B. Clinical Sleep Science and Practice

significantly associated with impaired mood (TMD and subscales) or PAID. However, ESS was statistically significant in predicting greater TMD (β =.310, p <.001), mood subscales (all p-values <.05) and PAID (β =.222, p <.001).

Conclusion: Daytime sleepiness, not late sleep timing, is a significant sleep-related symptom for increased mood impairment and diabetes-related distress in persons with T2D.

Support (if any):

662

PAP THERAPY: A REVIEW OF RESOURCES FOR THE UNINSURED DURING COVID-19

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Introduction: In 2019, the United States Census estimated 8% (26.1 million) people were without health insurance. Further, an estimated 3.5 million people became/remained uninsured from COVID-19-related job losses. Patients with OSA that belong to a lower socioeconomic status (SES) are less likely to have access to healthcare and may be under or uninsured. Untreated OSA can lead to increased risk of symptoms and associated co-morbidities. Resources to help the uninsured to obtain PAP therapy were available pre-COVID, including two main sources, American Sleep Apnea Association (ASAA) and our local branch serving central Ohio, The Breathing Association. However, the COVID pandemic limited access or closed these programs. Our Sleep Medicine clinics saw 148 uninsured OSA patients between March-December, 2020. Given these difficulties, we re-evaluated available resources for the uninsured.

Methods: We conducted a search for current low cost (\$100 or less) PAP therapy options for the uninsured, March 15, 2020-December 3, 2020, by: (1) contacting pre-COVID-19 resources, including Durable Medical Equipment (DME) providers, (2) consulting social work, and (3) completing a librarian assisted web-search not limited to PubMed, Embase, CINAHL for academic related articles and electronic searches using a combination of English complete word and common keywords: OSA, PAP, uninsured, no insurance, cheap, medically uninsured, resources, self-pay, low-income, financial assistance, US. Resources such as private sellers were not investigated.

Results: During COVID-19, assistance for PAP machines/supplies have closed or required a protracted wait-time. Options including refurbished items range from low, one-time fixed cost or incomebased discounts from: one local charity (Joint Organization for Inner-City Needs) and DME (Dasco), and four national entities (ASAA, Second Wind CPAP, Reggie White Foundation, CPAP Liquidators). An Electronic Health Record-based tool was developed and distributed to increase provider awareness of pandemic available resources.

Conclusion: Untreated OSA is associated with increased risk of cardiovascular co-morbidities. Access and cost may limit treatment in OSA patients from a lower SES. The COVID-19 pandemic has shuttered programs providing discount PAP and supplies, leaving fewer resources for these patients, thus further widening this health care disparity. Alternatives are needed and current resources are not easily accessible for providers and patients. **Support (if any):**

663

IMPROVED SLEEP AFTER A BRIEF INTERVENTION FOR INSOMNIA MEDIATES IMPROVEMENTS IN DEPRESSION SYMPTOMS DURING THE COVID-19 PANDEMIC

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Introduction: The COVID-19 Pandemic and mitigation efforts have led to drastic increases in acute insomnia symptoms, which left untreated may contribute to increased risk for other negative mental health outcomes, including depression. However, the impact of treating acute insomnia symptoms on future depression outcomes remains unknown. Moreover, whether sleep improvements as a result of an insomnia treatment mediate subsequent reduction of depression symptoms similarly remains unknown.

Methods: At this writing, 44 individuals experiencing insomnia symptoms (Insomnia Severity Index; ISI \geq 10) that began during the COVID-19 pandemic have been randomized to receive a brief, telehealth Cognitive Behavioral Therapy for Insomnia (CBTI) waitlist control. Treatment was delivered in 4 sessions over a 5-week period. CBTI is the gold-standard behavioral intervention for chronic insomnia and has been applied successfully via telemedicine. Outcome measures were depressive symptoms as measured by the Patient Health Questionnare-9 (PHQ-9) minus the sleep item and insomnia symptom severity as measured by the ISI. Both outcome measures were collected at baseline (week 0), throughout treatment phase (weeks 2–6), and at the post-treatment (week 7). Linear mixed models determined the impact of treatment on depression and insomnia symptom severity. Mediation was tested using the MacArthur framework.

Results: There was a significant Group x Time interaction, with CBTI leading to a greater rate of improvement in ISI (b = -1.14, p < 0.001) and PHQ-9 (b = -0.61, p = 0.002) than the control. Critically, the rate of improvement in insomnia symptoms to the last session of treatment, was associated with the subsequent improvement in depressive symptoms post-treatment (b = 2.06, p = 0.017). In contrast, depressive symptom improvement was not associated with insomnia symptom improvement (b = 4.28, p = 0.102).

Conclusion: This preliminary data suggests that brief CBTI can reduce pandemic onset insomnia and other depressive symptoms. The preliminary mediation results further suggest that sleep may be an important treatment target for reducing situational depressive symptoms and supports the need to examine the physiological mechanisms of sleep using high-density EEG in a larger sample. **Support (if any):**

664

CHARACTERISTICS OF RESPONDENTS TO A VIRTUAL TRIAL OF A DIGITAL BEHAVIORAL TREATMENT FOR INSOMNIA DURING THE COVID-19 PANDEMIC

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Introduction: Rates of sleep disturbance and sleep medication use have increased during the COVID-19 pandemic, at a time when face-to-face delivery of behavioral insomnia treatments is severely limited. To support research during the pandemic, the FDA released guidelines promoting the use of "alternative methods" to conduct trials in a virtual or decentralized manner. Currently, few data exist regarding the impact of virtual trial enrollment during a pandemic. This