B. Clinical Sleep Science and Practice

Results: Results show that in less resilient young adults, nightmares prior to COVID-19 (β =.79, p<.001) and increase in negative emotions (β =.21, p=.033) significantly predicted nightmares during the pandemic and explained 67.0% of their variance. In resilient young adults, nightmares prior to COVID-19 (β =.56, p<.001) and gender (β =-.15, p=.04) significantly predicted nightmares during the pandemic and explained 52.0% of the variance.

Conclusion: Our results show that increase in negative emotions during the pandemic is associated with an increase in nightmares in less resilient young adults, but not in resilient young adults. Furthermore, our results show that in resilient young adults, being a woman is associated with an increase in nightmares during the pandemic. These results suggest that resilience may be a protective factor in managing the impact of negative emotions on nightmares, but only in men. **Support (if any):**

670

CHANGES IN CHILDHOOD SLEEP PATTERNS IN AN INTERVENTION STUDY PRIOR TO AND DURING COVID19 RESTRICTIONS

Jonathan Mitchell,¹ Knashawn Morales,² Ariel Williamson,³ Abigail Jawahar,⁴ Lionola Juste,⁴ Babette Zemel,⁵ David Dinges,⁶ Alexander Fiks⁵

¹University of Pennsylvania & Children's Hospital of Philadelphia, ²University of Pennsylvania, ³Children's Hospital of Philadelphia and University of Pennsylvania, ⁴Children's Hospital of Philadelphia, ⁵University of Pennsylvania & Children's Hospital of Philadelphia, ⁶University of Pennsylvania Perelman School of Medicine

Introduction: We conducted a childhood sleep promotion study between March 2019 and December 2020 in Philadelphia. COVID19 was first detected in Pennsylvania in March 2020 and non-essential services were strictly curtailed (including school closures), with easing of curtailments by the fall 2020 (including hybrid schooling in some districts). We determined if changes in sleep duration were consistent during pre-, earlier, and later COVID19 periods.

Methods: Typically developing children (9-12y) with sleep duration <8.5 hours per weeknight were enrolled. Sleep was measured using Fitbit devices during a baseline week and a 7-week intervention period. A factorial design was used to test five candidate intervention components: 1) sleep goal; 2) electronic device reduction messaging; 3) daily routine messaging; 4) child-directed financial incentive; and 5) parent-directed financial incentive. Sleep data were transmitted to a mobile health platform that automated delivery of the intervention components. We categorized participants when they completed the study: 1) Spring-Fall 2019 semesters (pre-COVID19); 2) Spring 2020 semester (started pre-COVID19, with strict restrictions impacting intervention periods); or 3) Fall 2020 semester (easing of COVID19 restrictions). Mixed effect modelling determined sleep changes.

Results: Mean age of participants was 11.6y (51% female and 29% Black participants). Pre-COVID19 (N=59), average sleep duration increased from baseline by 21 (95% CI: 10, 30) minutes per weeknight during the intervention. In spring 2020 (N=18), the average sleep duration increase was two times larger in magnitude at 41 (95% CI: 25, 59) minutes per weeknight. For fall 2020 (N=20), the average sleep duration increase was 24 (95% CI: 7, 40) minutes per weeknight. Changes in sleep timing from baseline during the intervention were consistent pre-COVID19 and in the fall 2020 (e.g., \approx 15 minutes earlier sleep onset throughout the intervention period), whereas sleep timing changes were dynamic in the spring 2020 (e.g., 41 minutes earlier for week 1, and 44 minutes later for week 7).

Conclusion: This sleep intervention demonstrated increases in sleep duration pre-COVID19, with marked duration increases and dynamic timing changes coinciding with COVID19 restrictions during earlier (Spring 2020), but not later (Fall 2020), weeks of the COVID19 pandemic in Pennsylvania.

Support (if any): K0 1 HL1 2 3 6 1 2 and CHOP

671

Social media for students sleep health promotion: A health intervention report during COVID -19

*Maria-Cecilia Lopes,*¹ *Gabriela Gutierres,*² *Henrique Salmazo*² ¹University of Sao Paulo, ²Catolic University of Brasilia

Introduction: The COVID-19 pandemic affected sleep health. Students' sleep health requires cognitive processes, mental and physical balance. We assume that the pandemic COVID-19 has modified some sleep habits by eliciting environmental and social interaction changes. According to the perspective that the students need health education interventions on sleep hygiene, we aimed to promote sleep health education based on social media in students using Instagram.

Methods: Students participated by answering an online questionnaire in Instagram platform. The sample was 300 students with internet access between two weeks of March/2020. This period refers to the second and third week of the social isolation policy enacted due COVID-19. The Snowball strategy was the dissemination method, a non-probabilistic sampling technique in which the participants invited new participants from their network of acquaintances.

Results: The valid responses were from students among 18-24 y.o. The sample was mostly female (61,7%), between 18 and 22 y.o., and they sleeped less than 8 hours. Also, 76,3% of the surveyed reported somnolence during the day, 70,2% anxiety and 87,8% worse sleep associated to stress and/or anxiety, which indicated the variables for an educational health intervention design in this context. Most of the sample did stipulate a schedule to wake up on the weekdays (96,6%), and 24,4% of the sample didn't stipulate a fixed schedule for bedtime during the weekdays. More than 150 people (53,2%) didn't make any effort to avoid screens before sleeping. The responses' distribution showed that an average number of people (73,9%) try to avoid using the bed for work or watch television, and 83,1% seek to avoid heavy foods before sleeping.

Conclusion: The Instagram profile focused on the main sleep issues seen in the survey. The posts were created using subjects about sleep process, sleep hygiene practices for students; sleep stages, function and regulation; sleep-wake circadian rhythms. The creation of the @ comodormimos profile on Instagram was based on the need for a subject understanding by the researched public. Coronavirus' pandemic increased the harmful sleep behavior of students. Further studies should be done to understand the impact of COVID-19 pandemic in the student's sleep health.

Support (if any):

672

COVID-19 ANXIETY AND SLEEP IN MIDDLE-AGED AND OLDER ADULTS: IMPACT OF AGE AND SEX

Sadhika Jagannathan,¹ Mikayla Rodgers,² Christina S. McCrae,² Mary Beth Miller,² Ashley Curtis² ¹University of Missouri-Kansas City, ²University of Missouri-Columbia

Introduction: COVID-19 is an infectious respiratory illness that was declared a pandemic in March 2020. During the course of COVID-19,