Changes in Sleep Pattern During the COVID-19 Lockdown in Patients With Narcolepsy, Idiopathic Hypersomnia, and Restless Legs Syndrome

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Study Question
What was the effect of the extended period of home confinement due to COVID-19 on sleep symptoms and sleep patterns in patients with a chronic sleep neurologic disorder?

What Is Known and What This Paper Adds
Although a few studies reported the effect of quarantine in patients with narcolepsy and idiopathic hypersomnia (IH) (with either improvement or worsening of the symptoms), sleep patterns on weekdays and weekends before the lockdown were not assessed, and no validated measures of disease severity and quality of life (QoL) were available. No data were published in restless legs syndrome (RLS). The results of this study show that during the lockdown, patients with narcolepsy, IH, and RLS had later bedtimes, and those with narcolepsy and IH extended their sleep duration unlike patients with RLS. More than one-third had a disease worsening, but some stopped or lowered their medication. These changes were often associated with negative consequences on QoL.

Methods
With an online survey, investigators assessed the effect of the first COVID-19 lockdown in France (that lasted from March 17 to May 11, 2020) in 813 adult patients with a sleep disorder according to the Third International Classification of Sleep Disorders (299 with narcolepsy, 260 with IH, and 254 with RLS) followed up at a Reference Hospital Sleep Unit. Patients who did shift work were excluded. The survey was composed of questions related to occupations (daily activities and working status), sleep-wake habits during weekdays and weekends, perceived effect on the sleep disease, current medication intake, modification of drugs and doses, and several validated scales for sleep symptoms and the 3 different diseases (International RLS Study Group questionnaire [IRLS], Narcolepsy Severity Scale [NSS], IH Severity Scale [IHSS], Epworth Sleepiness Scale [ESS], Insomnia Severity Index [ISI], Beck Depression Inventory-II, and European QoL five-dimension scale). Participants completed the survey once, explaining that it includes questions on the prelockdown (recall of the preceding month) and the lockdown period (at the time of the study). The primary outcome of the study was changes in sleep patterns and disease severity.

Results and Study Limitations
Of the 331 responders (response rate 41%), 102 had narcolepsy, 81 IH, and 148 RLS (mean age: 40 ± 20, 35 ± 13, and 62 ± 13 years, respectively). Compared with the prelockdown period, during the lockdown, patients with narcolepsy, IH, and RLS had later bedtimes, and those with narcolepsy and IH extended their sleep duration unlike patients with RLS. More than one-third had a disease worsening, but some stopped or lowered their medication. These changes were often associated with negative consequences on QoL.

Study Funding and Competing Interests
This study did not receive targeted funding. Some authors report competing interests. Go to Neurology.org/N for full disclosures.
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