



# Ansiedade e depressão em profissionais de unidade de terapia intensiva em Manaus na pandemia de covid-19

Anxiety and depression in professionals at intensive care unit in Manaus during the covid-19 pandemic

Ansiedad y depresión en profesionales de unidad de cuidados intensivos de Manaus durante la pandemia de covid-19

Gabriele Pimentel Sinimbu<sup>1\*</sup>, Letícia Gomes Melo Cunha<sup>2</sup>, Dalila de Alcântara Martins, Alaidistania Aparecida Ferreira<sup>2</sup>

### **RESUMO**

**Objetivo:** identificar as principais variáveis sociais e sua influência na saúde mental de profissionais da saúde durante a pandemia de COVID-19. **Método:** estudo de abordagem quantitativa, realizado com profissionais que atuaram em unidade de terapia intensiva. A análise dos dados aconteceu em 3 etapas: análise descritiva, análise univariada e análise multivariada, com o programa SPSS e o nível de significância utilizado foi de 5%. **Resultados:** os profissionais tiveram amigos próximos diagnosticados com COVID-19 e alto grau de preocupação. 52,4% perderam amigos próximos e isso impactou sua saúde mental em grau moderado e alto. 85% têm medo de perder seus familiares, 95% afirmaram que não receberam auxílio psicológico entre 2020 e 2022, 25% foram afastados do trabalho por causa da saúde mental. 28,6% dos participantes apresentaram sintomas de ansiedade e 14,4% de depressão. **Conclusão:** o estudo evidenciou que houve impacto dos fatores sociais na saúde mental.

Descritores: Saúde mental; Pandemias; Covid-19; Unidades de terapia intensiva.

## **ABSTRACT**

**Objective:** to identify the main social variables and their influence on the mental health of healthcare professionals during the COVID-19 pandemic. **Method:** quantitative study, carried out with professionals who worked in an intensive care unit. Data analysis took place in 3 stages: descriptive analysis, univariate analysis and multivariate analysis, with the SPSS program and the significance level used was 5%. **Results:** professionals had close friends diagnosed with COVID-19 and a high level of concern. 52.4% lost close friends and this impacted their mental health to a moderate and high degree. 85% are afraid of losing their family members, 95% stated that they did not receive psychological help between 2020 and 2022, 25% were removed from work

<sup>&</sup>lt;sup>1</sup> Universidade Estadual do Amazonas (UEAM). Manaus - AM. \*E-mail: gabrieleufam@gmail.com

<sup>&</sup>lt;sup>2</sup> Universidade Federal do Amazonas. Manaus - AM



# Journal of Education, Environment and Health ISSN 1983-0173

because of mental health. 28.6% of participants presented symptoms of anxiety and 14.4% of depression. Conclusion: the study showed that there was an impact of social factors on mental health.

**Descriptors:** Mental health; Pandemics; Covid-19; Intensive care units.

### **RESUMEN**

Objetivo: identificar las principales variables sociales y su influencia en la salud mental de los profesionales de la salud durante la pandemia de COVID-19. **Método:** estudio cuantitativo, realizado con profesionales que actuaron en una unidad de cuidados intensivos. El análisis de los datos se realizó en 3 etapas: análisis descriptivo, análisis univariado y análisis multivariado, con el programa SPSS y el nivel de significancia utilizado fue del 5%. **Resultados:** los profesionales tenían amigos cercanos diagnosticados con COVID-19 y un alto nivel de preocupación. El 52,4% perdió amigos cercanos y esto impactó en grado moderado y alto su salud mental. El 85% tiene miedo de perder a sus familiares, el 95% afirmó que no recibió ayuda psicológica entre 2020 y 2022, el 25% fue apartado del trabajo por motivos de salud mental. El 28,6% de los participantes presentó síntomas de ansiedad y el 14,4% de depresión. **Conclusión:** el estudio demostró que hubo impacto de los factores sociales en la salud mental.

Descriptores: Salud mental; Pandemias; Covid-19; Unidades de cuidados intensivos.



### INTRODUCTION

Various factors influence the health of a population, including environmental, social, economic, cultural and biological or genetic factors. Economic factors are related to inequalities, such as material deprivation, lack of access to culture, physical activities, eating conditions, leisure and unemployment rates. 2-3-4

In relation to social factors and their impact on health, the scholar Virchow stated that the economic and social variables that impact on the population's health conditions should be the subject of investigation.5 Politics, the economy and social policies play a powerful role in shaping these variables.<sup>3,5,6</sup>

The relevance of social determinants has been demonstrated in the significant increase in research that seeks to understand the process by which social circumstances impact on the health of different populations. Health inequalities between certain populations, as well as being the result of the deprivation of certain groups, are systematic and can be avoided.<sup>3,5,7</sup>

Thus, understanding the social determinants of health makes it possible to reduce inequalities, improve health and well-being and promote development.<sup>3,8</sup>

Health and mental health are complex concepts that have been historically influenced according to socio-political contexts. The definition of these terms was often associated with specific fields of medicine but has changed in recent years due to the multidisciplinarity of these areas of knowledge. <sup>9-10</sup> Currently, it is understood that health and mental health are related to factors beyond the absence of pathological clinical manifestations and involve social, economic, cultural and environmental aspects. <sup>11</sup>

In the COVID-19 pandemic scenario, professionals who worked assisting patients who were positive or suspected of having the disease were exposed to a greater emotional burden, there was fear of the virus and its consequences, such as death, and feelings such as impotence, failure, stress and uncertainty are present in the daily lives of these professionals.<sup>12-14</sup>

A study carried out in China found that several health professionals were traumatized by the SARS epidemic and suffer from persistent psychiatric symptoms, such as post-traumatic stress.<sup>15</sup> In Brazil, double working hours, low pay for nursing professionals and workplace violence contribute to the development of stress and mental disorders, regardless of the current pandemic context<sup>16</sup>. Therefore, there is an urgent need for effective and immediate interventions to strengthen the promotion of mental health among health professionals.<sup>14,17</sup>



In the context of the COVID-19 pandemic, research has been carried out on factors related to the work environment and their impact on the mental health of health professionals. However, humans are complex beings, endowed with needs and social interactions that also affect their psychological aspects. Faced with this problem, the aim of this article was to identify the main social variables and their influence on the mental health of health professionals during the COVID-19 pandemic.

### **METHOD**

This was an epidemiological, cross-sectional study carried out in an Intensive Care Unit (ICU) of a hospital in the city of Manaus. Data was collected in June 2022. The inclusion criterion was professionals who worked in the ICU during the COVID-19 pandemic (between 2020 and 2022); professionals on leave or vacation during the data collection period were excluded from the study.

In order to characterize the professionals in terms of social variables and their relationship with mental health, a form was drawn up by the researchers with questions about age, education, marital status, religion, sexuality, gender identity, number of children, professional occupation, family income, consumption of legal drugs, questions related to their professional performance and family losses between 2020 and 2022.

The Hospital Anxiety and Depression Scale (HADS) was also used in its version translated and validated for the Portuguese language to identify possible symptoms of anxiety and depression. This instrument is easy to understand and quick to apply, as well as having a reduced number of items, consisting of 14 multiple-choice questions that address the anxiety and depression variables, with seven questions for each variable. The questions are scored from zero to three, where the highest score for each variable is 21 and the higher the score, the greater the chance of the individual showing symptoms of anxiety and/or depression.18 This study was submitted to the Research Ethics Committee and approved under Opinion No. 5.162.150 and CAAE No. 51466621.4.0000.5020. All study participants signed a Free and Informed Consent Form (FICF) in two copies, one of which was given to the participant and the other was kept by the researchers.

Based on Resolution No. 466 of December 2012 of the National Health Council, which provides for research projects with human beings, the bioethical references of autonomy, non-



maleficence, beneficence, justice and equity of the research participants were considered. Data analysis was carried out in three stages: descriptive analysis, univariate analysis and multivariate analysis, using the SPSS program version 20, with a significance level of 5%.

# **RESULTS**

The total number of professionals who took part in the survey was 21 (N). In terms of age, there was a higher percentage of people aged between 40 and 49 (35%), living in the south of the city of Manaus (30%), sharing a home with between 1 and 5 people (90%) and 33% having no children, declaring themselves to be brown (85%), female (80%), heterosexual (95%) and single (45%), having completed higher education (45%), working as a nursing technician or assistant (57.1%), having a monthly income of between R\$ 2. 200 and R\$ 3. 300 (60%), with the participant being the main breadwinner (52.4%). 200 and R\$3,300 (60%), with the participant being the main earner (52.4%). 47.6% of the people who responded to the survey said that paying expenses worries them, as there is no money left over for leisure, travel and other non-essential things.

All those interviewed said they had a Christian religion and 52.4% were able to strengthen their religious ties between 2020 and 2022. Regarding the consumption of tobacco and alcoholic beverages, 95.5% answered that they had never smoked and 42.9% consume alcoholic beverages. Regarding the use of routine medication to control chronic diseases, 71.4% answered that they do not use any medication.

Table 1 shows the losses associated with COVID-19. In relation to people close to them who were diagnosed with COVID-19, 18.8% reported that they had close friends with the disease and 12.5% had a daughter/wife/sister who tested positive for the pathology, 76.2% had a high degree of concern for these people. As for death from COVID-19, 52.4% lost close friends and this impacted their mental health to a moderate degree in 40% and to a high degree in 35% of the participants. Currently, 85% are afraid of losing their family members, 95% said that they did not receive psychological help between 2020 and 2022, 25% reported that they had to take time off work because of their mental health, 15% said that they have been thinking about changing professions since 2020 and 95% reported that their social conditions favor them continuing to work in the health field.



Table 1 - Losses associated with COVID-19. Manaus, AM, 2022.

Variable	Result from Mode (N)	Valid percentage
People close to you who have been diagnosed		
with COVID-19		
Father	6	9,4%
Mother	4	6,2%
Daughter	8	12,5%
Wife	8	12,5%
Sister	8	12,5%
Uncle	10	15,6%
Niece	6	9,4%
Granddaughter	1	1,6%
Friend	12	18,8%
Other	1	1,6%
Level of concern		
Low	0	0%
Moderate	4	1 <b>9</b> %
High	16	76,2%
Not applicable	1	4,8%
Close people who died of COVID-19		<u> </u>
Mother	1	4,8%
Sister	1	4,8%
Aunt	6	28,6%
Friend	11	52,4%
Other	2	9,5%
Impact of loss on mental health		,
Low	1	5%
Moderate	8	40%
High	7	35%
Not applicable	4	20%
Fear of losing family members		
Yes	17	85%
No	3	15%
Received psychological help during the		
pandemic		
Yes, whenever you need it	1	5%
No	19	95%
Have you had to take time off work because		
of your mental health?		
Yes	5	25%
No	15	75%
Have you thought about changing professions	-	2.12
during the COVID-19 pandemic?		
Yes, I still think	3	15%
Yes, but it passed	1	5%
No	16	80%
.10		23/0

Journal of Education, Environment and Health ISSN 1983-0173
---

Do your conditions favor you continuing to work in the health sector?		
Yes	19	95%
No	1	5%

Source: Research authors

With regard to the Hospital Anxiety and Depression Scale (HAD-A and HAD-S), according to Zigmond and Snaith's cut-off points, a score of 0 to 8 represents the absence of symptoms of anxiety or depression and a score greater than 8 is significant for the presence of symptoms of anxiety or depression. Table 2 shows the results of the scale, which indicate that 28.6% of the participants had symptoms of anxiety and 14.4% of depression.

Table 2 - Hospital Anxiety and Depression Scale. Manaus, AM, 2022.

Classification	Result from Mode	Valid Percentage
Absence of Anxiety (Score<9)	14	66,7%
Anxiety Symptom (Score>8)	6	28,6%
Absence of Depression (Score<9)	17	81%
Symptom of Depression (Score>8)	3	14,4%

Sources: Research authors

# **DISCUSSION**

# The delineation of professionals working on the front line of the COVID-19 pandemic

It is well known that the COVID-19 pandemic has had an impact on all aspects of society, and this is no different in the field of mental health, especially for frontline healthcare workers. The issue comes to the fore when reflecting on the experiences of these professionals, who are, first and foremost, human beings, suffering their own losses while caring for others at a professional level. The relentless mourning present on a daily basis, the uncertainty between life and death for patients and the fear of contamination, as well as the demands inherent to the profession, all contribute to physical, psychological and emotional exhaustion, causing sequelae that are still unknown.<sup>19</sup>

With regard to sociodemographic data, this article showed a prevalence of some variables, such as age between 30 and 49, i.e. a population with labor potential for the country, as well as females and professional nursing technicians, who made up more than half of the sample selected for the study.



With regard to family income, 60% of the interviewees reported receiving between 2 and 3 minimum wages. When asked about paying expenses, 28.6% said they were unable to cover family expenses and 47.6% said they were able to cover expenses with their salary, although the money was not enough for leisure and travel. This finding is in line with other studies on the working conditions and quality of life of health workers, especially nursing staff, and is a potential factor in mental illness in the area, given the heavy working hours, shortage of workers, which intensifies the strain, coupled with low pay, leading professionals to have more than one employment relationship. <sup>20</sup>

A study that investigated the main occupational stressors reported by nursing staff identified the following as major causes of stress in the sample: lack of patient dimensioning, human resources deficit, which generates work overload, emotional pressure, since they deal with death on a daily basis, professional devaluation and insufficient remuneration.<sup>21</sup> With the pandemic, all of these factors have been exacerbated due to the emergency situation, professionals falling ill, causing an even greater lack of manpower, more contact with death, as well as the fear of contamination, generating anxiety, stress, fear, ambivalence, depression and exhaustion among professionals.<sup>22</sup>

Another dimension assessed in this survey is religiosity and its practice during the pandemic period. All the interviewees declared themselves Christians, and when asked about the exercise of spirituality between 2020 and the present day, 38.1% said they were unable to dedicate themselves to religion due to the pandemic and 52.4% were able to strengthen their religious ties in the same period. This variable has been discussed in other studies as a resource for coping with COVID-19, both personal and collective, capable of helping individuals understand and cope with the adverse effects of the disease<sup>23</sup>. By connecting with the transcendent, meaning is generated, which helps to overcome difficulties and re-signify negative experiences, providing self-care and well-being for the health professional (HP).<sup>24</sup>

# A glimpse into the fears of health professionals linked to the pandemic

When it comes to the losses associated with COVID-19 suffered by health professionals, most of the sample had a friend or uncle tested positive for the disease, with a percentage of 18.8 and 15.6% respectively. Regarding the degree of worry, 76.2% of the interviewees showed a high level, which represents a potential stressor for them. With regard to the loss of a loved one, 52.4% of the people included in the study had lost a friend, and there were also deaths of a



mother, sister, aunt and other. The impact of this loss on the mental health of health workers was moderate to high in the majority of the sample.

Previous reflections have mentioned the damage caused to the mental health of health professionals by infectious outbreaks, given their essential role in care services. Past epidemics such as SARS, MERS and Ebola have been responsible for an increase in burnout, fatigue and high levels of stress among nurses and doctors. In addition, other psychiatric symptoms stood out among HCWs, such as anxiety, post-traumatic stress disorder, especially due to the fear of infection of family members and friends<sup>25</sup>, a result similar to that found in our study, in which 85% reported being afraid of losing a family member. It can therefore be inferred that the fear of the repercussions of the disease and, above all, the contamination of people close to them is a factor in the psychological illness of those who work on the front line of care.

The emotional and psychological strain experienced by health professionals in high-stress situations is obvious, so it is necessary to discuss their psychological support. Considering that many of these professionals are also users of the Unified Health System, a mental health support network is an essential and indispensable measure to ensure screening for depression, suicidal ideation, anxiety and post-traumatic stress, given that the negative impacts of the pandemic can last for months or years. <sup>26</sup> In our survey, only 5% of the sample said they had received psychological help whenever they needed it, which highlights the difficulty administrative and management bodies have in dealing with emergency situations that impact their employees' lives on a psychological level and the urgency of changing this scenario.

When investigating interest in changing profession during the COVID-19 outbreak, 20% of the people included in this study have thought or are still thinking about changing occupations. This reality has been seen in other parts of Brazil, and can be explained by various factors, aggravated by the pandemic. These include burnout, which was already pointed out as a factor in leaving work even before the outbreak of the disease, only intensified by the country's epidemiological situation, more sick people for an insufficient number of professionals, in addition to the aforementioned fear of infection by the Coronavirus, the loss of colleagues, victims of the disease, and precarious working conditions, in addition to physical and psychological exhaustion, leading workers to give up their jobs.<sup>27-28</sup>

The mental health of healthcare workers during the COVID-19 pandemic: Who cares for whom?



At this point, the lethality of the pandemic for the mental health of the general population is undeniable, especially for those who make up the country's and the world's health services, direct and indirect victims of the virus that is ravaging the world. With the aim of identifying the main social variables and their influence on the mental health of health professionals during the COVID-19 pandemic, this study found, using the Hospital Anxiety and Depression Scale (HAD-A and HAD-S), that 28.6% of participants showed symptoms of anxiety and 14.4% of depression.

Symptoms of anxiety, depression, stress, insomnia and substance abuse among health workers have been mentioned in national and international literature as a result of the global pandemic<sup>28</sup>. Our study did not record a statistically significant sample of tobacco users, but anxiety and depression were a problem, consistent with previous research on the subject.

Regarding gender and the correlation with mental illness, women seem to be more likely to present such symptoms, given their work responsibilities, and, during the pandemic, other concerns with children and family, which leads to a risk factor for the development of disorders.<sup>29</sup> The marital status variable also exerted an influence in studies already carried out on the mental health of the participants, with the single group, 45% of our sample, being more vulnerable to the appearance of symptoms of anxiety and depression.<sup>29</sup>

The presence of comorbidities among frontline health workers is also a stress-generating factor, given the proven evidence of the lethality of the virus in these people, so these professionals risk their own lives to care for others, which implies greater worry and fear.<sup>27</sup> Our sample consisted of 19.2% of antihypertensive users and 9.6% of blood glucose users, so they can be classified as a risk group for developing anxiety and/or depression.

Nursing professionals seem to have a greater predisposition to mental suffering, representing the majority of our sample, with depression being a highly prevalent disease in this group. One explanation for this is the enormous emotional strain inherent in the profession and the lack of professional value<sup>30</sup>, so they have been even more overburdened during the pandemic, a direct threat to their mental health.

Another variable that represents a major risk factor for mental illness among health professionals is family income: the lower the income, the greater the need for multiple jobs and the greater the workload, which has a direct impact on maintaining mental health, while income is already considered a protective factor for the onset of mental symptoms.<sup>30</sup> This information is



relevant given the findings of our research in this regard, where more than half had insufficient salaries.

Knowing the main factors that cause the psychological suffering of those who are the basis of the functioning of health services allows public and private bodies to develop prophylactic strategies that provide support and help them face emergency situations without putting their own health at risk, maintaining the integrity of the worker, as well as reducing the long-term consequences of the pandemic, such as medical error, suicidal ideation, substance abuse and the already known symptoms of anxiety and depression.<sup>31</sup>

The study has limitations, since it investigated the problem in a single health institution and with a small sample in relation to the Amazonian context, and may present biases related to these delimitations. It is therefore suggested that further research be carried out in other institutions so that the impact on professionals can be satisfactorily determined.

As a contribution to nursing practice, the study showed that nursing professionals need mental support and better income conditions, as these factors influence their social conditions.

# **CONCLUSION**

The study showed that there was an impact of various social factors on the mental health of health workers. The city of Manaus had high rates of deaths related to COVID-19 between 2020 and 2022 and health professionals had their workload increased, added to the lack of knowledge of the disease and being exposed to the risk of contamination.

The need for actions aimed at the mental support of these professionals is highlighted, with a view to reducing the risks related to psychological imbalances arising from both the work environment and the various variables mentioned in the study. The study's limitations include the fact that it was carried out in just one healthcare facility, so it is recommended that further studies be carried out to analyze the anxiety and depression profile of intensive care professionals in the aftermath of the Covid-19 pandemic.

## **ACKNOWLEDGMENTS**

Fundação de Amparo à Pesquisa do Estado do Amazonas - FAPEAM



## **REFERENCES**

- 1. George F. Sobre determinantes da saúde [Internet]. 2011 [Acesso em 17 de agosto de 2023]. Disponível em: https://www.dgs.pt/ficheiros-de-upload-2013/publicacoes-de-francisco-george-sobre-determinantes-da-saude.aspx.
- 2. Oliveira DGF. Determinantes do estado de saúde dos portugueses [Internet]. 114f. Dissertação (Mestrado em Estatística e Gestão da Informação) Instituto Superior de Estatística e Gestão da Informação, Universidade Nova de Lisboa, Lisboa, 2009 [Acesso em 17 de agosto de 2023].
- 3. Carrapato P, Correia P, Garcia B. Determinante da saúde no Brasil: a procura da equidade na saúde. Saúde e sociedade [Internet]. 2017 [Acesso em 17 de agosto de 2023] v. 26 (3), p. 676-689,
- 4. Karmakar SD, Breslin FC. The role of educational level and job characteristics on the health of young adults. Social Science & Medicine [Internet]. 2008 [Acesso em 17 de agosto de 2023] v. 66, n. 9, p. 2011-2022.
- 5. Buss PM, Pellegrini A. A saúde e seus determinantes sociais. Physis [Internet]. 2007 [Acesso em 17 de agosto de 2023], v. 17, n. 1, p. 77-93.
- 6. Krieger N. A glossary for social epidemiology. Journal of Epidemiology and Community Health, London [Internet], 2001 [Acesso em 17 de agosto de 2023], v. 55, n. 10, p. 693-700.
- 7. WHO WORLD HEALTH ORGANIZATION [Internet]. A conceptual framework for action on the social determinants of health. Geneva: WHO, 2010 [Acesso em 17 de agosto de 2023].
- 8. Carvalho AI. Determinantes sociais, econômicos e ambientais da saúde. In: Fundação Oswaldo Cruz. A saúde no Brasil em 2030: diretrizes para a prospecção estratégica do sistema de saúde brasileiro [Internet]. Rio de Janeiro: Fiocruz, 2012 [Acesso em 17 de agosto de 2023].
- 9. Rocha PR, David HMSL. Determination or determinants? A debate based on the Theory on the Social Production of Health. Rev Esc Enferm USP [Internet]. 2015 [Acesso em 17 de agosto de 2023], v. 49(1), p: 129-35.
- 10. Hunter J, et al. A positive concept of health interviews with patients and practitioners in an integrative medicine clinic. Complement Ther Clin Pract [Internet]. 2013 [Acesso em 17 de agosto de 2023], v. 18(4), p. 197-203.
- 11. Gaino LV, et al. O conceito de saúde mental para profissionais de saúde: Um estudo transversal e qualitativo. Rev. Eletrônica Saúde Mental Álcool Drog [Internet]. **2018** [Acesso em 17 de agosto de 2023], v. 14, 2, p. 108-116.



- 12. Petzold MB, Plag J, Ströhle A. Dealing with psychological distress by healthcare professionals during the COVID-19 pandemia. Nervenarzt [Internet], 2020 [Acesso em 17 de agosto de 2023], v. 91(5), p. 417-421.
- 13. Xiang YT, et al. Tribute to health workers in China: A group of respectable population during the outbreak of the COVID-19. INT. J. BIOL. SCI [Internet]. 2020 [Acesso em 17 de agosto de 2023] v. 16(10), p. 1739-1740.
- 14. Saidel MGB, et al. Intervenções em saúde mental para profissionais de saúde frente a pandemia de Coronavírus. Rev enferm UERJ [Internet]. 2020 [Acesso em 17 de agosto de 2023], v. 28, p. 1-6.
- 15. Wu KK, Chan SK, Ma TM. Posttraumatic stress after SARS. Emerging Infectious Diseases [Internet]. 2005 [Acesso em 17 de agosto de 2023], v. 11(8), p. 1297- 1300.
- 16. Fernandes MA, Soares LMD, Silva JS. Work-related mental disorders among nursing professionals: a Brazilian integrative review. Rev. Bras. Med [Internet]. 2018 [Acesso em 17 de agosto de 2023], v.16(2), p. 218-224.
- 17. Lai J, et al. Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. JAMA Netw Open [Internet]. 2020 [Acesso em 17 de agosto de 2023], v. 3(3):e203976.
- 18. Schmidt DRC, Dantas RAS, Marziale MHP. Ansiedade e depressão entre profissionais de enfermagem que atuam em blocos cirúrgicos. Rev Esc Enferm USP [Internet]. 2011 [Acesso em 17 de agosto de 2023], v. 45, p. 487-493.
- 19. Dresch LSC, et al. A saúde mental do enfermeiro frente à pandemia COVID-19. Enfermagem em Foco [Internet]. 2020 [Acesso em 17 de agosto de 2023], 11(6).
- 20. Felli V. Condições de trabalho de enfermagem e adoecimento: motivos para a redução da jornada de trabalho para 30 horas. *Enfermagem em Foco [Internet]*. 2012 [Acesso em 17 de agosto de 2023], 3(4), 178-181. doi:https://doi.org/10.21675/2357-707X.2012.v3.n4.379
- 21. Ueno LGS, et al. Estresse ocupacional: estressores referidos pela equipe de enfermagem. Rev enferm UFPE [Internet]. 2017 [Acesso em 17 de agosto de 2023], 11(4), 1632-1638.
- 22. Humerez D, Ohl R, Silva M. Saúde mental dos profissionais de enfermagem do brasil no contexto da pandemia COVID-19: ação do conselho federal de enfermagem. Cogitare Enfermagem [Internet]. 2020 [Acesso em 17 de agosto de 2023], 25. doi:http://dx.doi.org/10.5380/ce.v25i0.74115
- 23. Scorsolini FC, et al. A religiosidade/espiritualidade como recurso no enfrentamento da COVID-
- 19. Revista de Enfermagem do Centro-Oeste Mineiro [Internet]. 2020 [Acesso em 17 de agosto de 2023], 10.



# Journal of Education, Environment and Health ISSN 1983-0173

- 24. Sant'ana G, Silva CD, Vasconcelos MBA. Espiritualidade e a pandemia da COVID-19: um estudo bibliográfico. Comunicação em Ciências da Saúde [Internet]. 2020 [Acesso em 17 de agosto de 2023], 31(03), 71-77.
- 25. Ramos AMT. Saúde mental de profissionais de enfermagem durante a pandemia de COVID-19: recursos de apoio. Escola Anna Nery [Internet]. 2020 [Acesso em 17 de agosto de 2023], 24.
- 26. Dantas ESO. Saúde mental dos profissionais de saúde no Brasil no contexto da pandemia por Covid-19. Interface-Comunicação, Saúde, Educação [Internet]. 2021 [Acesso em 17 de agosto de 2023], 25.
- 27. Vedovato TG, et al. Trabalhadores (as) da saúde e a COVID-19: condições de trabalho à deriva?. Revista Brasileira de Saúde Ocupacional [Internet]. 2021 [Acesso em 17 de agosto de 2023], 46.
- 28. Teixeira CFDS, et al. A saúde dos profissionais de saúde no enfrentamento da pandemia de Covid-
- 19. Ciencia & saude coletiva [Internet]. 2020 [Acesso em 17 de agosto de 2023], 25, 3465-3474.
- 29. Guilland R, et al. Prevalência de sintomas de depressão e ansiedade em trabalhadores durante a pandemia da Covid-19. Trabalho, Educação e Saúde [Internet]. 2022 [Acesso em 17 de agosto de 2023], 20.
- 30. Santos KMRD, et al. Depressão e ansiedade em profissionais de enfermagem durante a pandemia da covid-19. Escola Anna Nery [Internet], 2021 [Acesso em 17 de agosto de 2023], 25.
- 31. Neto HPP, Moreira, SFC. O impacto da pandemia na saúde dos profissionais da saúde. In anais colóquio estadual de pesquisa multidisciplinar (issn-2527-2500) & congresso nacional de pesquisa multidisciplinar. 2022 [Acesso em 17 de agosto de 2023].