quality (95%CI:[0.170,1.456];p=0.014), sleepiness (95%CI[0.032,1.026];p=0.037), and weekend (but not weekday) sleep duration (95%CI:[-0.031,0.003];p=0.015). Further adjustment for education (model-2) revealed similar significant associations. Additional adjustment for BMI (model-3) revealed a change in daytime sleepiness, where no association was seen (95%CI:[-0.202,0.805];p=0.238). Regarding subscale scores, relationships were generally seen between sleep and both emotional eating and uncontrolled eating, but not cognitive restraint. However, after adjustment for BMI, there was a significant association between cognitive restraint and weekend sleep duration (95%CI:[-0.015,-0.001];p=0.030).

Conclusion: Greater insomnia, poorer sleep quality, increased daytime sleepiness and decreased weekend sleep duration were associated with eating patterns at the US Mexico border, particularly in terms of uncontrolled eating and emotional eating. This suggests possible mechanisms linking sleep and obesity in Hispanic/Latinos.

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LONGITUDINAL CHANGES IN SLEEP DURATION, TIMING, VARIABILITY, AND STAGES DURING THE COVID-19 PANDEMIC: LARGE-SCALE FITBIT DATA

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Introduction: The COVID-19 pandemic has resulted in societal-level changes to sleep and other behavioral patterns. Objective, longitudinal data would allow for a greater understanding of sleep-related changes at the population level.

Methods: N= 163,524 deidentified active Fitbit users from 6 major US cities contributed data, representing areas particularly hard-hit by the pandemic (Chicago, Houston, Los Angeles, New York, San Francisco, and Miami). Sleep variables extracted include nightly and weekly mean sleep duration and bedtime, variability (standard deviation) of sleep duration and bedtime, and estimated arousals and sleep stages. Deviation from similar timeframes in 2019 were examined. All analyses were performed in Python.

Results: These data detail how sleep duration and timing changed longitudinally, stratified by age group and gender, relative to previous years' data. Overall, 2020 represented a significant departure for all age groups and both men and women (P<0.00001). Mean sleep duration increased in nearly all groups (P<0.00001) by 5-11 minutes, compared to a mean decrease of 5-8 minutes seen over the same period in 2019. Categorically, sleep duration increased for some and decreased for others, but more extended than restricted. Sleep phase shifted later for nearly all groups (p<0.00001). Categorically, bedtime was delayed for some and advanced for others, though more delayed than advanced. Duration and bedtime variability decreased, owing largely to decreased weekday-weekend differences. WASO increased, REM% increased, and Deep% decreased. Additional analyses show stratified, longitudinal changes to sleep duration and timing mean and variability distributions by month, as well as effect sizes and correlations to other outcomes.

Conclusion: The pandemic was associated with increased sleep duration on average, in contrast to 2019 when sleep decreased. The increase was most profound among younger adults, especially women. The youngest adults also experienced the greatest bedtime delay, in line with extensive school-start-times and chronotype data. When given the opportunity, the difference between weekdays and weekends became smaller, with occupational implications. Sleep staging data showed that slightly extending sleep minimally impacted deep sleep but resulted in a proportional increase in REM. Wakefulness during the night also increased, suggesting increased arousal despite greater sleep duration.

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SLEEP DURATION, QUALITY AND TIMING DURING CONFINEMENT AMID THE COVID-19 PANDEMIC

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Introduction: As of March 2020, most U.S. states and territories issued statements advising people "stay at home" to avoid spreading the novel Coronavirus (COVID-19). This resulted in an unprecedented number of people practicing physical confinement and social distancing. This study examined self-reported changes in sleep duration, quality and timing in response to confinement and isolation.

Methods: We developed the "Anonymous Survey on Confinement during the COVID-19 Pandemic" to collect information on the American population practicing social distancing and some level of confinement. The survey collected information on demographics, duration and degree of confinement, and sleep-wake dynamics. The online survey was available for completion by any individual ≥18 years of age through the Penn Medicine Clinical Research page from May 16th to November 11th 2020. Descriptive statistics characterized the nature of confinement and non-parametric correlations evaluated the relationships between confinement and sleep-wake dynamics.

Results: N=226 participants completed the survey (n=176 female [77.8%]; n=47 male [20.8%]). The average age was 44.9±17.4 years. N=215[95.1%] reported confinement since March 2020 for an average of 89.3±41.7 days in confinement. Surveyed participants in confinement reported sleeping more than before confinement [40.0%], taking the same amount of time to fall asleep [56.6%], and felt that they were getting enough sleep [66.3%]. However, 36.3% of participants reported going to bed earlier and waking up earlier. Participants that engaged in naps prior to confinement reported taking more naps in confinement [50.8%]. Participants reported more daytime sleepiness [42.9%] and more disturbed sleep quality during confinement relative to before confinement [42.5%]. There were no significant correlations between time in confinement and sleep outcomes.

Conclusion: During the confinement amid the COVID-19 pandemic, participants responded by sleeping more and at different times, which could reflect circadian disruption of sleep. Changes in sleep amount and sleeping timing were accompanied by increased daytime sleepiness and a reduction in sleep quality. These changes may have been due to age, stressors experienced during the pandemic, social isolation, and/or a change in behavioral routines in response to changing demands and schedules. Our findings suggest that attention to changes in sleep-wake dynamics due to prolonged confinement is likely important to maintain healthy behaviors.

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RESILIENCE, SLEEP DIFFICULTIES, AND SUBJECTIVE SLEEP QUALITY DURING COVID-19

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Introduction: We have shown in a previous study that despite significant improvements in sleep patterns and sleep duration during COVID-19 in teens and young adults, only teens reported better sleep quality and satisfaction. Moreover, sleep difficulties seem to be more prominent in the older group during the pandemic, suggesting that there could be additional