

differences within all groups ( $p < 0.0001$ ), but small effect sizes (0.0019-0.00052).

**Conclusion:** Median imputation is useful for correcting for missing data (<24 hours) when examining IV and IS. Non-parametric analysis of the general population indicated values within the expected range. Even though there were significant differences in non-parametric outcomes between genders, age groups, ethnicities, body-mass index and material deprivation, none of these had significant effect sizes.

**Support (If Any):** This research has been conducted using the UK Biobank Resource

## 0160

### SLEEP AND HIGH BODY MASS INDEX IN ADOLESCENTS: ETHNICITY AND SOCIOECONOMIC STATUS AS MODERATORS

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**Introduction:** Sleep deficiency and obesity disproportionately affect racial/ethnic minorities and those with lower socioeconomic status (SES). Considerable research has linked sleep deficiency to overweight/obesity. Less clear is the interactive effects of sleep duration (SD) and social determinants (i.e., SES, race/ethnicity) on weight status in adolescents. This study examined the role of race/ethnicity and SES as moderators of associations between SD and overweight/obesity in a nationally representative adolescent sample.

**Methods:** Using the National Survey of Children's Health 2017-2018 dataset, we included adolescents (10-17 y.o.) with available SD and Body Mass Index (BMI) data ( $n=24,337$ ). Parents reported children's SD and sleep regularity. Adolescents with a BMI  $\geq 85$ th percentile were classified as overweight/obese. We used a stepwise approach to identify SES factors and covariates to include in the model. Accounting for complex survey design, as well as sleep regularity and selected covariates (i.e., age, sex, smoking, exercise, and depression, diabetes), logistic regression (STATA 16.0) estimated the interaction between SD and selected social determinants (i.e., race/ethnicity, family income, primary caregiver education, neighborhood condition) in adolescents.

**Results:** Every hour increase in SD was associated with a 7% decrease in the odds of high BMI (OR=0.93,  $p=0.03$ ) regardless of race/ethnicity and SES. There were significant interactions between SD and social determinants. Compared with the White (OR=0.88,  $p < 0.001$ ), the association between longer sleep and lower odds of high BMI was weakened and even reversed in Hispanic adolescents (OR=1.20,  $p=0.02$ ). Similarly, family income below 100% FPL (versus 300% or above) (OR=1.19,  $p=0.02$ ) and primary caregiver having education below high school (versus high school or above) (OR=1.15,  $p=0.03$ ) also attenuated the associations. Poor neighborhood condition was not a moderator but independently associated with high BMI (OR=1.57,  $p=0.02$ ).

**Conclusion:** Adolescence may be a sensitive period that sets the stage for the interaction between sleep and social risk factors on overweight/obesity. Increasing sleep duration is associated with decreased risk of overweight/obesity, but the protective role is dampened in Hispanic adolescents and those with the low SES. Our findings suggest that sleep-related prevention and intervention

efforts should target at-risk populations who experience health disparities.

**Support (If Any):**

## 0161

### STRATEGIES FOR ENHANCING RECRUITMENT OF ADULTS FOR RANDOMIZED CONTROLLED TRIAL AMONG HETEROGENOUS SAMPLE OF CANCER SURVIVORS WITH INSOMNIA AMID THE COVID PANDEMIC

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**Introduction:** Challenges associated with recruiting participants in a longitudinal research study have been recognized yet remain a major barrier for researchers. The current study details strategies used in recruiting a heterogenous sample of cancer survivors with insomnia from multiple clinical sites, referral sources and outreach.

**Methods:** Enrollment goals were 158 participants over 3 years (June 2019 to May 2022). Recruitment strategies included 1) face-to-face (FTF) recruitment at hospital clinics; 2) posting recruitment flyers in clinical settings; 3) completion of insomnia screening instrument at community clinic sites; 4) research registries; 5) institutional social media outreach; 6) community events; 7) PI interview and request for study volunteers in local newspaper; and 8) ongoing engagement and communication with recruited participants.

**Results:** 108 of 158 participants have been recruited and completed baseline surveys; 9 participants dropped out. To date, 42 of 49 (85.7%) participants have completed the 12-month study. June 2019 through December 2019 FTF recruitment occurred, where 104 were eligible and 32 (30.76%) were enrolled. Due to changes in study personnel and the COVID pandemic restricting access to in-person recruitment and enrollment, the study pivoted to develop protocols for electronic consent and enrollment using video conferencing. In addition, research databases, institutional social media, community events and local newspaper were utilized, where 76 of 239 (31.79%) interested participants enrolled. The most effective recruitment strategies included on-site FTF recruitment (57.9%) and local newspaper interview (13.88%). The local newspaper interview was the most cost-effective considering personnel costs associated with FTF recruitment.

**Conclusion:** Despite the onset of the COVID pandemic during the recruitment phase, we were able to pivot and employ innovative techniques to meet our targeted enrollment goal for the projected study deadline. FTF recruitment, perceived value by clinic staff in benefitting cancer survivors, and participants' acceptance of video-conferencing were significant contributors. The importance of building and maintaining relationships with providers and nurses in local clinical sites cannot be underestimated.

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