**TRIGGERING FACTORS OF DEPRESSION AND ANXIETY IN NURSING PROFESSIONALS**



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**ABSTRACT**

Anxiety and depression, a duo considered the evil of the twenty-first century, are mental disorders that are characterized by having as their main symptoms excessive worry and deep sadness for no apparent reason, respectively. Although they are different, they are commonly associated with each other, and nursing professionals are a high-risk group to develop them. This study aims to analyze factors that are associated with the prevalence of signs and symptoms of depression and anxiety in nursing professionals. This is a bibliographic review, which used the following databases: PubMed, Scielo and the Virtual Health Library (VHL). The health descriptors (DeCS) used in the survey were: "Nurse", "Depression" and "Anxiety". Articles published in the last 5 years that covered the proposed theme, in English and Portuguese, were included, in addition, the exclusion criteria were literary reviews, case reports and duplicates. The main triggers of depression and anxiety were long working hours, devaluation of the class, low wages, emotional involvement, insecurity, lack of autonomy and poor sleep quality. Thus, the results showed that there are several factors that trigger psychic problems, such as personal, emotional, environmental and work aspects. It is necessary to develop proposals aimed at: (I) the early detection of symptoms, (II) interventions that reduce the incidence of symptoms to improve this situation and (III) measures that hospitals can adopt to reduce cases of depression and anxiety.

**Keywords:** Nurses. Depression. Anxiety.

**INTRODUCTION**

Mental disorders are conceptualized as modifications in the physiological system, which compromise behavior, mood, and thoughts (FERNANDES et al., 2018). According to the World Mental Health Report released in 2022 by the World Health Organization (WHO), 1 billion people in the world live with mental illness. Of this total, it was estimated in 2019 that 31% referred to anxiety and 28.9% depression (WHO, 2022a).

Physiological anxiety is characterized by being a warning sign in times of danger, to make the person flee or fight, triggering signs of restlessness, discomfort, tension, racing heart, anguish, shortness of breath and tremors. In its pathological state, these signs occur in an excessive and intense way, without apparent reason or danger, and, in most cases, it is associated with depression (BRANDTNER; BARDAGI, 2009). Depression, on the other hand, is characterized as a state of deep sadness, irritation, disinterest, discouragement, constant tiredness, absence of energy and hope, sleep disturbances, negative thoughts and, in more serious cases, self-mutilation, and suicide (WHO, 2022a).

In 2020, there was an increase of more than 25% in prevalence rates related to such diseases, and health professionals are a high-risk group for the development of mental problems (WHO, 2022a). In the hospital area, nurses work with therapeutic action, which they apply their technical knowledge and perform subjective and complex health care for human beings. Thus, there is a high emotional involvement between the person and the health professional, in addition to the constant responsibility for the lives of the sick (DAL'BOSCO et al., 2020). Therefore, in order to work productively, a healthy state is important, as there is no way to disconnect the work activities carried out from the mental and physical health conditions of an individual (CARVALHO et al., 2019).

In this perspective, the care process is not only linked to the well-being of patients, but also to face daily scenarios of suffering, pain and death, which combined with the devaluation of the class and poor working conditions, can stimulate the development of psychiatric diseases. Studies show that some nurses have negative feelings about themselves, life, and work, as well as difficulty in family and social relationships (DUARTE et al, 2018; HUMEREZ; OHL; SILVA, 2020; CHEN, 2022).

According to this, Lincoln Gomes, alternate counselor of the Regional Nursing Council of Espírito Santo (COREN-ES), in an interview published in 2019, highlights that there are high rates of nursing professionals with depression and anxiety, "due to the characteristics of the profession and the current challenge that health services provide us and also in the face of the labor challenges that the category has faced for a long time" (COREN-ES, 2019).

In view of the importance of nurses in health care, and the risks associated with the provision of services, especially in the health area, it is necessary to better understand the pathophysiological mechanisms of these two diseases and their main triggers and consequences, both at the personal and work levels. To this end, the present study will focus on describing the factors that can influence the high incidence of signs and symptoms of anxiety and depression in nursing professionals found in the literature. Better understanding these triggers will allow the development of strategies to decrease the rates of psychiatric illness in nurses and propose better treatment and follow-up strategies.

**METHODOLOGY**

This is a literature review, which after choosing a hypothesis question, began the search for articles that meet the proposed theme, which were later selected according to the inclusion and exclusion criteria. The search for articles took place in March 2023, and the following databases were used to guide the study: National Library Of Medicine (PubMed), Virtual Health Library (BVS-BIREME) and Scientific Electronic Library Online (SciELO), and had as Health Sciences Descriptors (DeCS): "Nurses", "Depression", "Anxiety", with Boolean operator "AND".

To prepare this study, there was a previous selection of studies available in full. The inclusion criteria included articles dated 2018 to 2023, original, complete, with languages in English and Portuguese, which met the object of study of this research. For exclusion criteria, duplicates, incompletes, reviews, case reports, samples and monographs. The flow of methods for selecting the articles is outlined in Figure 1. Initially, during the selection of articles, the titles and abstracts were read in a thorough way, to refine the data that converged with the theme addressed to compose the final results.

A total of 518 articles were found in the databases, of which 244 were in the VHL, 267 in PubMed and 7 in Scielo. It had 82 duplicates, which were removed. In addition, 426 were excluded who did not meet the eligibility criteria. The final sample included 10 selected articles.

Data collection from the samples was carried out in table format, using the Microsoft Word version 2019 program. The flow of methods for selecting the articles that were included was outlined in Figure 1.

Figure 1 - Flowchart of the selection of articles in the databases.

Diagram

AI-generated content may be incorrect.

**RESULTS AND DISCUSSION**

The results obtained after analysis of the selected articles, through the inclusion and exclusion criteria for the elaboration of the sample, were presented through a table. Chart 1 consisted of 10 articles, with information such as: article number, title, author, year, database, objective and main results.

Chart 1 – Selection of the articles analyzed for the construction of this review.

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| --- | --- | --- | --- | --- |
| **Title** | **Author/Year** | **Database** | **Objective and Methodology** | **Results** |
| Factors associated with stress, anxiety and depression in nursing professionals in the hospital context. | Assis *et al.* 2022. | VHL | Analyze factors associated with stress, anxiety, and depression. | Poor sleep quality, lack of autonomy, insecurity, overload, compromised social and family environment, hostile relationship with the team, concomitant with lack of pleasure and professional satisfaction. There was a slight correlation between stress and variables of number of jobs and age. |

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| Evaluation of the relationship between religiosity, anxiety, depression and  psychological resilience in the nursing team. | Fradelos *et al*. (2020). | PubMed | To correlate religiosity, resilience and psychological well-being of these professionals. | Although religious practices are considered to protect against diseases such as depression and anxiety, religious experiences and beliefs can increase the levels of such pathologies, and no correlation was observed with the resilience of nurses. |
| Psychological Symptoms in Chinese Nurses May Be Associated  Predisposition to chronic diseases: a cross-sectional study  of suboptimal health status. | Zhu *et al*. (2020). | PubMed | To investigate the prevalence and relationship of  of chronic diseases and psychological symptoms in Chinese nurses and the  feasibility of improving health status and preventing diseases in nurses. | There was a relatively higher incidence of depression and anxiety in nurses who had chronic diseases, especially those that caused cardiovascular changes, diabetes and others. In addition, factors such as monthly income, long hours, overload, hostile and stressful work environment also contribute. |
| Sleep deprivation and autobiographical memory: evidence  of sleep-deprived nurses. | Khormizi *et al.* (2018). | PubMed | To evaluate the memory performance of well-rested nurses and those who are sleep-deprived for 8 to 12 hours working in shifts. | Considerably higher levels of depression were found in the sleep-deprived group, and much worse autobiographical memory compared to the other group. In addition, there was a difference in the specific memories remembered, and the sleep-deprived group had a higher presence of negative memories. |
| Describing the mental health status of nurses in the  British Columbia: A province-wide research study. | Havaei *et al*. (2021). | PubMed | To identify whether there is a prevalence of mental health problems among nursing professionals in  British Columbia (BC). | Symptoms of post-traumatic stress disorder and higher rates of burnout in the nursing team are correlated with the development of diseases such as depression and anxiety, in addition to the lack of psychological support and violence in the workplace of these professionals. |
| Effects of factors related to shift work  About depression and anxiety in  Nurses. | Li *et al*. (2022). | PubMed | Evaluate the effect of shift work and personal habits  on depression and anxiety among nurses. | Its main factors are sleep deprivation, use of sleeping pills, psychological stress, fatigue during work and working more than 40 hours a week. |
| Secondary traumatic stress, mental status  and work capacity in nurses -  Results of a psychological risk assessment  in a university hospital. | Bock *et al*. (2020). | PubMed | Assess the regularity of traumatic stress events and how this can mitigate nurses' psychological well-being, presenting with symptoms of anxiety and depression, as well as the ability to work. | It was analyzed that 91.2% had some secondary trauma, and 25.3% had symptoms of secondary traumatic stress. In addition, this second group had higher rates of depression and anxiety; In addition, they reported low performance, impaired work performance, emotional tension, and low social support. |
| Personality and occupational correlates  anxiety and depression in nurses:  the contribution of role conflict, self-evaluations, negative effect and bullying. | The 2022-2012 campaign has been called into question by the United States. | PubMed | To analyze the relationship between role conflict, core self-assessments, negative effect and bullying with anxiety and depression in nurses. | Factors that can influence the development of depression and anxiety in nurses are: having been bullied in the workplace, low central self-assessment, role conflicts among the team, negative affect related to pain, sadness and death of patients, conflicts in relationships with the team and high responsibility with patients. |
| Burnout, mental health, physical symptoms, and coping behaviors in health workers in Belize amid the COVID-19 pandemic: A national cross-sectional study. | Estephan *et al.* (2023). | PubMed | To analyze the incidence of *Burnout* and its associated factors in health workers in Belize, during the COVID-19 pandemic. | High prevalence of *burnout* was strongly associated with the development of anxiety and depression in health professionals, with the majority of nursing staff. |
| Burnout in doctors and nurses exposed to workplace violence: a  cross-sectional study using propensity score analysis. | Shi *et al*. (2020). | PubMed | To assess the effects of violence at work on anxiety and depression. | Professionals who suffered from physical and/or verbal violence in the workplace showed a greater tendency to develop signs and symptoms of depression, anxiety and psychological exhaustion. |

Nursing professionals are not exempt from developing mental illnesses, which can lead to psychic exhaustion, consumption of psychiatric medications, negative impacts on work performance and increased absenteeism rates. In addition, the female gender is more prone to developing psychic problems, because in addition to work activities, there are also domestic activities (SCHMOELLER et al., 2011).

There are several factors that contribute to these pathologies, which can occur either for personal reasons and/or in the work environment, such as: insecurity in performing procedures and making important decisions; deal directly with patients' pain, illnesses and death; absence of material resources and personnel, which intensifies the pace of work; perform several activities simultaneously, in addition to the complexity and responsibility in the care process (POZZEBON et al., 2016).

There is greater evidence that anxiety symptoms are more prevalent in professionals with less experience, which leads them to insecurity regarding the execution of their new duties, professional instability, lack of autonomy, low recognition of their work and conflicts with the team. On the other hand, those who had been in the service for a longer period of time showed more depressive signs, due to exhaustion, depersonalization and low personal fulfillment (OLIVEIRA; PEREIRA, 2012).

According to Pozzebon et al. (2016), nurses have intense emotional demands and are often exposed to a high degree of stress. Physical activity is positively linked to well-being, having an influence on mental health. However, 83.72% of the sample of nurses studied had a sedentary lifestyle and 70.07% did not perform any leisure activity. For the WHO (2022b), exercising prevents and controls cardiovascular diseases, diabetes, reduces symptoms of depression and anxiety, in addition to improving other health and sleep parameters.

Good sleep quality associated with good eating habits helps in an individual's cognitive, metabolic, and physical processes (HEATH; DORRIAN; COATES, 2019; PAIXÃO et al., 2021). Long-term sleep deprivation is related to the development of chronic diseases, which associated with other causes, increase tension, as well as trigger mental imbalances. Such problems can be observed in long working hours and shifts (GUIDO et al., 2011; PINHEIRO et al., 2014).

According to article 7, item XIII of the Constitution of the Republic, one should not exceed 44 hours per week worked, while the Federal Council of Nursing (COFEN) grants 40 hours, or that for every 12 hours in office, 36 hours are off (BRASIL, 1988; COFEN, 2017). The scale varies according to the institution, which can be: 6x1; 12x36; 12x60 or 24x48, if it is only one job. The availability of times that would be for rest has the opposite effect and contributes to these professionals working in more than one employment relationship, where most of the time one of these activities takes place in the night shift. With the lack of inspection for the quantity of activities, these individuals who have multiple jobs exceed the safe limit, and work up to 80 or even 120 hours a week.

Submission to excessive working hours and overtime is justified by financial need, resulting in reduced sleep, fatigue, excess demands, and exhaustion (SILVA; ROTENBERG; FISCHER, 2011). Unsatisfactory remuneration is a point that interferes with the quality of life of nurses, who, in order to have a higher income, end up exposing themselves to occupational risks, overload and psychic and physical exhaustion (CORDEIRO, 2012). To improve this situation, Law No. 14,434 came into force in 2022, which ensures the Salary Floor for nursing professionals, establishing a salary of R$4,750.00 for Nurses, 70% of this amount for Nursing Technicians and 50% for Assistants and Midwives (COFEN, 2022).

Concomitantly, nursing professionals have a high risk of suicide, as they present family and work conflicts, low pay and class recognition, hierarchical structures among professionals, in addition to refusal to recognize the presence of emotional imbalances, for fear and fear of being vulnerable (FREIRE et al., 2020). One of the hypotheses for the fact of refusal to seek psychological help is that this group understands itself as caregivers, therefore, they are reluctant to be in the role of receiving care, and exercising self-care (DUDEN et al., 2023).

On the other hand, nurses who provide services in the area of psychiatry had better mental health indices, compared to other areas (CARVALHO et al., 2019). This finding may be justified by the fact that these individuals are in an environment with less prejudice regarding emotional illness, which provides psychological security to seek help, and there is greater availability of specialized professionals, ensuring easy access. In addition, knowing warning signs in advance can produce a perception of self-assessment for early treatment.

In view of this, it is necessary to apply measures to promote better working conditions, with emotional support within the work environment, in addition to public policies to value the class, satisfactory remuneration and shorter working hours. It is opportune to provide guidance on the subject, with the intention of providing a safer means, and for institutions to adopt self-assessment tools for monitoring. Such proposals would be ways to reduce the rates of depression and anxiety, contributing to an improvement in the quality of life of nursing professionals.

**CONCLUSION**

The results of the present study indicate that social, personal, cultural, religious, emotional, environmental and work aspects influence the development of mental illnesses. Depression and anxiety have symptoms of deep sadness and excessive worry, respectively. Nursing professionals are a risk group for developing them, affecting the performance of their work activities, and causing an increase in absenteeism rates.

The lack of autonomy in their tasks was noted as triggering factors for the development of such problems in nursing professionals; insecurity; devaluation of the class; poor sleep quality, caused by night shifts; overload; violence in the workplace; high levels of stress; personal and team conflicts; presence of chronic diseases; Sedentary lifestyle; long hours; low pay; difficulties in seeking specialized treatment and others contribute to the illness of this population.

In view of this, the development of this research was extremely important to better understand the reasons that can trigger these diseases, and thus promote strategies and methods that act on modifiable factors, in addition to providing better organizational conditions and continuing education on the subject.

Therefore, it would be of great value to create a nucleus in the institutions that provides workers with psychiatric and psychological follow-up during their workday, providing guidance and support on how to better deal with situations in the work environment, as well as providing self-assessment tools in order to identify signs and symptoms of emotional imbalances early. with the objective of promoting the physical and mental well-being of these individuals, and consequently, bringing more quality to the care provided to patients.

**REFERENCES**

1. Assis, B., et al. (2022). Factors associated with stress, anxiety and depression in nursing professionals in the hospital context. Revista Brasileira de Enfermagem, 75(Supl. 3), e20210263. http://www.revenf.bvs.br/scielo.php?script=sci\_arttext&pid=S0034-71672022000500207&lng=pt&nrm=iso
2. Bock, C., et al. (2020). Estresse Traumático Secundário, Estado Mental e Capacidade para o Trabalho em Enfermeiros - Resultados de uma Avaliação de Risco Psicológico em um Hospital Universitário. Psiquiatria de Frente, 11, 298. https://pubmed.ncbi.nlm.nih.gov/32395109/
3. Brandtner, M., & Bardagi, M. (2009). Sintomatologia de depressão e ansiedade em estudantes de uma universidade privada do Rio Grande do Sul. Revista Interinstitucional de Psicologia, 2(2), 81-91. http://pepsic.bvsalud.org/scielo.php?script=sci\_arttext&pid=S1983-82202009000200004&lng=pt&nrm=iso
4. Brasil. (1998). Constituição da República Federativa do Brasil. Senado.
5. Carvalho, D. R., et al. (2019). A saúde mental dos enfermeiros: um estudo preliminar. Revista Portuguesa de Enfermagem de Saúde Mental, 21, 47-53. http://scielo.pt/scielo.php?script=sci\_arttext&pid=S1647-21602019000100007&lng=en&nrm=iso
6. Chen, S.-Y., et al. (2022). O papel mediador e moderador da resiliência psicológica entre estresse ocupacional e saúde mental de enfermeiros psiquiátricos: um estudo transversal multicêntrico. BMC Psychiatry, 22, 823. https://bmcpsychiatry.biomedcentral.com/articles/10.1186/s12888-022-04485-y#citeas
7. Cofen. (2017, Janeiro). Parecer nº 00820172017. http://www.cofen.gov.br/parecer-no-0082017cofenctln
8. Cofen. (2022, Maio). Piso salarial da enfermagem. http://www.cofen.gov.br/enfermagem-piso-salarial
9. Cordeiro, T. (2012). Qualidade de vida dos profissionais de enfermagem. Revista Brasileira de Qualidade de Vida, 4(1), 36-46. https://periodicos.utfpr.edu.br/rbqv/article/view/1079/804
10. Coren-ES. (2019, Maio). Depressão é realidade entre enfermeiros. http://www.coren-es.org.br/depressao-e-realidade-entre-enfermeiros\_20285.html
11. Dal’bosco, E. B., et al. (2020). A saúde mental da enfermagem no enfrentamento da COVID-19 em um hospital universitário regional. Revista Brasileira de Enfermagem, 73(Suppl. 2), e20200434. http://www.scielo.br/scielo.php?script=sci\_arttext&pid=S003471672020001400153&lng=en
12. Duarte, M., et al. (2018). O trabalho em emergência hospitalar: sofrimento e estratégias defensivas dos enfermeiros. Revista Gaúcha de Enfermagem, 39, e2017-0255. http://www.revenf.bvs.br/scielo.php?script=sci\_arttext&pid=S1983-14472018000100444&lng=pt&nrm=iso
13. Duden, G., et al. (2023). Saúde mental de profissionais de saúde durante a pandemia COVID-19 em curso: uma investigação comparativa do primeiro e segundo anos pandêmicos. BMJ Open, 13(3), e067244. https://pubmed.ncbi.nlm.nih.gov/36948559/
14. Estephan, L., et al. (2023). Burnout, saúde mental, sintomas físicos, e comportamentos de enfrentamento em trabalhadores de saúde em Belize em meio à pandemia COVID-19: um estudo transversal nacional. International Journal of Social Psychiatry, 69(4), 1033-1042. https://pubmed.ncbi.nlm.nih.gov/36748178/
15. Fernandes, M. A., et al. (2018). Transtornos mentais e comportamentais em trabalhadores: estudo sobre os afastamentos laborais. Revista da Escola de Enfermagem da USP, 52, e03396. https://pesquisa.bvsalud.org/portal/resource/pt/biblio-985045
16. Fradelos, E., et al. (2020). Avaliação da relação entre religiosidade, ansiedade, depressão e resiliência psicológica em trabalhadores de enfermagem. Health Psychology Research, 8(1), 8234. https://www.pagepressjournals.org/index.php/hpr/article/view/8234
17. Freire, F., et al. (2020). Factors associated with suicide risk among nurses and physicians: a cross-sectional study. Revista Brasileira de Enfermagem, 73(Suppl. 1), e20200352. https://www.scielo.br/j/reben/a/vnHK3kzz8YFqmmwhgfsj57J/?lang=en
18. Guido, L., et al. (2011). Estresse, coping e estado de saúde entre enfermeiros hospitalares. Revista da Escola de Enfermagem da USP, 45(6), 1434-1439. https://www.scielo.br/j/reeusp/a/9Vmj4CrP7kQsv5JHLNTHkCL/?lang=pt
19. Havaei, F., et al. (2021). Descrevendo o estado de saúde mental de enfermeiros na Colúmbia Britânica: um estudo de pesquisa em toda a província. Health Policy, 16(4), 31-45. https://pubmed.ncbi.nlm.nih.gov/34129477/
20. Heath, G., Dorrian, J., & Coates, A. (2019). Associações entre tipo de turno, sono, humor e dieta em um grupo de enfermeiros que trabalham por turnos. Scandinavian Journal of Work, Environment & Health, 45(4), 402-412. https://pubmed.ncbi.nlm.nih.gov/30806474/
21. Hosseini, Z., & Homayuni, A. (2022). Personalidade e correlatos ocupacionais de ansiedade e depressão em enfermeiros: a contribuição do conflito de papéis, autoavaliações centrais, afeto negativo e bullying. BMC Psychology, 10(1), 215. https://bmcpsychology.biomedcentral.com/articles/10.1186/s40359-022-00921-6
22. Humerez, D., Ohl, R. I., & Silva, M. (2020). Saúde mental dos profissionais de enfermagem do Brasil no contexto da pandemia COVID-19: ação do conselho federal de enfermagem. Cogitare Enfermagem, 25. https://revistas.ufpr.br/cogitare/article/view/74115
23. Khormizi, H., et al. (2018). Sleep-deprivation and autobiographical memory: evidence from sleep-deprived nurses. Journal of Sleep Research, 28, e12683. https://onlinelibrary.wiley.com/doi/abs/10.1111/jsr.12683
24. Li, Y., et al. (2022). Effects of factors related to shift work on depression and anxiety in nurses. Frontiers in Public Health, 10. https://www.frontiersin.org/articles/10.3389/fpubh.2022.926988/full
25. Oliveira, V., & Pereira, T. (2012). Ansiedade, depressão e burnout em enfermeiros: impacto do trabalho por turnos. Revista de Enfermagem Referência, 7, 43-54. https://rr.esenfc.pt/rr/index.php?module=rr&target=publicationDetails&pesquisa=&id\_artigo=2300&id\_revista=9&id\_edicao=46
26. OMS. (2022a, Maio). OMS divulga Informe Mundial de Saúde Mental: transformar a saúde mental para todos. Biblioteca Virtual em Saúde MS. https://bvsms.saude.gov.br/oms-divulga-informe-mundial-de-saude-mental-transformar-a-saude-mental-para-todos/
27. OMS. (2022b, Janeiro). Relatório sobre o ponto de situação global da atividade física 2022: sumário executivo. https://apps.who.int/iris/handle/10665/365405
28. Paixão, J. T., et al. (2021). Prevalência de sintomas ansiosos e depressivos em universitários da área da saúde. Enfermagem Foco, 12(4), 780-786. http://revista.cofen.gov.br/index.php/enfermagem/article/view/4595
29. Pinheiro, R., et al. (2014). Prevalência de sintomas depressivos e ansiosos em pacientes com dor crônica. Jornal Brasileiro de Psiquiatria, 63(3), 213-219. https://www.scielo.br/j/jbpsiq/a/jMfb36hvgZYkr4Y54tPv8Cc/?lang=pt
30. Pozzebon, D., et al. (2016). Relação entre estresse percebido, ansiedade, depressão e dor craniocervical em profissionais de enfermagem sob estresse no trabalho. Fisioterapia e Movimento, 29(2), 377-385. https://www.scielo.br/j/fm/a/J5vryNhQD7GgxzDX4fzzHQp/?lang=en
31. Schmoeller, R., et al. (2021). Cargas de trabalho e condições de trabalho da enfermagem: revisão integrativa. Revista Gaúcha de Enfermagem, 32(2), 368-377. https://www.scielo.br/j/rgenf/a/CbXX56XPMkbNNbPRzXvM37x/?lang=pt
32. Shi, Lei et al. Psychological depletion in physicians and nurses exposed to workplace violence: A cross-sectional study using propensity score analysis. International Journal of Nursing Studies, v. 103, p. 103493, mar. 2020. Disponível em: https://www.sciencedirect.com/science/article/abs/pii/S0020748919303001?via%3Di hub. Acesso em: 10 maio 2023.
33. Silva, Amanda; ROTENBERG, Lúcia; FISCHER, Frida. Jornadas de trabalho na enfermagem: entre necessidades individuais e condições de trabalho. Revista de Saúde Pública, v. 45, n. 6, p. 1117–1126, dez. 2011. Disponível em: https://www.scielo.br/j/rsp/a/zDTfDqPg9tKBcgXHbVrMLLk/?lang=pt. Acesso em: 4 mar. 2023.

1. Zhu, Jinxiu et al. Sintomas psicológicos em enfermeiros chineses podem estar associados à predisposição a doenças crônicas: um estudo transversal sobre o estado de saúde subótimo. EPMA Journal, v. 11, n. 4, p. 551-563, out. 2020. Disponível em: https://pubmed.ncbi.nlm.nih.gov/33078069/. Acesso em: 10 maio 2023.

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