difference at post (t=-1.43, df=46, p=.159, Cohen's d=-.35), but a difference at follow-up (t=-3.11, df=46, p=.003, Cohen's d=-.67) favoring the HW group, although about 50% were lost to follow-up on this item. For the VR-36 Mental Component Scale, there was no significant group difference at either timepoint (t=.20, df=46, p=.841, Cohen's d=.05; t=.77, df=46, p=.444, Cohen's d=.26).

Conclusion: At both post and follow-up, the CBT-I group surpassed estimated thresholds for clinically important improvements in both insomnia severity and sleep-related functioning, whereas HW did not. CBT-I for psychosis should be investigated with a larger, fully-powered randomized controlled trial, using sleep-specific functioning outcome measures.

0680

NOCTURNAL WAKEFULNESS AND SUICIDE RISK IN THE AUSTRALIAN POPULATION

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Introduction: Temporal patterns for suicide over a 24-hour period have shown mixed results among prior studies. However, analyses of 24-hour temporal patterns for wakeful actions including suicidal behavior, should adjust for expected sleep requirements that inherently skew such activities to conventional wakeful times. This study analysed the time-of-day for suicide cases from the Australian population for the year 2017, adjusting for expected sleep patterns. Identification of time-of-day trends using this methodology may reveal risk factors for suicide and potentially modifiable contributors.

Methods: The Australian Coronal database was accessed and data for suicide deaths were extracted for the most recent completed year, 2017. Time of suicidal action is frequently unable to be pinpointed and for this analysis an estimation was performed from time last seen alive and time found subsequently using data extracted from police and coronial reports. Time of suicide was allocated to one of four 6-hourly time bins across 24 hours from the mid position of time last seen alive and time found subsequently. Cases were excluded if allocation to a time bin was not able to be confidently determined if time last seen and time found crossed both boundaries for a given time bin. Prevalence of suicide for each time bin was adjusted for the likelihood of being awake for each bin according to sleep-wake norms published in 2020 from a large Australian community survey of 1966 subjects. Observed prevalence of suicide were compared to expected values predicted from likelihood of being awake across each time bin calculated as a standardised incidence ratio (SIR).

Results: For year 2017 there were 2208 suicides for which 1407 were able to be allocated into one of four 6-hourly time bins. Reasons for exclusion were cases for which allocaton into a time bin was not able to be performed. When adjusted for the likelihood of being awake based from population norms, cases were significantly more likely to enact suicide between the hours of 2301-0500 than predicted (SIR 3.93, P< 0.001). Furthermore, there was a lower-than expected rate of suicide

for the time bins, 1101-1700 (SIR 0.86, P=0.002). When subcategories of suicide cases were analsysed, suicide death in asssociation with alcohol consumption demonstrated the strongest for relatoinship to the 2301-0500 time bin (SIR 6.03, P< 0.001).

Conclusion: Higher than expected rates of suicide overnight associated proposes that nocturnal wakefulness may represent a modifiable risk factor for triggering suicide events. Nocturnal wakefulness may be linked to increased rates of loneliness and depair as well as greater tendency toward impusive actions and behaviors. Impusivity may be compounded by alcohol consumption Our findings offer a potential mechanism for which individuals with insomnia have increased suicidal thoughts and behaviors.

0681

ASSOCIATION OF POOR SLEEP WITH STRESS, ANXIETY, EMOTIONAL SUPPORT, SOCIAL ISOLATION, AND DEPRESSION DURING THE COVID-19 PANDEMIC

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Introduction: The COVID-19 pandemic has impacted multiple facets of daily living: personal finances, physical activity, and mental and physical health. These changes can result in additional stress and negatively affect sleep. It is important for sleep medicine providers to understand how their patients are impacted by these changes to optimize their care. In this study, we evaluated the association of poor sleep with stress, anxiety, emotional support, social isolation, and depression among sleep medicine clinic patients during the COVID-19 pandemic.

Methods: Sleep medicine clinic patients were distributed an online survey at baseline followed by a 6-month follow-up survey (December 2020 - May 2021). Participants answered questions regarding Insomnia Severity Index (ISI), Patient-Reported Outcomes Measurement Information System (PROMIS) measures (sleep disturbance and sleep-related impairments), and COVID-19 testing. Stepwise linear regression was performed using SAS to determine if self-reported poor sleep predicted stress, anxiety, emotional support, social isolation, and depression. This study was approved by Baylor College of Medicine IRB. Informed consent was obtained from all subjects involved in the study.

Results: Eighty-one adults completed baseline survey, and 54 adults (mean age 55.2±18.4 years, 61% female, 70% Caucasian) completed 6-month follow-up survey. At baseline, anxiety had a significant effect on sleep disturbance (0.43±0.11, p=0.0001), sleep-related impairments (0.53±0.12, p=0.0001) and ISI (0.28±0.08, p=0.0004). Upon follow-up, an increase in ISI predicted higher perceived stress (0.18±0.07, p=0.013) and worse anxiety (0.61±0.16, p=0.0003). An increase in sleep disturbance predicted a decrease in emotional support (0.25±0.12, p=0.038). Additionally, an increase in sleep-related impairments predicted an increase in social isolation (0.39±0.11, p=0.0002) and depression (0.57±0.07, p<0.0001). Interestingly, only 3 participants tested positive for COVID-19.

Conclusion: In this study of sleep medicine clinic patients during the COVID-19 pandemic, we observed that poor sleep predicted greater stress, anxiety, social isolation, and depression along with less emotional support. This study illustrates the importance of addressing stress management, mental health (anxiety, depression), and emotional support when treating sleep medicine clinic patients during the COVID-19 pandemic.

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0682

COGNITIVE-BEHAVIORAL THERAPY FOR INSOMNIA ALLEVIATES AND PREVENTS SUICIDAL IDEATION.

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Introduction: Patients with insomnia disorder are at increased risk for suicidal thoughts and behaviors. Early evidence suggests that insomnia therapeutics may reduce suicidal ideation (SI). However, the role of digital insomnia therapeutics in both the alleviation and prevention of SI remains unclear.

Methods: A total of 658 community adults with DSM-5 insomnia disorder enrolled into a single-site RCT evaluating the efficacy of digital cognitive behavioral therapy for insomnia (CBTI) relative to attention control. Before treatment, 126 patients endorsed SI, whereas 532 patients denied SI. First, we tested whether CBTI can reduce SI in patients with baseline SI. Second, we tested whether CBTI reduces risk for SI development in those without baseline SI.

Results: Among those with baseline SI, just 30.0% of CBTI patients reported SI after treatment, which was lower than the 54.5% of controls with posttreatment SI (OR=2.81, p=.006). Among those without baseline SI, CBTI did not reduce risk for developing SI after treatment (p=.681). However, a multivariate logit model regression odds for SI onto condition (p=.140) and posttreatment remission status (OR=5.68, p=.007) indicated that patients who remitted from insomnia exhibited a reduction in SI risk. Importantly, CBTI was associated with a 6.29 odds increase of insomnia remission relative to control. PRODCLIN estimation of the indirect effect indicated that CBTI prevents SI, but that the effect is fully mediated by the extent to which CBTI produces insomnia remission ($\alpha\beta$=-3.13=5, 95% CI=-5.28, -0.96).

Conclusion: Digital CBTI reduces risk for SI development in insomnia patients without pretreatment SI. These data support a role for digital insomnia therapeutics in SI prevention in this high-risk patient population. Moreover, digital CBTI reduces SI in insomnia patients with SI. These data indicate that digital CBTI can alleviate SI, but it possible that adjunct treatment directly targeting SI may enhance suicide risk reduction.

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SMOKING AND PERCEIVED STRESS: EXAMINING ASSOCIATIONS WITH SUBJECTIVE SYMPTOMS OF OBSTRUCTIVE SLEEP APNEA THROUGH PARALLEL MEDIATION ANALYSES

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Introduction: Cigarette smoking is known to have a negative effect on individuals' sleep quality. Specifically, evidence shows that smoking can exacerbate sleep disorders such as obstructive sleep apnea (OSA) by increasing irritation and inflammation of the upper respiratory conducts. Furthermore, previous research highlights a complex bidirectional positive association between cigarette smoking and perceived stress. Sleep quality may be an important aspect intervening in the association between smoking and perceived stress, given that individuals who report high stress also report more sleeping issues and increased risk for OSA. Further research is needed to elucidate the impact of smoking and OSA on perceived stress.

Methods: The present cross-sectional survey of N=459 (75.8% female; 60.3% non-Hispanic White) current smokers and non-smokers investigated the associations between smoking status and perceived stress through the indirect effects of subjective OSA symptoms. A parallel mediation analysis using PROCESS Macro Model 4 was conducted with three mediators: risk for OSA based on subjective symptoms (assessed using the STOP portion of the STOP-BANG questionnaire), average sleep propensity (evaluated using the Epworth Sleepiness Scale), and overall subjective sleep quality (assessed with the Pittsburgh Sleep Quality Index). Race, sex, employment, and income were added to the model as covariates.

Results: Analyses supported a significant indirect effect of risk for OSA based on subjective symptoms (B = -0.55, 95% CI [-1.07, -0.09]) and overall subjective sleep quality (B = -1.39, 95% CI [-2.16, -0.74]) on the relationship between smoking status and perceived stress. However, average sleep propensity was not found to mediate this association (B = -0.09, 95% CI [-0.45, 0.21]). The direct effect of smoking status on perceived stress was also not statistically significant (B = 0.06, t = 0.09, p = 0.93).

Conclusion: Findings illustrate that smokers tend to be at greater risk for OSA and overall report worse sleep quality, which in turn increases their reported levels of perceived stress. Further research is necessary to understand possible demographics-based differences behind these findings as well as potential clinical implications.

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0684

IMPROVING PSYCHOLOGICAL DISTRESS FOR BETTER SLEEP DURING THE COVID-19 PANDEMIC: ANALYSES OF DATA FROM A PILOT RANDOMIZED CONTROLLED TRIAL

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Introduction: Psychological distress has been associated with sleep problems. Emerging evidence suggests positive psychological well-being is associated with better sleep. However, most of these studies are cross-sectional and do not provide information on the effect that changes in psychological outcomes have on sleep. The aim of this secondary analysis was to test whether changes in distress and well-being following a 7-week intervention to improve sleep and mental health were associated with changes in sleep among adults reporting poor sleep quality (Pittsburgh Sleep Quality Index [PSQI]>5) and moderate distress (Perceived Stress Scale [PSS]≥14) during the COVID-19 pandemic.

Methods: Thirty individuals (age 40.7±12.9y, 80% female, 50% racial/ethnic minority) completed a pilot study testing a well-being and sleep hygiene intervention vs. sleep hygiene alone. Questionnaires were administered at baseline and post-intervention to assess distress (PSS and the Symptom Questionnaire), well-being (Psychological Well-Being scales), and sleep (PSQI and Insomnia Severity Index). A sleep diary was administered to collect information on total sleep time (TST), variability in TST, sleep onset latency, wake time after sleep onset, bedtime, and variability in bedtime. Change scores were calculated for each variable as the difference between post-intervention and baseline. Separate linear regression models were estimated with psychological variables as predictors and sleep variables as outcomes. Analyses were adjusted for intervention group, baseline scores of predictors and outcomes, age, and sex.