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## Nurses' perception regarding their health and working conditions during the COVID-19 pandemic

*Percepções de profissionais de enfermagem sobre suas condições de trabalho e saúde no contexto da pandemia de COVID-19*

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### Abstract

**Objective:** to identify working conditions and their effects on nursing professionals' health during the COVID-19 pandemic, based on the workers' own perceptions. **Methods:** qualitative research carried out with 15 nursing professionals interviewed through online focus group. We analyzed the interviews content based on hermeneutics-dialectics. **Results:** nurses reported that the pandemic worsened their historic, chronic, and precarious working and health conditions, marked by increased workload, lack of personal protection equipment and material resources, shortage of professionals and devaluation of their jobs, generating a perceived dehumanization at work, with nurses feeling as "machines" and "numbers". Mental suffering due to the risk of contamination, the frequent death of co-workers, patients, and family members, lack of societal support concerning protective measures, and the increasing demands for performance and productivity generates anxiety, depression, and stress. **Conclusion:** the COVID-19 pandemic enhanced nurses' mental suffering and the precariousness of their work, urging the improvement of their working conditions and health promotion, essential for workers' protection and dignity.

**Keywords:** nursing; team; working conditions; mental health; pandemic; occupational health.

### Resumo

**Objetivo:** identificar as condições de trabalho e seus reflexos na saúde de profissionais de enfermagem durante a pandemia de COVID-19, a partir das percepções dos próprios trabalhadores. **Métodos:** pesquisa qualitativa desenvolvida com 15 profissionais de enfermagem entrevistados por meio de grupos focais online. O conteúdo foi analisado a partir da perspectiva da hermenêutica-dialética. **Resultados:** os trabalhadores relataram que a pandemia agravou uma histórica, crônica e precária condição de trabalho e saúde, marcada pelo aumento da sobrecarga laboral, falta de equipamentos de proteção individual e de recursos materiais para a assistência, escassez de profissionais e desvalorização da categoria, o que gerou uma percepção de desumanização no trabalho ao se sentirem como "máquinas" ou "números". O sofrimento mental diante do risco de contaminação, da morte frequente de pacientes, colegas de trabalho e familiares, da falta de apoio da sociedade em relação às medidas protetivas e das cobranças crescentes por desempenho e produtividade geraram sintomas de ansiedade, depressão e estresse. **Conclusão:** a pandemia de COVID-19 intensificou a precarização do trabalho da enfermagem e o sofrimento mental dos profissionais, o que torna urgente a busca de melhorias nas condições de trabalho e de promoção da saúde, fundamentais à proteção e à dignidade dos trabalhadores.

**Palavras-chave:** equipe de enfermagem; condições de trabalho; saúde mental; pandemias; saúde do trabalhador.

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## Introduction

Among the protagonists of emergency actions to cope with the tragic scenario of the COVID-19 pandemic, nursing professionals - the subject of this study - stand out. While millions of people stayed home to minimize the transmission of the new coronavirus, "health care workers prepared to do just the opposite" (p. 922)<sup>1</sup>. Previous experiences with outbreaks or epidemics show that these workers have always been in the front line of healthcare, being exposed to risks of illness and death on behalf of the population they served<sup>2</sup>.

According to data from the Federal Council of Nursing (*Conselho Federal de Enfermagem* – Cofen), by March 31, 2021, Brazil recorded 40,696 cases and 699 deaths of nursing professionals from COVID-19. These figures correspond to almost a quarter (23%) of all deaths from the disease among nursing workers worldwide<sup>3</sup>. The figures suggest that, worldwide, Brazil is the country where most nursing professionals died<sup>4</sup>, evidencing the serious situation of precarious work of these professionals, despite their efforts to fight the COVID-19 pandemic.

National and international organizations have highlighted the need for specific measures to ensure the safety of healthcare professionals, including nursing. These recommendations advised about the need for: instructions and training for staff; provision of personal protective equipment (PPE) in sufficient number and free of charge to workers; offer of treatment or the possibility of staying home when sick; psychological support, and access to mental health resources; and priority access to vaccines against the disease<sup>1,5,6</sup>.

However, despite all the existing recommendations, the pandemic showed the worsening of a chronic precariousness in nursing work, already pointed out in pre-pandemic studies<sup>7,8</sup>. These studies indicated a professional history marked by lack of respect and cordiality among managers, teams, and the population being cared for, discrimination and labor violence, unsafe and stressful work environments, lack of infrastructure to perform the job, low salaries, high levels of physical and mental distress, work-related accidents, and leaves of absence<sup>7,8</sup>.

With the arrival of the new coronavirus these problems have been exacerbated, culminating in longer working hours, lack of or inadequate PPEs, lack of material and human resources, lack of training to perform the job, fear of infection risks, uncertainty about the disease development, social isolation, separation from family, situations of violence, devaluation of the job, and difficulties in dealing with daily patients deaths<sup>9</sup>.

This scenario brought about feelings of powerlessness, anguish, fear, and sadness, up to an alarming prevalence of stress, anxiety, depression, and professional burnout syndrome among nursing professionals<sup>9,10</sup>. Moreover, even after more than a year of the pandemic, a significant part of these professionals had not yet been vaccinated, especially in low- and middle-income countries, which is unacceptable for a group highly exposed to illness and death from COVID-19<sup>11</sup>.

The social inequalities characteristic to the nursing work in Brazil are noticeable, affected by unfair remuneration, health services scrapping, and dismantling of worker protection systems<sup>12</sup>. These problems stem from the expansion of neoliberal economic policies, intensified forms of labor exploitation, and the restriction of workers' collective practices<sup>12</sup>. Thus, with the onset of the pandemic and its consequences, including the aggravation of the health, economic, social, labor, and humanitarian crises<sup>13</sup>, nurses seem to have suffered a worsening of this picture.

Considering the foregoing, this study aimed at identifying the working conditions and their effects on the nursing professionals' health during the COVID-19 pandemic, based on the workers' own perceptions.

## Method

This is a descriptive, exploratory study with a qualitative approach. It comprised 15 nursing professionals, four nurses and 11 nursing technicians from the public and/or private hospital network of a city in the interior of São Paulo state (including services managed by Social Health Organizations, or *Organizações Sociais de Saúde* – OSS), in professional practice for at least six months, and working during the COVID-19 pandemic.

Participants were selected using the snowball strategy, through which researchers found initial informants who suggested other possible participants, producing a network of contacts<sup>14</sup>. The sampling through theoretical saturation was adopted. It is a process in which the search for new participants is interrupted when the data obtained become redundant or repetitive<sup>15</sup>.

Data collection was conducted from June to September 2020. Three online focus groups<sup>16,17</sup> were developed, with five nursing professionals in each group. This proportion was delimited based on the recommendations in the scientific literature about the number of participants in online focus groups<sup>17</sup>, the stronger interest for deepening the subject,

listening and exchange between participants, in addition to the nature of the topic addressed. The research theme brought out memories of loss and/or suffering, which led the authors to develop smaller and more welcoming groups.

Through the snowball strategy, the first five professionals who agreed to participate in the research made up the first group, and so on. Participants came from different hospital sectors, allowing the apprehension of different nursing contexts and work experiences in the pandemic. The strategy of online focus group was selected considering that data collection took place in the context of the COVID-19 pandemic, which required social distancing considering the risks of contamination.

The online focus groups were developed in a virtual private environment through a free communication application accessible to the participants, under the administration of the researchers. Groups were developed asynchronously, that is, the members did not need to be online or connected simultaneously<sup>16</sup>. This strategy may be adopted when participants have different working schedules available, a common situation among nursing professionals.

The online focus groups were scheduled by phone call or communication applications and were conducted based on a semi-structured script prepared by the authors, containing seven guiding questions about the nursing work conditions, and their impacts on healthcare in the context of the COVID-19 pandemic, as follows: “1. What does it mean to be a nursing professional in this context of the COVID-19 pandemic? 2. What work experience about the pandemic shocked/impacted you the most? 3. Did your work during the pandemic affect your physical and/or mental health? In what ways? 4. How are your working relationships during the pandemic? 5. How has your life out of the work environment been during the pandemic? 6. What strategies should be developed for nursing workers to have better working conditions and health? 7. Would you like to share any other experiences or comments?” The aforementioned script was produced based on scientific literature and was evaluated by three expert researchers in the theme involved, resulting in the final version.

Each group was given one question a day. At the end of seven days, groups were closed and definitively deleted, with the participants' knowledge and authorization, in order to preserve the secrecy and confidentiality of data and research subjects.

For data analysis, we adopted the hermeneutics-dialectics perspective, according to Minayo's<sup>18</sup> operational proposal. The analytical steps were as follows: a) data sorting, with the transcription of the reports and primary reading of all the material,

allowing a horizontal overview of the findings; b) data classification, with exhaustive and repeated reading of the texts - the so-called “floating reading” - aiming at apprehending the relevant structures, and the central ideas transmitted by the nursing professionals. Later, a cross-cut reading of each online focus group was performed, and produced units of meaning; these units of meaning were assigned to and grouped into themes or categories, in an attempt to build an analysis system; c) final analysis or interpretative synthesis, with the purpose of coordinating analytical and empirical categories.

The research followed the recommendations of Resolution No. 466/2012 by the Brazilian National Health Council (*Conselho Nacional de Saúde* – CNS) and was approved by the Research Ethics Committee of the *Universidade Federal do Triângulo Mineiro*, CAAE No. 82365417.9.0000.5154, Opinion No. 2.543.320. All study participants signed the Informed Consent Form. In the description of the results, aiming to preserve anonymity, the following codes were used: G for group, P for participant, ENF for nurse, and TE for nursing technician.

## Results

The investigation question “ what are the working conditions and their effects on nursing professionals' health during the COVID-19 pandemic, based on the workers' own perceptions?” gave rise to two theme categories, namely: “We are humans, not machines”: dehumanization of the nursing work; COVID-19 and the pandemic of mental distress in nursing.

### “We are humans, not machines”: dehumanization of the nursing work

The COVID-19 pandemic has exacerbated a historical, chronic, and precarious working condition of nursing professionals in Brazil. According to the respondents, there was an increase in demand and work overload, impaired meal and resting times, and a reduction in the staff. For them, these situations resulted from the lack of investment in human resources, and the dismissal of workers suspected or infected by the disease. Simultaneously, the increased pressure for productivity, and the low adherence of the population to preventive measures, intensified the physical and emotional overload.

[...] *extensive working hours, lack of minimally adequate place to rest and, mainly, the work overload.* (G3, P1, TE)

*I end up not having much time to have meals, breakfast and lunch; always very busy, which ends up reducing my resistance.* (G1, P1, ENF)

Yes, they [the working conditions] got worse. The demand increased, and the number of employees decreased. Many are on leave, and we have to deal with an overloaded shift. (G1, P2, TE).

We have three sectors of COVID plus the ICU [Intensive Care Unit] which takes care of more beds, and all of them are full. Most of the employees are on leave. (G2, P3, ENF).

The institution demands quality, however, does not invest in sufficient staff to cope with the demand. Before the pandemic we were already dealing, where I work, with insufficient staff. (G2, P1, TE)

We are under pressure all the time [...]. Besides being a hard work, seeing misfortunes and sadness all the time, when I leave the hospital I see people that don't care about that, it is very discouraging. Everyone is tired, because you do, do, do, go there and see that no one cares. (G1, P3, TE)

Respondents also reported dissatisfaction with the institutional demands, such as sudden transfers of sectors of activity without prior training, and postponement of the vacation period to meet the shortage of professionals. According to workers, this situation gave rise to high emotional stress in the teams, and fear of losing their jobs in case of noncompliance with the orders.

[...] I had to change from the sector I worked, get adapted in a short time, without proper training. (G1, P4, TE)

Having to take on more patients, going to sectors that you are not familiar with the routine, and the chances of error increase, not to mention the fear of losing your job if you refuse any order. (G1, P2, TE)

Professionals are exhausted, after two years without vacations, physically and mentally tired, feeling very afraid. I feel we are alone. There is no one to protect us, to help us. (G1, P3, TE)

Many employees are being reassigned in default, and forced to work in ICU under pressure [...]. We are tired, overloaded, worried, and with vacations canceled for the next months. We don't even need to rest, right? (G2, P1, TE)

The interviewed workers also reported that, with the COVID-19 pandemic, there was a greater shortage of PPE and other material and organizational resources crucial for patient care, and for the safety of the professionals.

[...] depending on the sector we have a lack of adequate PPE, and exposure. (G1, P4, TE)

The physical overload is due to the lack of employees, and lack of materials and equipment. (G3, P2, ENF)

We lack supplies, we don't have working tools anymore, like syringes, needles, medications. (G1, P3, TE)

Physical impacts for having to work under extreme situations, like obese patients, and not having in

the hospital passersby, hoists and tools in general necessary for our physical health. A simple example is the sheets without elastic bands. (G1, P2, TE)

Faced with these conditions, nursing professionals stressed the devaluation of their work, feeling like machines or numbers, without feelings, without limits, and without humanization. One of the respondents reported that dehumanization echoed in a process of naturalization or by workers' acceptance of suffering at work. On the other hand, one of the interviewed professionals questioned about her chosen profession, especially when relating work overload to low salaries.

I work for two different companies, and one of them is very humanized, respects you as an employee, rather than as a number. In the second company, in turn, they see you as a number. (G1, P3, TE)

We are humans, not machines. It is hard not to remember the problems even while working. (G1, P2, TE)

They believe we are a machine; many times some sectors don't have teamwork, boss doesn't help, it's complicated. (G2, P3, ENF)

We don't even have a decent salary, or even health hazard bonus compensation! (G2, P5, TE)

If we were paid a decent salary so we didn't need working a double shift, we would have more time for ourselves and our family. (G2, P2, TE)

Only a functional number. And there is so much talk about humanization in nursing, but there is not the least bit of respect for the class. [...] The worst thing is that most people don't see the suffering, as I've heard countless times; they are used to it. As if we had no feelings, no limits. [...] There are times when I don't even know why I keep on working in this area... The salary isn't even worth it. (G2, P1, TE)

## COVID-19 and the pandemic of mental suffering in nursing

Nursing work in the pandemic context steps up mental suffering, as reported by all respondents. Professionals highlighted the fear of contamination, and transmitting the disease to family members, the need for social isolation, and the uncertainties in face of a new disease.

[...] psychological impact in face of diseases without prognosis, the transmission forces... Insecure to work, besides getting the disease, and even transmit it to family members. (G1, P2, TE)

[...] I feel fear, a little despair in relation to my family. I think this uncertainty that everyone has, about how each one will react to the virus, if it will be serious or mild... I am not watching television (newspapers) anymore, I don't want to see anything. (G1, P1, ENF)

*My mental health is certainly shaken. The uncertainty about a possible contamination, the fear of contaminating my family; the fear of how I will react in case of contamination [...]. (G3, P1, TE)*

*The feeling of fear, insecurity, led me to have anxiety symptoms. With the social isolation this was enhanced [...]. (G3, P2, ENF)*

*Fear is what affects me mentally. Fear of passing it on to someone in the family, the social withdrawal and not being able to see my family! (G2, P4, TE)*

According to the respondents, mental suffering was manifested through symptoms of anxiety, depression, and stress, which also generated physical changes and damage to quality of life, especially among those who already faced some emotional illness before the pandemic. There were also case reports of colleagues who required psychological and/or psychiatric support services, as well as the use of medications to cope with psychic overload during the pandemic.

*[...] the pandemic made me stop and think and feel a lot of emotional tension and stress [...]. (G3, P3, TE)*

*Anxiety causes insomnia, polyphagia or inappetence, as well as tachycardia due to tension and excess stress. (G1, P3, TE)*

*I suffer from anxiety disorder and obsessive-compulsive disorder! And with these stressful situations my conflict increases, totally reflecting on my quality of life: sleep, eating, compulsion, etc. (G1, P5, NFS)*

*[...] We now even have a psychologist to follow-up those who feel bad. (G2, P5, TE).*

*Each one that leaves due to depression, COVID or is transferred, entails a very big emotional overload on the whole team [...]. We suffer with the pain of our colleagues... Where I work many are depressed. More than half are already followed-up by a psychiatrist and are on medication. (G2, P1, TE)*

Emotional distress in the face of the death from COVID-19 of patients, friends, family members, and co-workers was also highlighted. Workers reported difficulties with emotional control, feelings of helplessness, and seeking spirituality to cope with grief.

*[...] it does affect, because we are so demanded, double work, and many deaths, one just cannot stand it. (G2, P3, ENF)*

*It affects the psychological sometimes, seeing people in states where there is not much to do. Almost every day there are some deaths, many people left there because of depression. (G2, P5, TE)*

*Unfortunately I am a professional who cannot act without getting emotionally involved, and this in times of pandemic gives me very heavy emotional overload. (G3, P1, TE)*

*I was shaken, discouraged, especially after losing a very dear person [crying]. Today I feel more at peace, because I am very attached to God; if it weren't for Him, I don't know how I would be today. (G3, P4, TE)*

*I lost my friend, who was 32 years. She was obese, and ended up getting COVID-19 in her job. What I feel is inexplicable, it seems like a powerlessness. Working is every day an encounter with death [...]. (G1, P3, TE)*

Finally, urgent changes for nursing were claimed, including the need for permanent education, adequate supply of protective equipment, free psychological support, improved team communication, reduced work hours, salary increase, vaccination for all, and, above all, greater concrete appreciation of the nursing work.

*While there is no professional appreciation, and decent wage floor, nursing will stay this way, because if there is no quality of life everyone gets sick. (G2, P1, TE)*

*[...] Most of the time we are not recognized, despite all our efforts. Many times we can't achieve our financial goals, and we find ourselves caught in this vicious wheel of overwork, fatigue, lack of recognition, and economic frustration. (G3, P1, TE)*

*I think it gets a lot better when you have proper training, and continuing education! Besides providing all the required PPE, I think it would be worth paying attention to the psychological side, offering group or individual care by psychologists and psychotherapists. (G1, P5, ENF)*

*Delivery of PPE in a proper and timely way is very important. [...] If there was a form of communication for the whole team, including coordination, it would be ideal. (G1, P2, TE)*

*We should have a reduction in the working hours, we have been denied the 30-hour [weekly shift] for a long time. (G1, P4, TE)*

*Now what I wish the most is that vaccine is available for everybody and soon. I don't see any other solution, since it reduces the chance of becoming a serious case. (G1, P3, TE)*

*Nursing was never valued and even now with COVID (when they really need us) it won't change. The situation has worsened: lack of psychological support, stress, added to low salary. The only good thing is to be able to help someone, but how much does it affect you? With the COVID-19 you have the risk of getting contaminated, contaminating your family, dying. It is very hard. (G1, P1, ENF)*

## Discussion

The interviewed nursing professionals reported the worsening of a work process historically marked by work overload, lack or inadequacy of human and material resources, and unfair devaluation

of the category, despite their efforts during the COVID-19 pandemic. Mental suffering stood out due to the risk of contamination, frequent death of patients, coworkers, and family members, and, in parallel, the increasing demands for performance and productivity. Altogether, these factors generated anxiety, depression, and stress, changes in physical health, and damage to the quality of life at work.

According to Oliveira<sup>19</sup>, the onset of the pandemic suddenly transformed the routine of the Brazilian health services, magnifying the ICUs overcrowding, increased profile of critically-ill patients, shortage of professionals, inadequate number of PPEs and, above all, the disrespect for the professionals' human limits. Injuries from wearing masks for long working hours, an image that have been widely disseminated in the media, have become a symbol of the daily suffering of health care professionals<sup>19</sup>.

Vedovato et al.<sup>20</sup> found reports of insufficient PPEs, frontline workers considered risk groups, constant fear of contamination, emotional impact in face of losses, difficulties of access to COVID-19 tests, and reports of quitting the job. Leaving the profession has become a central theme in research about nursing professionals, considering the scrapping of hospitals, low pay, double or triple work shifts, and lack of professional recognition<sup>19,21</sup>. According to recent data from the World Health Organization (WHO), there is a shortage of approximately 6 million nursing professionals in the world, a worrisome information in face of the COVID-19 pandemic and its urgency for human resources in health<sup>21</sup>.

Cofen<sup>22</sup>, after one year of the pandemic, warned about the difficulties still faced by nursing professionals, including superhuman work demands, increased occupation of beds, collapse of health services, abdication of vacations and rest, and distancing from the family. It is noteworthy that nursing staff has always worked beyond their limits due to understaffing<sup>22</sup>. This picture suggests that, even after a long period of reports of suffering at work, these professionals remain in radically precarious labor situations.

The participants of this survey also emphasized the worsening of psychic suffering in the pandemic context. A study by Li et al.<sup>23</sup> conducted in the first Asian countries affected by the pandemic identified an increase in negative emotions or states in the general population, while positive emotions and life satisfaction decreased due to concerns about individual and family health. Therefore, if the general population's mental health was directly or indirectly affected by the

onset of COVID-19, this picture proved even more critical among healthcare professionals.

A study by Lai et al.<sup>24</sup>, comprising 34 hospitals in China, found reports of symptoms of depression, anxiety, insomnia, and distress among healthcare workers. Frontline nurses and workers in Wuhan, the epicenter of the disease, reported more severe degrees on all measures of mental health symptoms compared to other healthcare workers, highlighting the suffering of nursing teams worldwide<sup>24</sup>.

Among the factors that generated mental suffering for nursing workers during the COVID-19 pandemic, research highlights the high demand for healthcare, exhaustive shifts, insufficient PPE, interpersonal conflicts within teams, the continuous risk of getting sick and contaminating family members, as well as social isolation, which weakened the support networks of these professionals<sup>25-27</sup>.

Regarding the frequent contact with the death of patients, accentuated by the pandemic, De Paula et al.<sup>28</sup> highlighted that daily changes brought about by the coronavirus, with an increase of deaths in hospitals and uncertainty about the disease development, added to restricted training on death and mourning in technical and undergraduate nursing courses, made nurses feel more vulnerable to a feeling of professional failure.

As consequences to mental health, similar to the results found in this research, previous studies showed that nursing workers in the context of COVID-19 face feelings such as fear, grief, frustration, guilt, anger, uncertainty, hopelessness, moral suffering and impotence, which were associated with depression, anxiety, burnout syndrome, changes in appetite and sleep, sedentary lifestyle, drug use, need for psychological and psychiatric support, and higher risk of developing mental disorders in the medium and long term<sup>22,26</sup>.

A feeling of ambivalence also marked the mental suffering in the nursing work, as professionals lived with tributes and applause from the population, at the same time that they experienced frequent situations of discrimination and violence<sup>25</sup>. Nursing professionals were physically and verbally assaulted for following care protocols based on scientific evidence, for delays in care due to saturation of services, or for structural weaknesses of the health apparatus, which "are due to aspects such as underfunding and management problems"<sup>29</sup>.

The persistent need to demystify fake news related to COVID-19 was also a reason for emotional exhaustion<sup>26</sup>. The fake news disseminated by unofficial sources permeated the whole pandemic time, and continue to encourage the population to

adopt inadequate treatments or underestimate the disease, increasing the transmission of the virus<sup>30</sup>. It is noteworthy that such speeches may cause damage to health professionals, whose morbidity and mortality rates from workplace-acquired COVID-19 are irreparable<sup>31</sup>.

Therefore, measures to support the mental health of nursing professionals should be promoted, such as the opening of places to rest and have meals, creation of communication channels between professionals and their families, as well as daily visits by psychologists or online care resources<sup>22,29,32</sup>. Actions to foster mental health at work should also consider the determinants of the work process and organization, instead of the mere production of individual biosafety protocols that centralize on the worker the responsibility for the risks<sup>33</sup>.

As limitations of this study, it is noteworthy that data analysis did not include a comparison between professionals from the public and private hospital network, including institutions managed by OSS. This comparison could potentially generate robust analyses about the working conditions and health of nursing professionals in the pandemic, especially regarding different forms of precariousness in different contexts. Hence the urgency for future research on this theme.

Finally, the question is: how will health professionals who are sick, devalued and lacking resources take care of a sick population in the midst of an unprecedented pandemic? Despite the methodological limits of this research, which do not allow extrapolating the results, it is clear that the humanization of nursing workers in Brazil is urgent. A unison discourse from different work contexts claims: "We are humans, not machines".

## Authors' contributions

Galon T, Navarro VL and Gonçalves AMS substantially contributed to the study design; data survey, analysis and interpretation; preparation, critical reviews and approval of the final version of this manuscript; and take full responsibility for the work performed and the content published.

## References

1. Lancet. COVID-19: protecting health-care workers. *Lancet*. 2020; 395(10228):922.
2. Semple S, Cherrie JW. Covid-19: protecting worker health. *Ann Work Expo Health*. 2020;64(5):461-4.
3. Conselho Federal de Enfermagem (BR). Mortes de enfermeiros por covid voltam a subir e batem recorde em março [Internet]. Brasília, DF: Cofen; Mar 31, 2021 [cited in May 5, 2021]. Available from: [http://www.cofen.gov.br/mortes-de-enfermeiros-por-covid-voltam-a-subir-e-batem-recorde-em-marco\\_86149.html](http://www.cofen.gov.br/mortes-de-enfermeiros-por-covid-voltam-a-subir-e-batem-recorde-em-marco_86149.html)
4. Conselho Federal de Enfermagem (BR). Brasil é o país com mais mortes de enfermeiros por Covid-19 no mundo [Internet]. Brasília, DF: Cofen; May 25, 2020 [cited on Feb. 4, 2021]. Available from: [http://www.cofen.gov.br/brasil-e-o-pais-com-mais-mortes-de-enfermeiros-por-covid-19-no-mundo-dizem-entidades\\_80181.html](http://www.cofen.gov.br/brasil-e-o-pais-com-mais-mortes-de-enfermeiros-por-covid-19-no-mundo-dizem-entidades_80181.html)

## Final considerations

The nursing professionals unveiled that the pandemic intensified a work context historically marked by work overload, shortage of human and material resources, lack of spaces for rest and meals, lack of training, sudden sector transfers, postponement of vacations, pressure for productivity, and dehumanization of work. Participants also highlighted the worsening of mental suffering, permeated by the fear of getting sick and dying, of contaminating family members, and of dealing with loss and uncertainty when faced with a new disease. Symptoms of anxiety, depression and stress, worsening of previous mental illnesses, use of medication, and the need for psychological and psychiatric care were also mentioned.

Low pay and devaluation of the category were reported as remarkable characteristics of the nursing work precariousness. It is restated that such problems are old in the profession and, even in face of the pandemic, have not been solved. These professionals remain seen as caregivers at any cost, compromising their health status in favor of assisting the population.

Therefore, effective measures to promote the health and safety of nursing professionals are urgent, including the guarantee of adequate resources for protection and assistance, decent wages, increased hiring of professionals, reduced working hours, greater investments in the healthcare sector, and appreciation of the work by the State and the society.

5. World Health Organization. Coronavirus disease (COVID-19) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health [Internet]. Geneva: WHO; 2020 [cited on Mar 5, 2021]. Available from: [https://www.who.int/docs/default-source/coronaviruse/who-rights-roles-respon-hw-covid-19.pdf?sfvrsn=bcabd401\\_0](https://www.who.int/docs/default-source/coronaviruse/who-rights-roles-respon-hw-covid-19.pdf?sfvrsn=bcabd401_0)
6. Conselho Federal de Enfermagem (BR). Recomendações gerais para organização dos serviços de saúde e preparo das equipes de enfermagem [Internet]. Brasília, DF: Cofen; 2020 [cited on Oct. 20, 2021]. Available from: [http://www.cofen.gov.br/wp-content/uploads/2020/04/cofen\\_covid-19\\_cartilha\\_v3-4.pdf](http://www.cofen.gov.br/wp-content/uploads/2020/04/cofen_covid-19_cartilha_v3-4.pdf)
7. Machado MH, Santos MR, Oliveira E, Wermelinger M, Vieira M, Lemos W, et al. Condições de trabalho da enfermagem. *Enferm Foco*. 2015;6(1/4):79-90.
8. Carvalho DP, Rocha LP, Barlem JGT, Dias JS, Schallenberger CD. Cargas de trabalho e a saúde do trabalhador de enfermagem: revisão integrativa. *Cogitare Enferm*. 2017;22(1):1-11.
9. Caram CS, Ramos FRS, Almeida NG, Brito MJM. Sofrimento moral em profissionais de saúde: retrato do ambiente de trabalho em tempos de COVID-19. *Rev Bras Enferm*. 2021;74(Supl 1):e20200653.
10. Dal’Bosco EB, Floriano LSM, Skupien SV, Arcaro G, Martins AR, Anselmo ACC. A saúde mental da enfermagem no enfrentamento da COVID-19 em um hospital universitário regional. *Rev Bras Enferm*. 2020;73(Supl 2):e20200434.
11. Conselho Federal de Enfermagem (BR). ICN solicita abordagem global para os programas de vacinação da Covid-19 [Internet]. Brasília, DF: Cofen; Feb. 12, 2021 [cited on Mar. 20, 2021]. Available from: [http://www.cofen.gov.br/icn-solicita-abordagem-global-para-os-programas-de-vacinacao-da-covid-19\\_85505.html](http://www.cofen.gov.br/icn-solicita-abordagem-global-para-os-programas-de-vacinacao-da-covid-19_85505.html)
12. Soares CB, Peduzzi M, Costa MV. Os trabalhadores de enfermagem na pandemia Covid-19 e as desigualdades sociais. *Rev Esc Enferm USP*. 2020;54:e03599.
13. Antunes R. Coronavírus: o trabalho sob fogo cruzado. São Paulo: Boitempo; 2020.
14. Vinuto J. A amostragem em bola de neve na pesquisa qualitativa: um debate em aberto. *Tematicas*. 2014;22(44):203-20.
15. Nascimento LCN, Souza TV, Oliveira ICS, Moraes JRMM, Aguiar RCB, Silva LF. Saturação teórica em pesquisa qualitativa: relato de experiência na entrevista com escolares. *Rev Bras Enferm*. 2018;71(1):243-8.
16. Flick U. Introdução à pesquisa qualitativa. 3rd ed Porto Alegre: Artmed; 2009.
17. Abreu NR, Baldanza RF, Gondim SMG. Os grupos focais on-line: das reflexões conceituais à aplicação em ambiente virtual. *Journal of Information System and Technology Management*. 2009;6(1):5-24.
18. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 14th ed. São Paulo: Hucitec; 2014.
19. Oliveira AC. Desafios da enfermagem frente ao enfrentamento da pandemia da COVID19. *REME Rev Min Enferm*. 2020;24:e-1302.
20. Vedovato TG, Andrade CB, Santos DL, Bitencourt SM, Almeida LP, Sampaio JFS. Trabalhadores(as) da saúde e a COVID-19: condições de trabalho à deriva? *Rev Bras Saude Ocup*. 2021;46:e1.
21. World Health Organization. State of the world’s nursing 2020: investing in education, jobs and leadership [Internet]. Geneva: WHO; 2020 [cited on Apr. 21, 2021]. Available from: <https://www.who.int/publications/i/item/9789240003279>
22. Conselho Federal de Enfermagem. A difícil realidade dos enfermeiros diante à pandemia [Internet]. 2021 [cited on Apr. 21, 2021]. Available from: [http://www.cofen.gov.br/a-dificil-realidade-dos-enfermeiros-diante-a-pandemia\\_85957.html](http://www.cofen.gov.br/a-dificil-realidade-dos-enfermeiros-diante-a-pandemia_85957.html)
23. Li S, Wang Y, Xue J, Zhao N, Zhu T. The impact of COVID-19 epidemic declaration on psychological consequences: a study on active weibo users. *Int J Environ Res Public Health*. 2020; 17(6):2032.
24. Lai J, Ma S, Wang Y, Cai Z, Hu J, Wei N, et al. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Netw Open*. 2020;3(3):e203976.
25. Humerez DC, Ohl RIB, Silva MCN. Saúde mental dos profissionais de enfermagem do Brasil no contexto da pandemia COVID-19: ação do Conselho Federal de Enfermagem. *Cogitare Enferm*. 2020;25:e74115.
26. Ramos-Toescher AM, Tomaschewisk-Barlem JG, Barlem ELD, Castanheira JS, Toescher RL. Saúde mental de profissionais de enfermagem durante a pandemia de COVID-19: recursos de apoio. *Esc Anna Nery Rev Enferm*. 2020;24(n esp):e20200276.
27. Duarte MLC, Silva DG, Bagatini MMC. Enfermagem e saúde mental: uma reflexão em meio à pandemia de coronavírus. *Rev Gauch Enferm*. 2021;42(n esp):e20200140.
28. De Paula GS, Gomes AMT, França LCM, Anton Neto FR, Barbosa DJ. A enfermagem frente ao processo de morte e morrer: uma reflexão em tempos de Coronavírus. *J Nurs Health*. 2020;10(n esp):e20104018.
29. Conselho Federal de Enfermagem (BR). Coren-SP repudia violência cometida contra profissional de Enfermagem [Internet]. Brasília, DF: Cofen; Jan. 28, 2021 [cited on Apr. 21, 2021] Available from: [http://www.cofen.gov.br/coren-sp-repudia-violencia-cometida-contra-profissional-de-enfermagem\\_84947.html](http://www.cofen.gov.br/coren-sp-repudia-violencia-cometida-contra-profissional-de-enfermagem_84947.html)

30. Carvalho KM, Silva CRDT, Felipe SGB, Gouveia MTO. A crença em saúde na adoção de medidas de prevenção e controle da COVID-19. *Rev Bras Enferm.* 2021;74(Supl 1):e20200576.
31. Silva FV. Enfermagem no combate à pandemia da COVID-19. *Rev Bras Enferm.* 2020;73(Supl 2):e2020sup2.
32. Chen Q, Liang M, Li Y, Guo J, Fei D, Wang L, et al. Mental health care for medical staff in China during the COVID-19 outbreak. *Lancet Psychiatry.* 2020;7(4):e15-6.
33. Jackson-Filho JM, Assunção AA, Algranti E, Garcia EG, Saito CA, Maeno M. A saúde do trabalhador e o enfrentamento da COVID-19. *Rev Bras Saude Ocup.* 2020;45:e14.