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LETTERS TO THE EDITOR

Did the COVID-19 lockdown really have no impact on young children's sleep?

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Currently available data on the COVID-19 lockdown suggest that sleep among preschoolers was not affected. In their article, "Early impact of COVID-19 lockdown on children's sleep: a four-week longitudinal study," Dellagiulia et al[1] observed a disturbance followed by stabilization. This could be an adaptation specific to the first 4 weeks of lockdown observed in 37 children 3–6 years of age. However, we do not know whether this was maintained throughout the entire lockdown period. In a retrospective study that used the Sleep Disorder Scale for Children, Di Giorgio et al[2] found no effect of the lockdown on the proportion of children 2–5 years of age with sleep disorders or on the intensity of such sleep disorders. Nevertheless, the retrospective method has its limitations, because parents completed questionnaires on their child's current and past sleep at the same time. Liu et al[3] compared the responses for children 4–6 years of age surveyed in 2018 with the responses for a sample of children surveyed during the COVID-19 lockdown and found no impact on sleep disorders. However, their samples were not paired or similar, either for bed sharing or for room sharing (which could have minimized insomnias and parasomnias), and no matching was done. Using standardized assessments of sleep disorders in a matched age-sex prepost design, we investigated whether COVID-19 increased the prevalence of sleep disorders among French young children.

As soon as the lockdown in France ended (duration: 2 months), the Sleep Disorder Scale for Children was distributed[4] to 110 French mothers for completion: these assessed the frequency of sleep disturbances in their children during the lockdown. In 2018, this same questionnaire was completed by 316 mothers. Age and sex matching of the children was undertaken, creating 92 pairs of children comparable in age (pre-COVID = 29.4 months, post-COVID = 29.6 months; $P > .1$), sex ($boys_{pre\text{-}COVID} = boys_{post\text{-}COVID} = 58\%$ boys), and room sharing/cosleeping ($n_{pre\text{-}COVID} = n_{post\text{-}COVID} = 9$).

The lockdown reduced the number [$t(182) = 2.4$, $P = .02$] and duration [$t(182) = 2.6$, $P = .01$] of naps. The length of nocturnal sleep increased from 10.3 (standard deviation = 0.9) to 10.9 hours [standard deviation = 1.5; $t(182) = -3.5$, $P < .001$], with no impact on the total duration of sleep over 24 hours [$t(182) = -0.8$; $P = .4$). The total Sleep Disorder Scale for Children score increased from 35.7 (standard deviation = 7.9) to 42.1 (standard deviation = 12.3) during the lockdown [$t(182) = -4.1$, $P > .001$]. The proportion of children scoring above the pathologic threshold (>37) increased from 40% to 62%. Difficulties initiating and maintaining sleep increased [Disorders of Initiating and Maintaining Sleep score: 15.7 vs 19.8; $t(182) = -4.3$, $P > .001$], as did the frequency of parasomnia [Parasomnias score: 6.0 vs 7.1; $t(182) = -3.0$, $P = .003$].

Using a robust methodology, these results are the first to demonstrate a significant increase in sleep disorders among young children during the lockdown. Along with Dellagiulia et al,[1] we recommend being vigilant about the sleep habits and about insomnia and parasomnia in preschoolers[5] in the event of a future pandemic lockdown.

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DISCLOSURE STATEMENT

All authors have seen and approved the manuscript. The authors report no conflicts of interest.