#### V. Disparities in Sleep and Circadian Health

#### 0069

#### TRAJECTORIES OF SLEEP CHARACTERISTICS IN BLACK AND WHITE WOMEN DURING THE FIRST YEAR POSTPARTUM

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**Introduction:** In the postpartum period, many women experience sleep deficiency due to caring for their infant. Racial disparities exist in sleep characteristics in the adult population, with Black adults having shorter total sleep time (TST) and worse sleep efficiency (SE) than White adults. However, few studies have investigated sleep changes in postpartum Black and White women. The purpose of this study was to examine trajectories of sleep characteristics from 6-8 weeks to 12 months postpartum in Black and White women.

**Methods:** Black (n=48) and White (n=86) women who gave birth to a singleton infant at  $\geq$ 37 weeks gestation, wore an Actiwatch Spectrum Plus (Phillips Respironics, Inc) at 6-8 weeks, 4, 6, 9, and 12 months postpartum. Participants were instructed to wear the monitor, complete a sleep diary, and to maintain their normal daily activities over 7 days. Daily time in bed (TIB), TST, SE, and wake after sleep onset (WASO) were determined.

Results: Trajectories of TIB, TST, SE and WASO were not different between Black and White women from 6-8 weeks to 12 months postpartum. However, Black women had shorter TIB and TST, and lower sleep efficiency (p<0.001 for all). WASO was similar between Black and White women. For the entire sample, TIB significantly decreased from 470±74 (mean±SD) minutes at 6-8 weeks to 459±54 minutes at 12 months (p=0.0038). TST significantly increased from 347±86 minutes at 6-8 weeks to 369±70 minutes at 4 months (p=0.0085) but did not change at the later timepoints. SE increased from  $80\pm8\%$  at 6-8 weeks to  $83\pm7\%$  at 6 months (p=0.0034) but did not change at the later timepoints. WASO decreased from 54±24 minutes at 6-8 weeks to 46±21 minutes at 4 months (p<0.0001) but did not change at later timepoints. Conclusion: In the first year postpartum, Black and White women had similar trajectories for sleep characteristics, but Black women had shorter TIB and TST and lower SE than White women. TIB and WASO decreased while TST and SE increased over time. The first 4 to 6 months show the greatest changes.

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#### 0070

## A MEXICAN SPANISH VERSION OF THE BRIEF INDEX OF SLEEP CONTROL

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**Introduction:** The Brief Index of Sleep Control (BRISC) is a 4-item assessment of the degree to which an individual perceives that they are in control of their sleep. Previous work shows that this measure may be useful for sleep health promotion efforts. The present study describes an attempt to develop a version of this measure in Spanish, particularly for individuals of Mexican descent.

**Methods:** Data were collected from a sample of N=100 individuals of Mexican Descent in Nogales, Arizona, located at the US-Mexico border. The BRISC is a 4-item scale that quantifies the

degree to which an individual perceives that their sleep is under their control, assessing perceived control over time to bed, time out of bed, total sleep time, and sleep quality. To translate the measure into Spanish, the following procedure was followed: (1) a bilingual study team member performed an initial translation; (2) a bilingual community member edited the translation; (3) a certified medical translator edited the revision; (4) a focus group of N=5 bilingual community members made contextual edits; (5) a back-translation was performed; (6) an additional bilingual focus group examined the final version for compatibility; and (7) the medical translator certified the accuracy of the final version. T-tests examined differences between those who completed the measure in Mexican Spanish vs English.

**Results:** Of the N=100 survey respondents, N=42 completed the BRISC in Spanish. No significant differences were seen in overall scores between those who completed the measure in English or Spanish (p=0.69). In addition, no differences were seen for individual items regarding time to bed (p=0.30), wake time (p=0.77), total sleep time (p=0.58), or sleep quality (p=0.98).

**Conclusion:** Data collection instruments be linguistically and culturally appropriate to the study population. This version of the BRISC was adapted to Mexican Spanish for use in future studies. **Support (If Any):** 

### 0071

# A MEXICAN SPANISH VERSION OF THE CIRCADIAN ENERGY SCALE

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**Introduction:** Circadian health is increasingly recognized for the contributions it makes to general health. Few instruments assessing circadian rhythms have been translated into Spanish, however. The present study describes a Spanish translation of the Circadian Energy Scale (CIRENS). The instrument was designed according to the language norms of those living along the US-Mexico border by a bilingual research team. The CIRENS was completed by both English and Spanish speaking border residents, in their preferred language.

**Methods:** Data were collected from a sample of N=100 individuals of Mexican descent living in Nogales, Arizona. CIRENS is a 2-item scale that assesses chronotype by examining overall energy level in the morning and evening. Translation of the instrument into Spanish was done according to the following process: (1) a bilingual study team member attempted an initial translation; (2) a bilingual community member edited the translation; (3) a certified medical translator edited the revision; (4) a focus group of N=5 bilingual community members made further contextual edits; (5) a back-translation was performed; (6) an additional bilingual focus group examined the final version for compatibility; and (7) the medical translator certified the accuracy of the final version. T-tests examined differences between those who completed the measure in Spanish vs English.

**Results:** Of the N=100 survey respondents, N=42 completed the CIRENS in Spanish. No significant differences were observed in overall chronotype determination between those who took the Spanish versus English version (p=0.22) of the instrument. As a continuous score, the respondents in Spanish demonstrated slightly