

Study objectives To evaluate the impact of COVID-19 pandemic on sleep, anxiety, and Burnout in healthcare professionals. **Methods** A survey was distributed using social media and organizational emails to Brazilian active healthcare professionals during the COVID-19 outbreak. We explored potential associated factors including age, gender, occupation, workplace, work hours, income, previous infection with COVID-19, recent/current contact with COVID-19 patients, regional number of incident deaths due to COVID-19, anxiety, and burnout. We evaluated new-onset or previous insomnia worsening (primary outcome), sleep quality, and duration (secondary outcomes). **Results** A total of 4,384 health professionals from all regions of the country were included in the analysis (mean age: 44±12 years, 76% females, 53.8% physicians). Overall, 55.7% were assisting patients with COVID-19, and 9.2% had a previous COVID-19 infection. New-onset insomnia symptoms or previous insomnia worsening occurred in 41.4% of respondents in parallel to 13% (n=572) new pharmacological treatments for insomnia. Prevalent anxiety and burnout during the pandemic were observed in 44.2% and 21% of participants, respectively. Multivariate analyses showed that females (OR:1.756; 95% CI 1.487-2.075), weight change (decrease: OR:1.852; 95% CI 1.531-2.240; increase: OR:1.542; 95% CI 1.323-1.799), prevalent anxiety (OR:3.209; 95% CI 2.796-3.684), new-onset burnout (OR:1.986; 95% CI 1.677-2.352), family income reduction >30% (OR:1.366; 95% CI 1.140-1.636) and assisting patients with COVID-19 (OR:1.293; 95% CI 1.104-1.514) were independently associated with new-onset or worsening of previous insomnia. **Conclusions** We observed a huge burden of insomnia in healthcare professionals during the COVID-19 pandemic. In this scenario, dedicated approaches for sleep health are highly desirable.