overestimate the probability of negatively valenced outcomes and underestimate the likelihood of positive outcomes. This study explores the relationship between anhedonia and sleep-related cognitions in patients with insomnia disorder.

Methods: Adults 50 years and older (N = 241) who met DSM-5 criteria for insomnia disorder were enrolled in a randomized controlled trial assessing the effectiveness of a stepped care approach to delivering Cognitive Behavioral Therapy for Insomnia. At baseline, participants completed the Dysfunctional Beliefs and Attitudes about Sleep Scale, Pre-Sleep Arousal Scale (cognitive subscale), Beliefs about Medications Questionnaire (Subscales assess the belief that hypnotics are necessary and concern regarding consequences of use), and PROMIS sleep-related impairment short form. A t-test was used to compare participants who did and did not endorse anhedonia on the Geriatric Depression Scale (GDS). We also correlated the Patient Health Questionnaire-4 (PHQ-4) anhedonia item with sleep-related cognition measures.

Results: Participants reporting anhedonia (GDS) endorsed greater dysfunctional beliefs about sleep (p < .001, d = 0.44) and sleep-related impairment (p < .01, d = 0.39). Groups did not differ significantly regarding belief in the necessity of sleep medications and concern with hypnotic use, nor in pre-sleep arousal. Higher anhedonia (PHQ-4) was correlated with more severe dysfunctional beliefs about sleep (r = .20, p < .01), belief in the necessity of hypnotics to manage sleep disturbance (r = .22, p < .001), and greater pre-sleep arousal (r = .18, p < .01).

Conclusion: Endorsement of anhedonia was associated with stronger dysfunctional beliefs about sleep in this sample of middle age and older adults with insomnia disorder. Participants reporting anhedonia also reported greater sleep-related impairment. Exploring anhedonia as a transdiagnostic symptom that influences interpretation of sleep-related difficulties may elucidate underlying mechanisms that sustain maladaptive cognitions. Prospective, multi-method studies will be essential to clarify predictive interactions between reward system dysfunction and sleep-related beliefs in those with insomnia disorder.

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0653

POOR SLEEP QUALITY IS ASSOCIATED WITH BURNOUT IN EMERGENCY MEDICINE HEALTHCARE WORKERS

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Introduction: Prolonged exposure to stressful environments is associated with adverse psychological outcomes, including sleep disturbance and burnout. Burnout rates have increased substantially during the unprecedented challenges faced by healthcare workers (HCWs) during the COVID-19 pandemic. Since burnout has been associated with significant health risk and adverse organizational outcomes, it is important to identify factors that inform preventive or therapeutic approaches to mitigate adverse outcomes in HCWs.

Methods: Participants were HCWs (physicians, nurses, advanced practice providers, technicians etc.) from 4 emergency departments in New York City who completed a cross-sectional electronic survey (completed at study enrollment between November 2020-October 2021). The Pittsburgh Sleep Quality Index (PSQI) assessed global sleep quality. The Maslach Burnout Inventory (MBI) assessed 3 burnout dimensions: emotional exhaustion (EE; feelings of being emotionally overextended and exhausted by one's work); Feelings of depersonalization (DP; unfeeling and impersonal response towards patients); and reduced personal accomplishment (PA; feelings of competence and successful achievement in one's work). Descriptive statistics were calculated and separate binary logistic regressions were used to predict poor global sleep quality (PSQI >5) from individual MBI subscales (dimensions of burnout), while controlling for age, race, ethnicity, and gender.

Results: Ninety-one participants, studied to date, were included in the analysis (51% non-Hispanic/Latino White, 63% female, mean age: 40 [SD: 9.6] y). Poor global sleep quality was reported by 68%. High EE (score >9), DP (score >6) and reduced PA (score <9) were reported by 44%, 27%, and 18% of participants, respectively. Poor global sleep quality was significantly associated with presence of elevated EE (OR: 3.04, 95% CI: 1.07-8.63, p=0.037), but not with elevated DP (OR: 1.35, 95% CI: 0.44-4.10, p=0.603) or reduced PA (OR: 3.29, 95% CI: 0.65-16.44, p=0.146).

Conclusion: During the COVID-19 pandemic, poor sleep quality was reported by the majority of participants and associated with increased burnout in HCWs. Poor global sleep appears to have the most influence on the burnout dimension EE, thus suggesting new evidence about associations between sleep and emotional regulation in HCW during the pandemic. Future trials should test whether existing (or novel) interventions can improve sleep and thereby support HCWs in high stress periods.

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0654

SLEEP, MENTAL HEALTH, AND STRESS IN COLLEGE STUDENTS: IMPACT OF COVID-19

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Introduction: The COVID-19 pandemic has had an unparalleled impact on sleep, mental health, and stress globally. This has been particularly true among college students. While Universities recognize the surge in mental health visits and high stress, few have evaluated sleep, even though poor sleep is a known contributor to poor mental health and stress.

Methods: To address this gap, data from 116 college students were examined for sleep disturbance (Pittsburgh Sleep Quality Index (PSQI)), as well as stress, depression, and anxiety scores from the Depression, Anxiety and Stress Scale (DASS-21). Data were collected between May 2020-October 2021.

Results: Participants included N = 10 (8.7%) males and 106 (91.3%) females, Mage = 23.1 (6.5) years. MPSQI scores = 7.8 (2.0) and 7.0 (3.9), for males and females, respectively. As a comparison, pre-pandemic data from 866 undergraduates from Dietch et al (2016) found a MPSQI = 5.64 (SD = 2.79). Examination of individual components indicate that MTST = 7.06 (1.65) hours, with a range of 1-12. Average bedtime = 10:25PM (44.0 minutes) with a range between 9:00PM-5:00AM, and average waketime = 7:45AM (.09 minutes) with a range between 4:30AM – 2:00PM. SOL was high with 48 (41.0%) indicating an average of 16-30 minutes and 41.8% reporting 31+ minutes. Sixty-seven (57.3%) indicated that they had fairly bad or a very

bad time initiating sleep in the past month, while 54 (46.2%) reported difficulty staying asleep at least 2x/week. Medication use at least 3x/week was noted in 20 (17.1%) of the sample and 50 (42.7%) stated that keeping up their enthusiasm was somewhat or a big problem. MDASS-21 scores indicate that this sample was in the moderate to severe range for Depression =14.9 (11.4), Anxiety = 12.9 (10.0), and Stress = 19.1 (9.8). As a comparison, Kia-Keating et al., (2018) assessed 1400+ undergraduates and reported depression (M = 4.1, SD = 4.3), anxiety (M = 3.9, SD = 3.6), and stress (M = 6.0, SD = 4.1).

Conclusion: Regrettably, undergraduates are experiencing "long-haul' impacts on sleep, mental health, and stress. Recognition of the enduring struggles is critical if we intend to mitigate a major health crisis among college students.

Support (If Any):

0655

THE IMPACT OF SLOW-WAVE SLEEP DISRUPTION ON RESPONSE INHIBITION IN INDIVIDUALS WITH DEPRESSION

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Introduction: Individuals with Major Depressive Disorder (MDD) exhibit reductions in slow-wave sleep (SWS) and impairments in neuroplasticity. For example, decreased executive functioning, including poorer response inhibition compared to healthy controls, has been reported. SWS has been implicated in the homeostatic regulation of neuroplasticity, however it is unclear if the cognitive deficits seen in MDD are directly associated with SWS. In this study, we aimed to examine if disrupting SWS, thereby altering neuroplasticity, could improve response inhibition in patients with MDD.

Methods: Participants in this study (n=29) included 19 individuals with depression and 10 healthy controls. Data were collected after two overnight sleep studies separated by one week. During one of the two nights, participants' slow-wave sleep was disrupted via auditory tones. In the morning following each night, participants completed a neurocognitive task battery including an auditory Go/No-Go task. Accuracy scores were calculated as the percentage of trials on which the participant responded correctly to the "Go" or "No-Go" stimulus. Repeated measures ANOVA and paired t-tests were then performed to examine changes from baseline to SWD, assessing the role of SWD on response inhibition.

Results: Following SWD, depressed participants' performance on the Go/No-Go task was significantly more accurate (t=-2.067, p=.027) than following baseline sleep, while healthy controls showed no significant change between nights (t=-.231, p=.411). The interaction between group (MDD vs. healthy control) and condition (baseline vs. SWD) did not reach statistical significance (p=.175).

Conclusion: In a sample of individuals with depression, accuracy on the Go/No-Go task improved significantly after undergoing SWD compared to following baseline sleep, indicating improved response inhibition. However, healthy controls did not exhibit this same improvement in accuracy. These findings highlight a possible disparity in the role that SWS plays in the regulation of neuroplasticity in those with depression and those without.

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0656

DEMOGRAPHIC AND CLINICAL FEATURES OF NOCTURNAL SUICIDE

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Introduction: The risk for suicide is greatest at night after adjusting for population wakefulness, possibly due to sleep- and circadian-dependent changes in neurophysiology to promote sleep. Those who die by suicide at night, however, may differ by demographic and/or clinical characteristics from those who die by suicide during the day.

Methods: An archival analysis of the National Violent Death Reporting System for 2003-2017 identified 77,784 suicide deaths with time of fatal injury. Cases were divided into daytime (5AM to 10:59PM) or nighttime (11PM to 4:59AM) and characterized by age, sex, race, ethnicity, marital status, military service, education, prior diagnosis of an anxiety disorder, bipolar disorder, depression, history of suicidal ideation, PTSD, and schizophrenia, as well as the presence of an opiate or cannabis, and blood alcohol level (BAL) on autopsy. Bidirectional stepwise regression and robust Poisson models characterized significant predictors of nocturnal suicide using incident risk ratios (IRR).

Results: Nocturnal and daytime suicides differed on all sociodemographic variables. Nocturnal suicides were more prevalent among those with bipolar disorder, PTSD, an elevated BAL, and those who tested positive for cannabis. Stepwise models identified a significant age by BAL interaction. Using adults 35-64 with BAL=0mg/dl as the reference, adults 35-64 with a BAL<80mg/dl had a 46% greater risk of suicide at night, and those with a BAL≥80mg/dl had a 78% greater risk. Individuals 15-34 had a nighttime suicide that was 26% greater with BAL=0mg/dl, 84% greater with BAL<80mg/dl, and 298% greater with BAL≥80mg/dl. Conversely, individuals 65 and older were 27% less likely to die at night with BAL=0mg/dl, while those with a BAL>0mg/dl did not differ from those aged 35-64 with BAL=0mg/dl. The risk of nocturnal suicide was also 17% greater among those with a prior history of suicidal ideation, and 13% less likely among those with documented depression.

Conclusion: Nocturnal suicide is more prevalent among intoxicated younger adults and those with previous suicidal ideation. However, suicide victims with depression were less likely to die at night. Further research is needed to target suicide prevention efforts at appropriately times for those with mood, substance, and alcohol use disorders.

Support (If Any):