

LETTERS TO THE EDITOR

The impact of SARS-CoV-2 on sleep

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The COVID-19 pandemic not only has devastating impacts on health care and the economy, it has adversely affected the most basic aspects of life, including sleep. Over the last 2 months, we have observed concerning trends in the sleep health of our patients and suspect these trends are universal in parts of the country with similar sheltering mandates.

Significant stressors including school closures, economic insecurity, fear of death, and the psychological and physical effects of social distancing have important implications, including sleep disturbances. Difficulty falling and staying asleep has increased among our patients with and without prior history of insomnia for a variety of reasons including increased anxiety levels, caffeine use, alcohol consumption, and blue light exposure secondary to increased screen time.

In addition to insomnia, sheltering at home appears to have resulted in alterations in sleep circadian pattern, predominantly with sleep phase delays. Many patients are delaying sleep time from 10 PM to midnight and rise time from 6–7 to 8–9 AM, a disorder called delayed sleep phase syndrome. Additionally, frequency of daytime napping has increased. Once daily obligations resume, the expected impacts include difficulty falling asleep and waking up earlier, increased fatigue, and excessive daytime sleepiness.

Alcohol consumption has increased considerably based on patient reporting and spikes in alcohol sales, particularly online. Many restaurants are also offering sale of alcohol with carryout food for the first time, and bars are offering virtual happy hours.¹ Alcohol inhibits the immune response and has a proinflammatory effect,² which may increase susceptibility to COVID-19 infection and disease severity. Furthermore, alcohol worsens obstructive sleep apnea by relaxing upper airway musculature, causes sleep maintenance insomnia during the latter half of the night, and reduces rapid eye movement sleep³ with deleterious consequences.

Moreover, opioid use and overdoses have increased during sheltering. In Toronto, opioid overdose deaths, which had been declining, are at their highest since March 2019⁴ (US statistics pending) and opioid-induced sleep apnea could be a contributing factor. Moreover, patient-reported use and demand for marijuana has also increased,⁵ and according to the National Institute of Drug Abuse, marijuana and opioid use may increase vulnerability with COVID-19 infection, particularly if inhaled.⁶

Therefore, we recommend that our patients maintain consistent sleep/wake patterns, according to their usual work hours, minimize substance use including alcohol, and maintain physical activity and natural light exposure. For patients with obstructive

sleep apnea, fixed continuous positive airway pressure may not be adequate to control obstruction, which is worsened by depressants like alcohol and opiates. Additionally, given the potential to aerosolize COVID-19 through the exhalation port of the device, we recommend patients with mild, uncomplicated obstructive sleep apnea living with others refrain from use, and those with moderate or severe disease sleep in a separate bedroom from bed partners while using continuous positive airway pressure.

CITATION

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