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I WAS SLEEPING, OR SO I THOUGHT: COMPARISON OF SUBJECTIVE AND OBJECTIVE REPORTS IN INDIVIDUALS WITH ALCOHOL DEPENDENCE DURING AN INPATIENT REHABILITATION TREATMENT PROGRAM

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Introduction: Current evidence suggests that there is discordance between subjective and objective assessments of sleep quality in various patient populations. Little is known about the concordance between subjective and objective measures of sleep among individuals with alcohol dependence, who experience higher rates of sleep disturbance compared to the general population.

Methods: Data were collected from a cohort of patients (n=164) enrolled on an inpatient alcohol treatment program. Both objective (actigraphy) and subjective (Pittsburgh Sleep Quality Index-PSQI and daily diaries) measures of sleep quantity and quality were collected. PSQI assessments from day 28 of inpatient treatment and the first four weeks average actigraphy sleep duration and efficiency were compared using a paired t-test. Sleep efficiency was calculated by dividing total sleep duration by the total time spent in bed during major rest intervals.

Results: Of the 96 patients included in this analysis, the majority were male (66.7%), non-Hispanic (95.8%), and African American (51%). Self-reported sleep duration (6.17 hrs ± 1.47) was significantly (p < 0.0001) longer than actigraphy recorded sleep duration (5.17 hrs ± 1.17). In addition, there were significant differences (p < 0.0001) between self-reported (87.05% ± 15.21%) and actigraphy-recorded (74.87% ± 11.12%) sleep efficiency.

Conclusion: In a population of individuals undergoing inpatient treatment for alcohol dependence, our data demonstrate a significant discordance between the patients' subjective reports of sleep efficiency and actigraphy-recorded sleep efficiency. Discordance between subjective and objective reports of sleep efficiency and duration may have clinical implications especially when it comes to the treatment of sleep disturbance among individuals with alcohol use disorders. Understanding individual-level predictors of concordance between subjective and objective sleep measures should be further explored.

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SLEEP DISTURBANCES IN OPIOID DEPENDENT PATIENTS ON BUPRENORPHINE- GENDER DIFFERENCES

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Introduction: Sleep disturbances are common in opioid use disorder (OUD) patients on buprenorphine. The aim of the study is to examine gender differences in the prevalence and factors associated with sleep disturbances in patients with OUDs on buprenorphine.

Methods: A total of 219 patients with OUDs on buprenorphine (35 ± 9.5 years, 49.3% women, 80% Caucasian) were recruited from a buprenorphine maintenance program in central Pennsylvania. Subjects completed a sociodemographic survey and the Pittsburgh Sleep Quality Index (PSQI). We used chi-square tests, t-tests, and Mann-Whitney U tests to compare demographics, sleep disturbances, and PSQI composite scores between men and women. Stepwise logistic regression analysis was performed to determine factors associated with poor sleep quality in men and women separately.

Results: Women were more likely to report moderate-to-severe depression (42 %) and anxiety (53%) and to seek treatment for mental health issues (39 %) than men (24%, 36% and 19%, respectively, all Ps<0.01). Men had longer duration of opioid dependence (128 ± 102 months) and frequent rehabilitation hospitalizations (3 ± 3.5) than women (88 ± 66 months, and 2 ± 2 respectively, all Ps<0.01). Women had marginally longer duration of abstinence (33 ± 46 months) and adherence to medication treatment (19 ± 28 months) on buprenorphine than men (23 ± 31 months and 13 ± 19 months respectively, all Ps<0.10). Women had higher total PSQI scores (10.7 ± 4.8) and more frequent poor sleep quality (PSQI>5) (82%) than men (8.7 ± 4.3 and 69% respectively, p<0.05). In men, anxiety severity (OR=1.9, p=0.03) was independently associated with poor sleep quality. In women, age (OR=1.2, p=0.01) anxiety severity (OR=3.2, p=0.005) worsening sleep with opioid use (OR=6.3, p=0.008) were independently associated with poor sleep quality.

Conclusion: Similar to the general population, women with OUDs on buprenorphine are more likely to have severe and frequent sleep disturbances than men. Age, presence of comorbid anxiety and onset of insomnia with opioid use may help predict sleep disturbance in women with OUDs on buprenorphine. Recognizing and treating sleep disturbances as well as anxiety in men and women with OUDs on buprenorphine should be a target for relapse prevention.

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INVESTIGATING PRE-SLEEP PROCESSES AND HOW THEY INFLUENCE SLEEP AND NIGHTMARES

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Introduction: The current study examined the relationship between stress, pre-sleep processes and sleep in the context of real-world stress exposure in medical students during an internship. Medical students are often exposed to a variety of stressors and potentially traumatic events and have been shown to be at risk to develop psychopathology, such as anxiety and depression. Previous research has shown an association between stress, psychological distress and sleep disturbances. In this context, studies have investigated possible predictors for sleep disturbances. Recently, the period just prior to sleep onset has received increased interest. At the moment, little is known, however, about the influence of such pre-sleep processes. In this study, we investigated the influence of pre-sleep rumination, intrusion, and mindfulness on sleep disturbances (e.g. longer sleep onset latency, reduced sleep efficiency, alleviated heart rate during sleep) and nightmares. We aimed at identifying risk and potential protective factors for sleep quality and nightmare development.

Methods: In a prospective study, we examined a sample of 50 medical students from the University of Zurich. All participants completed

their first medical internship over 9 months as part of medical school. Predictors were assessed prior to starting the internship and pre-sleep processes and nightmares were indexed mid-internship using sleep diaries over seven consecutive days. Participants also provided descriptions of their nightmares. Additionally, a Fitbit tracking device was used to measure objective sleep quality. Correlational analyses and multilevel linear models were conducted.

Results: Results show associations between pre-sleep processes and sleep disturbances in this stress-exposed at risk population. For example, pre-sleep mindfulness predicted less nightmare distress and could function as a protective factor.

Conclusion: Together, our data suggest pre-sleep processes and sleep quality as potential targets for stress-prevention programs that could help reduce the negative influence of stress in at risk populations.

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