group, including interaction terms to assess moderating effects of discrimination.
Results: Insomnia symptoms were associated with shortened telomere length among non-latinx white participants (β -0.046, p=0.015, [-0.06, -0.01]). Discrimination had a moderating effect between insomnia symptoms and telomere length among black participants (β -0.28, p=0.045, [-0.33, -0.00]). Analyses remained significant after adjusting for age, medical co-morbidities, smoking status, and a history of depression.
Conclusion: Our results suggest that symptoms of insomnia may contribute to telomere erosion, with potentially adverse effects on genomic integrity. For black individuals, those who experienced discrimination were at greater risk of telomere damage associated with insomnia.
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0060

SLEEP DISPARITIES BY RACE/ETHNICITY DURING PREGNANCY: AN ENVIRONMENTAL INFLUENCES ON CHILD HEALTH OUTCOMES (ECHO) STUDY

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Introduction: Poor sleep during pregnancy is common and associated with increased risk of adverse perinatal outcomes. Racial/ethnic minoritized groups in the United States experience worse sleep than non-Hispanic Whites (nHW), likely due to downstream effects of systemic and structural discrimination. Nonetheless, the extent of sleep disparities in the perinatal period remains understudied. In this analysis we estimated the prevalence of subjective measures of sleep in a multi-racial/ethnic pregnant population from the Environmental influences on Child Health Outcomes (ECHO) program.
Methods: Participants self-reported their race and ethnicity and were grouped into four categories: 1)nHW, 2)non-Hispanic Black/African American (nHB/AA), 3)Hispanic, 4)non-Hispanic Asian (nHA). Our analysis examined trimester-specific nocturnal sleep duration, sleep quality, and sleep disturbances (derived from the Pittsburgh Sleep Quality Index and the ECHO maternal sleep health questionnaire) by race/ethnicity. A total of 1119,2409 and 1284 participants in the first (T1), second (T2) and third trimesters (T3) reported on sleep duration. 1107,1742 and 783 participants in T1,T2 and T3 reported on sleep quality. 1112,1758, and 787 participants in T1,T2 and T3 reported on sleep disturbances Linear or multinomial regression were used to estimate associations between race/ethnicity and each sleep domain by trimester, controlling for body mass index (BMI) and age. We repeated analyses within education strata (high school degree, GED/equivalent; some college and above)
Results: nHB/AA participants reported shorter sleep duration (T2: β=-0.55 [-0.80,-0.31]: T3: β=-0.65 [-0.99,-0.31]), and more sleep disturbances (T2:β=1.92 [1.09,2.75]; T3:β=1.41 [0.09,2.74]) compared to nHW. Hispanic participants reported longer duration compared to nHW (T1: β=0.22 [0.00004, 0.44];T2: β=0.61 [0.47,0.76];T3: β=0.46 [0.22,0.70]), better sleep quality (Compare to Very good quality OR for Fairly good T1: OR=0.48 [0.32,0.73], T2: OR=0.36 [0.26,0.48], T3: OR=0.31 [0.18,0.52]; Fairly bad T1:OR=0.27 [0.16,0.44], T2:OR=0.46 [0.31,0.67], T3: OR=0.31[0.17,0.55]), and fewer sleep disturbances (T2 β=-0.5 [-1.0,-0.12]; T3 β=-1.21 [-2.07,-0.35]). Differences persisted within the subsample of high SES women.
Conclusion: These findings highlight racial/ethnic disparities across multiple domains of sleep health during pregnancy. Given the stark racial/ethnic disparities in perinatal outcomes and their associations with sleep health, further research is warranted to investigate the determinants of these disparities, such as downstream effects of systemic and structural discrimination
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ASSOCIATIONS BETWEEN SLEEP, ADVERSE CHILDHOOD EXPERIENCES AND HIGH BODY MASS INDEX IN A NATIONAL SAMPLE OF ADOLESCENTS

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Introduction: Adverse childhood experiences (ACEs) are independently associated with short sleep duration (SD) and an increased obesity risk that tracks into adulthood. Similarly, substantial research has demonstrated an association between deficient sleep and overweight/obesity in adolescents. Not known is how sleep duration and ACEs may interact in association with obesity risk in adolescents. This study explored ACEs as a moderator between sleep duration and obesity risk in a national sample of adolescents.
Methods: Using the National Survey of Children's Health 2017-2018 dataset, we included adolescents (10-17 yrs) with available SD and Body Mass Index (BMI) data. Parents reported adolescent's SD, and number of ACEs. We classified adolescents as overweight/obese if they had a BMI ≥85th percentile. Using a stepwise approach and accounting for complex survey design, logistic regression (STATA 16.0) estimated the interaction between SD and the number of ACEs in adolescents, controlling for selected covariates (i.e., demographics, social determinants, sleep regularity, exercise, and mental/physical health outcomes).
Results: In a sample of 26,013 adolescents (mean age=13.81, SD=2.29; 52% male, 70% White, Non-Hispanic), 27% were classified as overweight/obese, 47% had >1 ACE, and 34% had SD <8-10 hours/night. Accounting for covariates and ACEs, every hour increase in SD was associated with 6% decrease in the odds of overweight/obesity (OR=0.94, p=0.04). There was a significant interaction between SD and ACEs. Compared with having no ACEs, the association between longer sleep and lower odds of high BMI was weakened or even reversed if an adolescent experienced one ACE (OR=1.18, p=0.02) or two or more ACEs (OR=1.13, p=0.04).
Conclusion: Adolescence may be a critical period in the life course for the interaction between SD and ACEs on obesity risk. Increasing SD is a known intervention target to decrease obesity risk, yet in children experiencing one or more ACE, this protective role may be dampened. Our results suggest that sleep and