

Conclusion: Perceived unsafe neighborhood during childhood was associated with poorer sleep during adulthood among a cohort of young Black women.

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0239

A LATENT PROFILE ANALYSIS OF ACTIGRAPHIC SLEEP AND PHYSICAL ACTIVITY MEASURES AMONG CAMBODIAN-AMERICANS: RELATIONSHIP WITH SPECIFIC TRAUMA SYMPTOMS

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Introduction: Sleep and physical activity are related to psychological trauma. Less is known about how individuals with distinct sleep and activity profiles differ on specific clusters of trauma symptoms. Cambodian-Americans who survived the Pol Pot genocide experienced severe collective trauma. This analysis explored group differences between sleep/activity profiles on specific trauma symptoms among Cambodian-Americans.

Methods: Participants in a diabetes prevention trial for Cambodian-Americans (NCT02502929) met inclusion criteria for depression and high diabetes risk (but did not have diabetes). They wore wrist actigraphy (sleep) and hip actigraphy (physical activity) for 7 days (≥ 3 days to be included) and completed the 16-item trauma symptom scale of the Harvard Trauma Questionnaire (HTQ; N=166). Latent Profile Analyses identified profiles using 3 mean actigraphic sleep and activity variables: total nightly sleep time, sleep maintenance efficiency, and minutes in moderate-vigorous physical activity. ANOVAs explored differences between sleep/activity profiles on the HTQ, specifically total scores and the "Avoidance/Numbing" and "Re-experiencing/Hyperarousal" subscales. Models were adjusted for psychotropic medication use.

Results: Participants were predominantly women (79%), mean age 55.3, with elevated trauma symptoms (17% were higher than 2.5 cutpoint; mean \pm SD= 1.90 \pm 0.61). Sleep and physical activity patterns yielded a BIC best fit with 3 sleep/activity profiles: Inactive Poor Sleepers (n=30, 18%), Highly Active Short Sleepers (n=35, 21%), and Moderately Active Good Sleepers (n=101, 61%). Differences were observed between profiles on the HTQ total score (p=0.03). Tukey's post hoc test revealed that Inactive Poor Sleepers exhibited greater HTQ scores than Highly Active Short Sleepers (p<0.05), but did not differ from Moderately Active Good Sleepers. There was also a significant difference between profiles in the Avoidance/Numbing subscale (p=0.01); Inactive Poor Sleepers had higher Avoidance/Numbing than Highly Active Short Sleepers (p<0.05, Cohen's d: 0.47). There were no differences between profiles on the Re-experiencing/Hyperarousal subscale (p=.09).

Conclusion: Individuals with contrasting actigraphic sleep/activity profiles differed on trauma symptoms. Inactive Poor Sleepers may

benefit from specific interventions for Avoidance/Numbing symptoms. Future analyses will evaluate how changes in sleep/activity profiles are longitudinally related to psychological health and diabetes risk following interventions.

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0240

INVESTIGATING THE POTENTIAL FOR ACTIGRAPHY AS A COMPLEMENTARY CLINICAL TOOL FOR EVALUATION OF SLEEP IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Introduction: Poor sleep is a common complaint among patients with rheumatoid arthritis (RA), but few actively recognize the problem or discuss it with their rheumatologist during the clinical visit. Challenges to identification of sleep issues include a lack of standardized sleep measures used within clinical care and lack of confidence on the part of patients' articulating how sleep is affected by RA. Clinical management is further complicated by insufficient evidence between sleep quality and disease symptomology. The objective of this study was to identify correlations between sleep measures assessed through self-report and actigraphy with disease activity for patients with RA.

Methods: In a prospective, cross-sectional study, a sample of 15 participants diagnosed with RA were recruited through convenience sampling. Consenting participants self-reported sleep quality and disease activity using Pittsburgh Sleep Quality Index (PSQI) and Routine Assessment of Patient Index Data 3 (RAPID-3). Participants' sleep quality was also measured using actigraphy which monitors wrist movement by wearing a watch. Daily actigraphy measures of sleep efficiency, latency, and fragmentation were averaged over 6 nights. Actigraphy measures were correlated to the PSQI and RAPID-3 through Spearman correlations.

Results: The sample was mostly Caucasian women with an average age of 55 years, generally reflective of the population with RA. The results demonstrated weak, nonsignificant correlations between self-reported measures of sleep and average sleep efficiency (0.12, p=0.66), latency (0.10, p=0.72), and fragmentation (-0.13, p=10). Additionally, weak, nonsignificant correlations existed between disease activity and average sleep efficiency (0.09, p=0.75), latency (0.35, p=0.19), and fragmentation (-0.12, p=65).

Conclusion: This study's implications suggest actigraphy may provide complementary information to self-reported measures of sleep. Such information may support patients' articulation of sleep issues to the rheumatologist. Further research is necessary to understand how actigraphy measures can be effectively summarized for use by the patient and rheumatologist to discuss sleep issues during the clinical encounter as well as their ability to support clinical diagnosis of sleep disorders.

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