

- Virus

Poor sleep tied to severe COVID

Bad slumber traits associated with higher chance of hospitalization or death due to coronavirus

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Poor sleeping habits may be linked with higher risk of severe illness in patients with COVID-19, Harvard University researchers said. People who scored high on poor sleep “traits” were associated with higher odds of death or hospitalization due to the disease. Tracking sleep behavior may help identify those with increased risk for COVID-19 mortality or hospital confinement, the researchers said.

Poor sleeping habits may be linked with higher risk for severe illness in patients with COVID-19, according to Harvard University researchers.

They analyzed survey responses from more than 46,000 participants in the long-term UK Biobank study, including 8,422 who tested positive for COVID-19.

Participants had answered questions from 2006 to 2010 about sleep duration, daytime sleepiness, insomnia and body clocks. For the new study, based on their responses, the researchers assigned scores ranging from 0 to 6, with higher scores indicating multiple poor sleep “traits.”

In participants with COVID-19, poor scores were associated with higher odds of death. This was true even after researchers accounted for issues known to be risk factors for poor COVID-19 outcomes such as sleep apnea, obesity and smoking, they reported on Friday in the journal *Clinical Infectious Diseases*.

Immune system

Even people with two occasional or one frequent poor sleep trait appeared to experience higher risks for hospitalization and death, although the difference was not statistically significant and more study is needed to confirm the finding, the researchers said.

Poor sleep affects the immune system and blood clotting, both of which are key to the body’s fight against COVID-19, and “tracking sleep behavior may have importance in identifying those at increased risk for COVID-19 mortality and hospitalization,” the authors said.

Meanwhile, American and German researchers found brain inflammation and impaired “brain circuitry” in people who died of COVID-19 which looked a lot like what doctors see in the brains of people who die of neurodegenerative conditions such as Alzheimer’s disease and Parkinson’s disease.

Analyses of brain tissue from eight people who died from COVID-19 and 14 others who died from other causes showed “striking changes” in the COVID-19 patients’ brains, Stanford University researcher Tony Wyss-Coray said.

Research findings were reported on Monday in the journal Nature.

Brain tissue samples

Wyss-Coray said his team at Stanford, with colleagues at the University of Saarbruecken in Germany, analyzed thousands of genes in each of 65,309 individual cells taken from the brain tissue samples.

They found that genes involved with cognition, schizophrenia and depression were more often “turned on” in the COVID-19 patients’ brains.

“There also were signs of distress in neurons in the cerebral cortex, the brain region that plays a key role in decision-making, memory and mathematical reasoning,” the researchers said in a statement.

“These neurons ... form complex logic circuits that perform those higher brain functions.”

Wyss-Coray said his team could not find the virus itself in the brain, which suggests that “virus infection in the rest of the body could be enough to cause neurological symptoms, even in people who do not die from the disease.”

The findings, Wyss-Coray noted in a statement, “may help explain the brain fog, fatigue and other neurological and psychiatric symptoms of long COVID.”