

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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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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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, Mean = 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