

This scenario presents the growth of the population that becomes ill, the actors on the scene experience tensions and anguish to a greater degree, which added to the increase in the incidence of psychic disorders, although it should be noted that not all health professionals experienced this tense form of life/feeling ⁽²⁴⁾.

Category 02- Resilience of nursing professionals in the face of pandemic chaos

To start the discussion of this category, in which he used 03 studies, which were approached by the theme addressed. Resilience is currently considered a profile that leaders/professionals need to present during certain situations that may occur in their work routines.

Considering that the job market is increasingly competitive, it is essential that professionals who deal directly/indirectly with people and situations, have more and more understanding and preparation to work with; people, tools, strategies and processes, so that they can extract the best from their teams, according to the companies' objectives, in the contemporary world.

In strengthening the fact described here, Souza ⁽²⁵⁾ describes that resilience is an important factor of the universal human capacity to live with the crisis, go through it, transform adversity into learning and, even so, emerge stronger.

Faced with this reality, nursing faces crisis situations during most of its work, but the pandemic, at its peak, was unknown with a high degree of lethality. This fact, marked and changed the life of the professional category, which was invisible to the social eyes, starting to gain visibility by society and rulers, with a single factor to be considered, it needs that State/society, rethink the way of dealing with these professionals, because most of them urge for looks and actions that contemplate the modification of their state of mental health.

Based on the reality presented, it is possible to perceive the importance of promoting and preventing mental illness among nursing professionals and everyone who makes up the health workforce, in order to make them more resilient, promoting a better quality of life in a general context. Thus, promoting the character of confrontation and positive construction in the face of adversity, and thus, being resilient.

Category 03- The stress of the medical professional

In this category, 02 studies were grouped, which also follow the same line as the previous ones, “grouped by approximation”. These studies addressed the condition of the medical professional, in the face of the pandemic that had a direct impact, increasing suffering, reflecting on physical and mental health. Even though it is a problem, there are still few researchers/scholars who are willing to carry out a survey to try strategies to mitigate the problem.

In this line of care, we can understand that the fact, which contributed the most, was undoubtedly at the height of Covid-19, causing an overcrowding of patients with the virus, with fewer and fewer professionals with preparation and expertise to help, in the relay covering days off, hours of rest during shifts, in addition to the lack of knowledge about the disease and the great possibility of contamination, generating uncertainty, fear of death, separation from the family.

Collaborating with the discussion, the study by Almeida, et al ⁽²⁶⁾, describe that COVID-19 had deleterious effects on mental health, bringing a considerable number of increased levels of stress, exhaustion and insomnia. Emergencies are considered the gateway for everyone who needs health care, according to the need that each one presents, necessary and compatible direction will be provided. For this to happen, all health professionals have great possibilities for psychological suffering as a result of acting in this scenario with different possibilities, including infectious and contagious diseases, in this case Covid, in response to the pandemic. In addition, the challenges imposed by this scenario intensify stressors, such as the lack of personal protective equipment (PPE), the restricted number of beds and mechanical ventilators, the lack of knowledge and training, the level of complexity and severity of patients. , among other factors, was the reality for more than 365 days.

In this perspective, the reality experienced in which there were no choices, the need for this professional and many other health categories justifies the illness, unfortunately both the health units of the unified health system (SUS) and so little the health companies that provide “private” health services, do not have a plan to meet needs that are invisible to the eye, but with great power to devastate the subject’s life, regardless of their profession, especially when this professional is caring for a population in conditions of an already established disease.

Conclusion

In the face of all setbacks, it is possible to conclude that no one is prepared for the pandemic that is plaguing us, and, with that, it showed us the high overload of health professionals in which they carried out their work activities without resources and without support. In addition, linked to these factors, there is the psychological suffering resulting from the lack of equipment, the long hours of work and the lack of a suitable place to rest, which consequently directly affected their quality of life.

Through the research used in the corpus of this study, the predominance of methodological processes with a cross section proved to be more prevalent, linked to a field research and another quali-quantitative. However, it is necessary to promote and provide research regarding the thematic axis, since it becomes essential since producing science aimed at professionals who are on the front line only SARS-CoV-2 in their work practice, since science raises an improvement in professional practice, however, it generates protection for them, covering all occupational health in which it ensures support for both physical and mental health, and, with that, an improvement in health care in society. Considering that the productions available in the database both in the Brazilian social fabric and in the world scenario are scarce.

Therefore, taking into account that the work environment directly influences the mental health of the worker. Factors such as management style, stress, dangerousness, noise, environmental condition, among others, affect not only physically, but mentally the individual. Thus, it is up to the reflection of the population, our rulers and professionals of the class, alluding to the necessary improvements for a good quality in the resolution of health care.

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