Conclusion: Insomnia Disorder showed high baseline prevalence before COVID-19, followed by a striking increase in incidence in this sample of tertiary care health care workers. The effects of gender and age were similar to what has been previously published as risk factors for insomnia. The surprising finding that less time spent in direct patient care was associated with more cases of Acute Insomnia Disorder might be related to the poorly understood stresses of working from home during COVID-19.
Support (if any):

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THE IMPACT OF THE COVID-19 PANDEMIC ON NIGHTTIME ROOM ENTRIES AND SLEEP DISRUPTIONS FOR PEDIATRIC PATIENTS

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Introduction: Sleep is critical to children's health and recovery, but pediatric inpatient sleep is often disrupted by nonessential overnight interruptions. The COVID-19 pandemic necessitated social distancing policies which minimized contact with low-risk patients. These policies have the potential to decrease overnight disruptions and improve sleep for hospitalized patients.
Methods: This cohort study compared sleep disruptions for pediatric inpatients admitted prior to (Sep 2018 – Feb 2020) and during (Apr 2020 – Aug 2020) the COVID-19 pandemic at a single site, urban academic medical center. Objective disruptions were measured as room entries detected by hand hygiene sensors for occupied rooms pre-pandemic (n_average=56) and during the pandemic (n_average=48) for 69 and 154 nights, respectively. Subjective reports of overnight disruptions, sleep quantity, and caregiver mood were measured by surveys adopted from validated tools: the Karolinska Sleep Log, Potential Hospital Sleep Disruptions and Noises Questionnaire, and Visual Analog Mood Scale. Caregivers of a convenience sample of pediatric general medicine inpatients completed surveys. Caregivers pre-pandemic were surveyed in person, and during the pandemic, surveys were conducted over the phone.
Results: 293 pre-pandemic (age_patients=4.1±4.4 years) and 154 pandemic (age_patients=8.7±5.6 years) surveys were collected from caregivers. The majority (71% pre-pandemic and 52% pandemic) of the study population identified as Black/African American. Nighttime room entries initially decreased 36% (95% CI: 30%, 42%, p<0.001), then returned towards pre-pandemic levels as the COVID-19 hospital caseload decreased. Despite this, caregivers reported more disrupted patient sleep (p<0.001) due to tests (21% vs. 38%) as well as stress (30% vs. 49%), anxiety (23% vs. 41%), and pain (23% vs. 48%). Caregivers also reported children slept 61 minutes less (95% CI: 12 min, 110 min, p<0.001) and had more awakenings. Caregivers self-reported feeling more sad and weary, less calm, and worse overall (p<0.001 for all).
Conclusion: Despite fewer objective room entries, caregivers reported increased sleep disruptions and an hour less nighttime sleep with more awakenings during the pandemic for pediatric patients. Caregivers also self-reported worse mood. This highlights the importance of addressing subjective perceptions and experiences of hospitalized children and their caregivers during hospitalization.
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ADOLESCENT AND YOUNG ADULT SLEEP AND SLEEP-RELATED BEHAVIOUR CHANGE DURING THE COVID-19 PANDEMIC

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Introduction: Sleep disturbance, poor sleep quality, and dissatisfaction with sleep are common among adolescents and young adults (AYAs; e.g., Becker et al., 2018; Hicks et al., 2002; Hysing et al., 2013). Environmental and behavioural factors (e.g., early school start times, evening technology use and social pressures) are barriers to healthy sleep among AYAs that contribute to a "perfect storm" of sleep disturbance during this period (Carskadon, 2011; Crowley et al., 2018). Notwithstanding, few AYAs have access to sleep treatments. The COVID-19 pandemic lockdowns decreased academic and scheduling demands, providing an opportunity to study unconstrained AYA sleep and potentially facilitating better access to sleep interventions (Simpson & Manber, 2020). This study evaluated differences in baseline sleep and sleep-related behaviour change (i.e., how AYAs use an evidence-based app for sleep disturbance) before vs. during the lockdown.
Methods: Participants between the ages of 15 and 24 (M=20.66, SD=2.38) completed a 4-week feasibility study evaluating a free, transdiagnostic sleep self-management app (DOZE) before the lockdown ("Pre-Lockdown"; n=51) or during the lockdown ("Lockdown"; n=29). After 2 weeks of completing baseline sleep diaries, participants could set goals based on feedback and access tips, followed by 2 more weeks of completing sleep diaries.
Results: Compared to Pre-Lockdown, Lockdown demonstrated less variability in their sleep schedules (ps≤.011), less napping (p=.002), but increased time in bed (TIB; p<.001) and total wake time (p=.007). Total sleep time, lingering in bed in the morning, and sleep efficiency did not differ between groups. Relative to Pre-Lockdown, Lockdown showed a greater tendency to set goals to reduce schedule variability (p=.010) and to restrict excessive TIB (p=.005). Rates of goal setting for lingering in bed in the morning, sleepiness, naps, and sleep-interfering substance use did not differ between groups. Rates of accessing tips did not differ between groups.
Conclusion: Effects of COVID-19 lockdown on AYA sleep included less variability in their schedule and a decreased need for naps, but negative effects on TWT and TIB. As a result, AYAs set different goals during the COVID-19 lockdowns, focusing more on restricting excessive TIB than on schedule variability.
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ASSOCIATIONS BETWEEN OBJECTIVE AFTERNOON AND EVENING PHYSICAL ACTIVITY AND POLYSOMNOGRAPHIC SLEEP IN FIBROMYALGIA

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Introduction: Patients with fibromyalgia (FM) suffer from pain which limits physical activity and disrupts sleep. Research examining the relationship between pre-bedtime physical activity, pain, and objective sleep is limited. This study examined whether objectively measured activity levels (via actigraphy), pain intensity, or their interaction are associated with polysomnographic sleep outcomes and sleep architecture.
Methods: Adults with FM (n=158, Mage=52, SD=12, 93% female) completed 14 daily pain ratings, 14 days of actigraphy, and a single night of polysomnography. Activity levels (i.e., magnitude of wrist motion captured per 30 second epoch) were recorded, and average afternoon/evening activity for intervals 12:00-15:00, 15:00-18:00, and 18:00-21:00 was computed, removing days in which participants slept during these periods. Sleep architecture was quantified as the percentage of sleep time in rapid eye movement (%rem) and non-rem (i.e. %stage 1, %stage 2, and %stage 3). Multiple regressions examined