RACIAL AND ETHNIC CHARACTERISTICS IN ADULTS LIVING WITH NARCOLEPSY

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Introduction: Demographics and polysomnographic characteristics (PC) stratified by race and ethnicity in narcolepsy type 1 and 2 (NC1-2) have been occasionally examined. Despite differences in definitions, most studies in NC1-2 have used race and ethnicity terms interchangeably. This study in adults living with narcolepsy (ALWNC) examined demographics and PC by race and ethnicity separately.

Methods: This cross-sectional study at a large academic center identified ALWNC through detailed chart review. Adults aged ≥18 years with NC1-2 diagnosis were included. We stratified participants based on self-reported race (Asian, Black, White, Others) and ethnicity (Hispanic, non-Hispanic, and Others). Descriptive statistics were obtained per racial and ethnic groups. Linear regression models adjusted for age and body mass index (BMI) at diagnosis, gender, NC1-2, and race or ethnicity (accordingly) were utilized to examine associations between race, ethnicity, and mean sleep latency (MSL) and number of sleep onset REM periods (SOREMPs).

Results: We identified 250 participants; 58% had NC2, 70.8% were females, mean age and BMI at diagnosis were 29.1±12.9 years and 26.0±6.3 Kg/m², respectively. Asian, Black, White, and Other races were 8, 28, 194, and 20 participants, respectively. Hispanic, non-Hispanic, and Other ethnicities were 14, 225, and 11 participants, respectively. Blacks had significantly shorter MSL and greater number of SOREMPs than Asians, Whites, and Other races (2.7±2.1 vs. 3.8±1.1, 4.8±2.4, 4.7±2.4 minutes, and 3.3±1.3 vs. 2.4±0.9, 2.5±1.3, 2.0±1.3 SOREMPs, respectively). Other ethnicities had shorter MSL and greater number of SOREMPs than Hispanics and non-Hispanics (3.3±2.9 vs. 4.6±2.4, 4.5±2.4 minutes, and 3.1±1.2 vs. 2.2±1.5, 2.5±1.3 SOREMPs, respectively); albeit, statistically insignificant. Adjusted analyses showed associations between Black race and MSL (β=-1.7, 95% CI [-2.9, -0.6] minutes), and between Black, Other races, and number of SOREMPs (β=0.7, 95% CI [0.1,1.3]; β=-0.9, 95% CI [-1.8, -0.1] SOREMPs, respectively). No associations were observed between ethnicity and MSL or number of SOREMPs.

Conclusion: This study highlighted racial differences in PC among ALWNC. Blacks had shorter MSL and greater number of SOREMPs, while Other races had lesser number of SOREMPs. In addition, this report suggested a trend toward ethnic differences in NC PC.

Support (if any):