

Conclusion: In this study, individuals with sleep disorders had an increased suicide rate when compared to those with no sleep disorders. Higher suicide rates were found for individuals suffering from narcolepsy, insomnia and sleep apnea. More attention towards risks of suicide among people with sleep disorders might be needed.

Support (if any):

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INSOMNIA, COGNITIVE AROUSAL, AND PERINATAL-FOCUSED RUMINATION FUEL PERINATAL DEPRESSION

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Introduction: Depression is among the most prevalent perinatal complications, yet modifiable risk factors remain elusive. Over half of perinatal women endorse clinical insomnia symptoms, which are etiologically implicated in depression in non-perinatal samples. Yet, prospective data on perinatal insomnia and depression are mixed. We sought to clarify temporal associations of insomnia and depression during peripartum, and to investigate cognitive arousal as a potential mechanism facilitating this relationship.

Methods: Seventy pregnant women completed sociodemographic information and baseline sleep and mood symptoms between gestational weeks 25–30. Beginning at gestational week 30, participants completed 17 weekly online surveys assessing insomnia, depression, and three cognitive arousal indices (nocturnal cognitive arousal, perseverative thinking, perinatal-focused rumination). Mixed effects models were conducted to test hypotheses.

Results: Women were at elevated risk of screening positive for depression when experiencing high levels of insomnia (OR=2.36, 95%CI=1.28, 4.35), nocturnal cognitive arousal (OR=3.05, 95%CI=1.60, 5.79), perinatal-focused rumination (OR=2.05, 95%CI=1.11, 3.79), and perseverative thinking (OR=7.48, 95%CI=3.90, 14.32). Prospective analyses revealed bidirectional effects between insomnia and cognitive arousal, and both predicted future depression. Nocturnal cognitive arousal mediated 23–43% of the effect of insomnia on depression. Insomnia mediated 12–18% of the effect of nocturnal cognitive arousal on depression. A similar pattern was observed with perinatal-focused rumination. Depression did not predict insomnia.

Conclusion: Perseverating at night, particularly on perinatal concerns, fuels insomnia. In turn, lying awake at night provides ample opportunity for perseverating. This cycle feeds perinatal depression. Daytime cognitive arousal may indirectly disrupt sleep as perseverating during the day persists into the night.

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SLEEP AND POSTPARTUM DEPRESSION IN HEALTHY FATHERS: PERCEPTIONS OF SLEEP QUALITY PREDICT SEVERITY OF SYMPTOMS

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Introduction: Research on the link between sleep quality and depression in the postpartum period has focused primarily on mothers. Although fathers also experience poorer postpartum sleep and are at risk of developing depressive symptoms, they remain understudied. To

date, the limited research focusing on paternal sleep and depression has relied on subjective measures of sleep, without objective verification. The current study implemented a multi-measure approach using subjective and objective indices to explore the relationship between sleep and depressive symptoms in fathers at 6 months postpartum.

Methods: Fifty-four healthy fathers participated in this cross-sectional study. Paternal sleep was assessed for 2 weeks utilizing: 1) a self-report daily sleep diary, 2) a self-report perceived sleep quality rating, and 3) actigraphy. Subjective indices via the sleep diary measured participants' perception of their total nocturnal sleep duration and total number of awakenings (self-reported sleep duration and fragmentation). Perceived sleep quality ratings measured participants' perceptions of how well they thought they slept. Objective sleep variables measured through actigraphy included: total nocturnal sleep duration, number of awakenings, sleep efficiency, and wake after sleep onset (WASO). Paternal depressive symptoms were assessed with the Center for Epidemiologic Studies – Depression Scale (CES-D).

Results: Regression analyses showed that subjective sleep variables (measured by the sleep diary) and objective sleep variables (measured by actigraphy) did not significantly predict postpartum depressive symptoms in fathers ($p > .05$). However, self-reported perceived sleep quality significantly predicted postpartum depressive symptom severity in fathers ($R^2 = .172, p = .034$).

Conclusion: These findings advance our understanding of the link between sleep and depression in fathers. The results highlight the important role of fathers' perceptions of sleep quality, rather than the actual quality or quantity of their sleep (measured through the sleep diary or actigraphy), in the development of postpartum depressive symptoms. The multi-measure approach to sleep implemented in this study expanded our knowledge about how different facets of sleep relate to depression. These findings have important implications for the development of clinical interventions targeting paternal sleep and mood in the months following childbirth.

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LINKAGES BETWEEN SLEEP QUALITY AND MENTAL HEALTH AMONG COUPLES COPING WITH TYPE 1 DIABETES ACROSS SURVEY AND DAILY DIARY METHODS

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Introduction: Sleep serves an important role in maintaining and promoting metabolic and mental health. The interdependent nature of couple relationships makes examining sleep quality from a dyadic perspective critical. This study examined the effect of sleep quality on mental health among couples coping with type 1 diabetes across survey and daily diary methods and investigated whether relationship satisfaction moderated these relations.

Methods: 199 persons with type 1 diabetes (Mage = 46.82) and their spouses (Mage = 46.41) completed one survey questionnaire reporting their own sleep quality (PSQI), depressive symptoms (CESD), and relationship satisfaction (CSI). They also completed 14-day diaries reporting on their own sleep quality and negative affect. The actor-partner interdependence model and multi-level model were used to examine the effect of sleep quality on mental health across the cross-sectional and daily diary surveys. Multi-level modeling examined effects of within-person and between-person effects of sleep quality on next-day daily negative affect (controlling for prior day affect).

Results: Cross-sectional survey data revealed an association between poorer global sleep quality and higher depressive symptoms for both partners (actor effects). Spouses' poorer sleep quality was associated with higher depressive symptoms for persons with T1D (partner effects). Daily diary data demonstrated an association between within-person and between-person effects of own poor sleep quality and higher negative affect for both partners. Poorer daily sleep quality for persons with T1D was associated with higher negative affect for spouses (partner effects). When examining the moderating role of relationship satisfaction, spouses' poorer overall sleep quality was associated with greater depressive symptoms and overall negative affect respectively for those with lower relationship satisfaction but not for those with higher relationship satisfaction across both methods.

Conclusion: Findings support the conceptualized link between sleep quality and mental health as both an intraindividual and dyadic process among couples coping with T1D across survey and daily diary methods. Additionally, better relationship satisfaction may buffer the effect of overall poor sleep quality on mental health for spouses.

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DIFFERENCES IN THE PREVALENCE OF SLEEP DISTURBANCE AND ASSOCIATED RISK FACTORS IN ALCOHOL USE DISORDERS AND MAJOR DEPRESSION

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Introduction: Sleep disruption is common in patients with alcohol use disorders (AUD) and major depressive disorders (MDD). Our understanding of the differences in the rates of sleep disturbance and overall sleep duration in patients with AUD, MDD, and comorbid AUD and MDD is limited. Furthermore, it is unknown whether there is variation in demographic and clinical characteristics associated with sleep disturbance and duration in these diagnostic groups.

Methods: This study utilized data from the UK Biobank (UKB). Depression status was determined based on review of International Classification of Diseases (ICD) codes and health records. AUD status was based on AUDIT scores (score ≥ 8 was defined as AUD) and sleep disturbance was evaluated utilizing a self-reported questionnaire. The sample was categorized into those with MDD alone (MDD+/AUD-) (n=18,154), AUD alone (MDD-/AUD+)(n=6123), both (MDD+/AUD+)(n=9027), and controls with neither (MDD-/AUD-)(n=27,573). We used generalized linear models (GLMs) to compare rates of sleep disruption and duration among the groups and determine the clinical predictors of sleep disturbance/duration in the four groups as well as test whether these factors differed among the groups.

Results: The prevalence of sleep disturbance in the control sample (MDD-/AUD-) was 26.4% and the self-reported sleep duration in this sample was 7.209 \pm 0.919. Subjects with AUD and/or MDD had greater rates of sleep disturbance and shorter sleep duration. Among the different diagnostic categories, the prevalence of sleep disturbance was highest in subjects with MDD+/AUD+ (36.5%) followed by those with MDD+/AUD- (35.6%) and MDD-/AUD+ (27.9%)(all p<0.0001). Similarly, the sleep duration was shortest in subjects with MDD+/AUD+ (7.143 \pm 1.016), followed by MDD+/AUD- (7.158 \pm 1.050) and by MDD-/AUD+ (7.202 \pm 0.891)(all p<0.0001). Subjects with sleep disturbance were more likely to be older, female, and with higher body mass index, Townsend deprivation index, and neuroticism scores across all four groups (all p<0.05).

Conclusion: In a large population-based cohort, MDD with and without comorbid AUD was associated with greater rates of sleep disturbance and shorter sleep duration than AUD alone. The clinical and demographic factors associated with sleep disturbance did not differ in these diagnostic categories, indicating possible similar underlying risk factors.

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CORRELATES TO IMPROVEMENT IN SLEEP IN ACUTE MANIA

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Introduction: Sleep disruption and reduced sleep duration are potential triggers and also core symptoms of a manic episode. Our understanding of how sleep duration changes during the course of a manic episode and its potential association with symptom improvement is limited. We examined the natural course of sleep duration and its association with time to discharge and other clinical and demographic factors in patients with mania.

Methods: This was a retrospective study conducted in patients admitted to an acute care psychiatric unit with a manic episode. Sleep duration was determined based on observer report as logged by nursing staff. Sleep duration at admission and discharge were determined by averaging the total sleep time on day 2/3 of hospitalization and day 3/2 preceding discharge date. We obtained data on possible confounders including antipsychotic (chlorpromazine equivalents), benzodiazepine (diazepam equivalents) and other hypnotic medication doses administered at admission and discharge. We examined the associations between the change in sleep duration from admission to discharge with length of hospitalization and other clinical and demographic characteristics.

Results: The sample consisted of 35 patients (54.3% male) aged 32 \pm 9.96 years with an average length of hospitalization of 20.63 \pm 18.62 days. The mean sleep duration on admission was 6.23 \pm 1.77 hours and was 7.45 \pm 1.49 hours on discharge, with a mean change of 1.23 \pm 1.93 hours. The change in sleep duration was positively correlated with length of hospitalization (r=0.42; p=0.01). Other clinical factors including benzodiazepine or antipsychotic dose on admission, age, sex, and use of mood stabilizers were not correlated with the change in sleep duration.

Conclusion: There was a substantial improvement in the total sleep duration in patients with mania over the course of hospitalization. Overall, the change in sleep duration was only correlated to the length of stay and did not appear to be impacted by other clinical and demographic characteristics.

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ASSOCIATION OF LONGITUDINAL SLEEP PROFILES WITH COGNITIVE FUNCTIONING IN BIPOLAR DISORDER

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Introduction: Emerging evidence suggests that some cognitive deficits in bipolar disorder may be attributed to sleep disturbance. However, current findings are limited by cross sectional analyses or