

SLEEP CHANGES DURING THE COVID-19 PANDEMIC: IMPLICATIONS ON THE HEALTH AND WORK OF HEALTH PROFESSIONALS

CAMBIOS EN EL SUEÑO DURANTE LA PANDEMIA DE COVID-19: IMPLICACIONES EN LA SALUD Y EL TRABAJO DE LOS PROFESIONALES DE LA SALUD

ALTERAÇÕES DO SONO NA PANDEMIA COVID-19: IMPLICAÇÕES NA SAÚDE E TRABALHO DE PROFISSIONAIS DE SAÚDE

¹Ítalo Arão Pereira Ribeiro

²Ana Livia Castelo Branco de Oliveira

³Nanielle Silva Barbosa

⁴Márcia Astrês Fernandes

¹Graduate Program in Nursing at the Federal University of Piauí (PPGEnf/UFPI). Teresina, Brazil. <https://orcid.org/0000-0003-0778-1447>

²Graduate Program in Nursing at the Federal University of Piauí (PPGEnf/UFPI). Teresina, Brazil. <https://orcid.org/0000-0002-2634-0594>

³Graduate Program in Nursing at the Federal University of Piauí (PPGEnf/UFPI). Teresina, Brazil. <https://orcid.org/0000-0001-5758-2011>

⁴Graduate Program in Nursing at the Federal University of Piauí (PPGEnf/UFPI). Teresina, Brazil. <https://orcid.org/0000-0001-9781-0752>

Corresponding Author

Ítalo Arão Pereira Ribeiro

Rua São Leonardo, 2270/CEP 64073-063. Uruguai, Teresina-Piauí, Brazil. E-mail: italoaraao@hotmail.com

Support and Thanks: National Council for Scientific and Technological Development – CNPq.

Dissatisfaction with sleep has become an uncomfortable problem for different population groups in society, including health professionals¹. A satisfactory sleep, in addition to influencing the physiological processes, implies mental and emotional health. On the other hand, poor sleep quality is related to negative repercussions on workers' physical and psychosocial health².

National and international studies, in recent years, have sought to investigate the relationship between work and sleep quality among health professionals^{3,4}. These are constantly exposed to occupational hazards, especially in the midst of crisis scenarios and systemic collapse of health services, as observed in the Covid-19 pandemic. This conjuncture potentiated the stressful elements of work, culminating in poor sleep quality and triggering frank psychic illness, which in turn are associated with sleep disorders among these professionals⁵.

Sleep disorders can be characterized by low latency, efficiency and quality of sleep. It is worth highlighting some that affect Brazilian workers more frequently, such as insomnia, sleep-related breathing disorders or other causes of interrupted nighttime sleep, hypersomnia of central

origin not caused by circadian rhythm disorders, circadian rhythm disorders, parasomnias and movement disorders related to sleep⁶.

A cross-sectional study carried out in the state of Rio Grande do Sul, Brazil, identified the prevalence of sleep disorders in 72.4% of the 184 health professionals who provided care to patients with suspected or confirmed Covid-19. Corroborating the findings, research carried out in Turkey highlighted a decrease in sleep quality among health professionals in relation to the pre-pandemic period. There was a reduction in latency scores, duration, sleep efficiency, higher prevalence of sleep disorders and use of medication to sleep⁴.

It is important to consider that changes related to sleep result in an imbalance in the body's homeostasis and produce effects on the hormonal, reproductive, cognitive and psychological metabolic systems, which influences the appearance of a series of comorbidities, including changes in the Mass Index Body Weight (BMI), tendency to Obesity and increased risk of cardiovascular, gastrointestinal and endocrine diseases, such as Diabetes Mellitus (DM)².

Behavioral cognitive impacts can also be reported: fatigue, daytime sleepiness, irritability, mood swings, loss of recent memory, reduced ability to plan and execute, slow thinking, inattention and difficulty concentrating. In the long term, there are consequences such as physical vigor and decreased muscle tone, premature aging and impairment of the immune system. In addition, symptoms of anxiety, depression and stress can also be triggered^{2,8}.

It should be noted that health professionals can adopt risky behaviors as a way to alleviate the suffering caused by poor quality sleep, including the use, abuse and dependence on Psychoactive Substances (PAS), such as hypnotic drugs. All these factors contribute to loss of productivity, increase in hostile and aggressive behavior and misconduct, influencing the quality of care and patient safety⁹.

Due to the complexity of the effects caused by the poor quality of sleep on the worker's health, the possibility of underreporting of absences due to work arises, also considering the omission of services in recognizing these diagnoses. The lack of studies that identify the main sleep disorders among health professionals also contributes to the lack of evidence to guide care actions for these workers.

It is observed that at the international level there is a greater concern on the part of institutions to make integrated health promotion actions accessible to workers. Among these practices, the following stand out: safer work environments, awareness campaigns about the use of SPA, encouragement to practice physical activity and adoption of healthier eating habits, mutual support between the health team and management, adoption of Integrative practices (yoga, mindfulness, acupuncture, auriculotherapy, etc.), among others¹⁰.

Given the prerogatives presented, it is suggested to expand the scope of evidence with scientific basis and robust results that seek to identify the factors related to the occupational activity of health professionals and its reflection on the quality and satisfaction with sleep. These strategies potentially contribute to the development of an action plan in organizations that involves workers and meets their real needs, minimizing the negative effects of work on workers' health.

REFERENCES

1. Bastos J, Afonso P. O Impacto do Trabalho por Turnos no Sono e Saúde Psíquica. *Revista Portuguesa de Psiquiatria e Saúde Mental* [Internet]. 2020 [citado 2023 Mar 23];6(1): 24-30. Disponível em: <http://www.revistapsiquiatria.pt/index.php/sppsm/article/view/101/56>
2. Cattani AN, Silva RMD, Beck CLC, Miranda FMDA, Dalmolin GDL, Camponogara S. Trabalho noturno, qualidade do sono e adoecimento de trabalhadores de enfermagem. *Acta Paulista de Enfermagem* [Internet]. 2021 [citado 2023 Mar 23]; 34. Disponível em: <https://doi.org/10.37689/acta-ape/2021AO00843>
3. Maier MDR, Kanunfre CC. Impacto na saúde mental e qualidade do sono de profissionais da enfermagem durante pandemia da COVID-19. *Rev. enferm. UERJ* [Internet]. 2021 [citado 23 mar 2023]; e61806-e61806. Disponível em: <https://doi.org/10.12957/reuerj.2021.61806>
4. Bozan Ö, Atiş ŞE, Çekmen B, Şentürk M, Kalkan A. Healthcare workers' sleep quality after COVID-19 infection: A cross-sectional study. *International Journal of Clinical Practice* [Internet]. 2021 [cited 2023 Mar 23];75(11): e14772. Available from: <https://doi.org/10.1111/ijcp.14772>
5. Pappa S, Sakkas N, Sakka E. A year in review: sleep dysfunction and psychological distress in healthcare workers during the COVID-19 pandemic. *Sleep medicine* [Internet]. 2022 [cited 2023 Mar 23]; 91: 237-245. Available from: <https://doi.org/10.1016/j.sleep.2021.07.009>
6. Santana L. Distúrbios do sono em trabalhadores de enfermagem: revisão da literatura. *Revista Científica FacMais* [Internet]. 2018 [citado 2023 Mar 23]; 12(1). Disponível em: <https://revistacientifica.facmais.com.br/wp-content/uploads/2018/06/8.-DIST%C3%9ARBIOS-DO-SONO-EM-TRABALHADORES-DE-ENFERMAGEM-REVIS%C3%83O-DA-LITERATURA.pdf>
7. Oliveira Filho JRD. Alterações de sono em profissionais da saúde que prestam atendimento a pacientes com suspeita ou confirmação de Covid-19. 2021 [citado 2023 Mar 23]. Disponível em: <https://rd.uffs.edu.br/handle/prefix/6238>
8. Youssef N, Mostafa A, Ezzat R, Yosef M, El Kassas M. Mental health status of health-care professionals working in quarantine and non-quarantine Egyptian hospitals during the COVID-19 pandemic. *East Mediterr Health J.* [Internet]. 2020 [cited 2023 Mar 23];26(10):1155-1164. Available from: <https://doi.org/10.26719/emhj.20.116>
9. Stimpfel AW, Fatehi F, Kovner C. Nurses' sleep, work hours, and patient care quality, and safety. *Sleep Health* [Internet]. 2020 [cited 2023 Mar 23];6(3):314-20. Available from: <https://doi.org/10.1016/j.sleh.2019.11.001>

10. Bradley CJ, Grossman DC, Hubbard RA, Ortega NA, Curry SJ. Integrated Interventions for Improving Total Worker Health: A Panel Report From the National Institutes of Health Pathways to Prevention Workshop: Total Worker Health: What's Work Got to Do With It?. *Annals of Internal Medicine* [Internet]. 2016 [cited 2023 Mar 23];165(4): 279-283. Available from: <https://doi.org/10.7326/M16-0740>