

Sleep in pandemic times - COVID-19

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Received: 27 Sept 2020; Received in revised form: 8 Nov 2020; Accepted: 13 Nov 2020; Available online: 19 Nov 2020

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Abstract— *The effects of the pandemic on long-term mental health of the population submitted to isolation and anxiety due to the perspective of being contaminated or due to the economic distress are an emerging issue to the healthcare community to be faced in the years to come. Possible interventions to improve sleep quality during the pandemic like avoid reading or watching news regularly and, especially, before going to bed and interact positively with other household members are recommended. Further investigation of the symptoms caused by this physiological modification is necessary to handle what can be manifested by severe sleep disorders.*

Keywords— *pandemic, anxiety, COVID-19, WHO.*

I. INTRODUCTION

Corona Virus Disease (COVID-19) outbreak took place on December 2019 at Wuhan, China, and spread throughout the world, leading to declaration of a pandemic by the World Health Organization (WHO) on March 11th, 2020. Its exponential spreading is due to easy transmissibility from person to person, through respiratory droplets or contaminated objects and surfaces, allied to an incubation period that exploit the current transport globalization, which creates a true worldwide pandemic. As of November 02th, about 46 million people have been infected by the new SARS-CoV-2 worldwide, according to the WHO. COVID-19 pandemic containing measures can be extremely harmful in view of the abrupt changes that individuals have been undergone, whether in habits, behavior and even in the psychological aspect, reflected in quality of life and quality of sleep¹.

Biological clock activity requires synchronizers for the sleep-wake cycle to function effectively and provide a good sleep night and a more profitable day. Because of this, conditions such as reduced daily

exposure to light and increased exposure at night, mainly through cell phones or other screens, tend to change the rhythm of the biological clock and disrupt sleep latency, bedtime and waking and wake time^{2,3}. Psychological consequences of the pandemic caused by social isolation, excessive news spread by the media and lack of adequate medical / psychological support have influenced the quality of sleep in the population. Although they are temporary changes, if not treated in time and correctly, they can progress to long-term disorders, including sleep disorders and stress and depression⁴.

During social isolation, individuals' sleep time tends to be longer, while their quality is reduced. In addition, individuals who make use of digital media a few hours before bedtime usually sleep and wake up later, being higher this time to workers than for students. Another important fact to be reported is that individuals with lower quality of sleep have higher rates of depression, anxiety and stress, as well as a greater association between suicidal thoughts and insomnia^{3,5,6}. Insomnia and shorter sleep duration have

been more prevalent in adults with children and with reported family stress. Moreover, when compared to other occupations or individuals in total isolation, health professionals have a higher rate of poor sleep quality. The change in circadian rhythm can have several consequences, as shown in Table 1, where we list possible interventions to improve the quality of sleep in the population⁵⁻⁹.

Table 1: Consequences of changes in circadian rhythm and possible interventions to improve sleep quality during the pandemic

Consequences	Interventions
Poor sleep quality	Avoid reading or watching news regularly and, especially, before going to bed.
Insomnia	Reduce use of screens 1-2 hours before bedtime
Anxiety disorder	Set a time to sleep and wake up every day
Depressive disorder	Perform exercises
Suicidal thinking	Interact positively with other household members
Stress	Go to bed only at bedtime
Mood changes	Keep the room with low light and no noise
Posttraumatic stress disorder	Seek psychological assistance

Source: Authors themselves, 2020

II. CONCLUSION

The effects of the pandemic on the quality of sleep in the population are still matter of research, the consequences of anxiety and social isolation can have a significant negative impact on the sleep-wake cycle of individuals. Further investigation of the symptoms caused by this physiological modification is necessary to handle what can be manifested by severe sleep disorders. Population must be informed about the importance of sleep hygiene to improve the quality of life, and its importance for control of COVID-19 pandemic long-term mental health symptoms.

III. ACKNOWLEDGMENT

To the National Council for Scientific and Technological Development, to the Federal University of Alagoas, to the

Research Support Foundation of the State of Alagoas, to the Sleep Laboratory – Hipnos (Federal University of Alagoas – Campus Arapiraca) and the Cardiovascular Reactivity Laboratory (Federal University of Alagoas) for encouraging scientific research.

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