SLEEP IN THE TIME OF COVID-19

How the pandemic is affecting individuals around the globe

Insomnia, sleep disturbances, disrupted sleeping patterns and vivid dreams have been experienced by many around the globe recently. Google searches for the term "insomnia" rocketed in 2020,¹ and a survey conducted in the United Kingdom in May 2020 found that 50% of respondents said they had suffered from disturbed sleep during "lockdown".² Those considered key workers, women, people from Black, Asian and Minority Ethnic communities and parents of young children appear to have been disproportionately affected.³ Alterations to sleeping patterns during the pandemic have the potential to affect sleeping habits long-term, making them a veritable cause for concern.¹

Why sleep patterns alter during a pandemic

Disruption to routines; later sleeping and waking times; increased use of electronics; stress, anxiety, depression; and isolation can all contribute to altered sleeping patterns.^{4,5} The term "coronasomnia" has even been coined in reference to the insomnia suffered by many as a result of the coronavirus pandemic.⁶ In April 2020, a UK study found that 38% of respondents were suffering from poorer sleep.⁷ A similar survey by the American Academy of Sleep Medicine in late 2020 found that 22% of respondents weren't sleeping as well as before the pandemic.⁸ Other studies have found that, perhaps surprisingly, some people are in fact sleeping for longer.⁹

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Some people have had their routines disrupted, with no employment to get to or morning commute to factor in to their schedule. Many of those working

from home have been finding it harder to separate professional and personal and switch off, as the two have abruptly clashed within their homes. Many of us are understandably anxious, concerned and worried about our own health

Many of us are understandably anxious, concerned, and worried about our own health and the health of our loved ones and of the global population. and the health of our loved ones and of the global population. And a vast array of financial concerns, worries about the COVID-19 vaccines, anxieties regarding the economy and fear of when the pandemic will end are all playing on our minds.^{4, 10}

A dramatic upsurge in screen usage and reduced exposure to natural light can also affect the body's ability to distinguish between day and night. Natural light and the blue light emitted from technological devices can both influence the circadian rhythm, which plays a part in sleep patterns.¹¹ The blue light can also limit melatonin production in the body; a hormone that helps us to sleep.⁴ Spending more time inside, and a vast amount of time on devices, whether for work or pleasure, can therefore have a subsequent negative effect on our ability to drift off to sleep.



The importance of sleep amid a pandemic

Sleep is an important part of health and well-being in our daily lives; and this is more relevant than ever both during and in the aftermath of a global pandemic. Regular, quality sleep promotes our body's defences and supports a strong immune system. A 2015 study found that people getting under five hours of sleep per night were 4.5 times more likely to develop a cold when exposed to rhinovirus when compared to those getting seven hours of shuteye.¹²

Regular, quality sleep promotes our body's defences and supports a strong immune system. Some studies have also concluded that a shortage of sleep can reduce the efficacy of some vaccines. A 2020 study found that poor sleep before and after receiving an influenza vaccination negatively affected the antibody responses to the vaccine.¹³

Brain function is closely associated with sleep; we are better able to think, learn, remember and make decisions when we have had sufficient sleep. Our moods are also affected; insufficient sleep can lead to low energy levels, irritability, anxiety and depression. It has also been linked to bipolar disorder and post-traumatic stress disorder (PTSD).⁴

A 2020 study found that 10% of workers returning to work after lockdown in China reported PTSD.¹⁴ With mental health suffering expected to be at a high in the coming months, the importance of sleep should not be underestimated. Furthermore, long-term sleep disruption can lead to health problems such as dementia and heart disease.¹⁵ Highlighting the importance of self-care and sleep during this period and beyond is key.⁶

Sleeping well

There may not be a miracle cure for insomnia and disrupted sleep patterns, but there are various habits that can promote a good night's sleep. Following routines, both during the day and for getting up and going to bed, help your body know what to expect. Avoiding taking naps, eating dinner too late, exercising close to bedtime, drinking too much caffeine later in the day and using the bed as a workspace can also help prepare you for a soundless sleep. Avoiding

social media sites and news outlets is also advisable, particularly if you find yourself worrying about the pandemic and its seemingly never-ending consequences.⁶

Concerns about increased substance use

With an increase in difficulty sleeping and insomnia comes an amplified risk of substance misuse. Cognitive behavioral therapy is a treatment option often recommended for insomnia. In some cases, medications, such as sedatives, antidepressants, melatonin agonist and orexin receptor antagonists, might be advised.¹⁶ Statistics



collated by Express Scripts from a month-long period in spring 2020 found that the number of prescriptions filled for anti-insomnia drugs in the U.S. rose by 14.8%. Prescriptions for anti-anxiety medications and antidepressants also followed a similar pattern.¹⁷ While medication prescribed by a doctor familiar with an individual's medical history and condition can be a recommended course of treatment, it is important to be aware of the dangers of self-medicating. Some sleeping aids can be addictive.¹⁸

Studies have found that many people have been drinking more alcohol during the pandemic. Supermarket sales are up, and it is the younger generations in particular who are drinking more.¹⁹ It can be seen as a distraction

technique and in some cases a coping mechanism. However, alcohol can lead to disjointed sleep and longer periods of being awake, as well as an increased risk of serious diseases such as liver disease, depression, breast cancer and heart attacks.^{19, 20}

Keep dreaming

Over the course of 2020, dreams made it to the news, as many of us asked ourselves why we were suddenly having such strange dreams that we could remember so vividly. The Lyon Neuroscience Research Center has highlighted a 35% surge in recall and a 15% rise in negative dreams.²¹ *The Lyon Neuroscience Research Center has highlighted a 35% surge in recall and a 15% rise in negative dreams.*²¹



A Twitter account named We Dream of Covid-19 has over 1,000 tweets to date, as people share their vivid, extraordinary dreams.²² Meanwhile, Harvard researcher Deirdre Barrett's online survey collated thousands of responses. Many tell of dreams about COVID-19 specifically, while others have shared stories of dreams about "bugs" in various forms, likely related to the connotation of a virus being a bug that can be caught.²³

Dreams are more prevalent during rapid eye movement (REM) sleep periods, something we are generally having more of due to the altered sleeping patterns we are experiencing.²⁴ In addition, increased isolation, stress, lower sleep quality, awakenings

and hidden or unprocessed emotions are all thought to play a contributing part in this recent trend.²¹ Previous episodes of dream surges and high-levels of recall include the aftermath of the 2001 attacks on New York City's World Trade Center.²⁴

The meaning of dreams isn't necessarily clear cut; and can sometimes simply indicate increased levels of stress. Dreams are generally not damaging or dangerous.¹⁵ However, bad dreams have been linked to generalized anxiety disorder among adults. Cognitive behavioral therapy as a treatment option resulted in a substantial decrease in the number of bad dreams experienced.²⁵

If dreams are indicative of increased stress levels, something understandable and common during the COVID-19 pandemic, then they can only highlight the need for more sleep and the prioritization of self-care.

Looking ahead

Improving sleeping patterns and ensuring sufficient quality sleep every night is key in protecting mental health. Sleeping problems that come about during the pandemic do have the potential to become more serious, long-term conditions.²⁶ Of particular concern is the connection between poor sleeping patterns and mental health disorders. People with PTSD and depression, among others, may be more at risk of disturbed sleep patterns.²⁶ Given findings

related to the prevalence of stress, depression and PTSD over recent months, this is something that we cannot afford to ignore.

There is a need for awareness, screening, improved habits, preventative care and treatment. As countries begin to gradually come out the other side of the deadly pandemic that has taken millions of lives, we are seeing a wave of mental health problems emerge. We as individuals and as collective populations need to prepare ourselves and become well-equipped to deal with them. Improving sleeping patterns and ensuring sufficient quality sleep every night is key in protecting mental health.



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