

Poster Session I

#14

Modifiable Factors Associated with Insomnia in Adults with Heart Failure

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Purpose: Outcomes remain poor in adults with heart failure (HF). Insomnia is common in these patients and thought to contribute to poor outcomes. The purpose of this study was to identify modifiable factors associated with insomnia.

Theoretical Framework: Bandura's social cognitive theory.

Methods: Baseline data were collected from 280 subjects enrolled from three sites in the Northeastern US. Insomnia was defined as self-reported difficulty initiating sleep, difficulty maintaining sleep, early morning awakenings, and non-restorative sleep, and measured using four subscales of the Pittsburgh Sleep Quality Index, each scored 0-3 with 3 indicating more frequent occurrence. Potentially modifiable clinical, behavioral, and psychological factors thought to be associated with insomnia were analyzed with hierarchical regression analysis.

Results: Full data were available on 266 of the 280 subjects. Only 18.4% reported insomnia. Covariates of age, gender, race, data collection site, and New York Heart Association (NYHA) functional class accounted for 10.8% of the variation in the insomnia score and predictors explained another 23.1% of the variance. Significant determinants of insomnia were sleep disturbances ($b = .27$, $p < .05$; $r = .46$, partial $r = .35$), alcohol consumption ($b = -.61$, $p = .004$; $r = -.22$, partial $r = -.18$), and self-reported or perceived health ($b = .45$, $p = .017$; $r = .35$, partial $r = .15$). Specific sleep disturbances were having to go to the bathroom (74.4%), pain (43.6%), feeling too hot (36.8%), coughing or snoring (32%), inability to breathe (30.1), having bad dreams (30.3%), and feeling too cold (28.9%). Although most (54.6%) subjects had sleep disordered breathing (SDB), SDB was not a significant predictor of insomnia.

Conclusions and Implications: Modifiable factors associated with insomnia in adults with HF include sleep disturbances, lack of alcohol use, and health perceptions. Interventions that focus on decreasing sleep disturbances, especially nocturia, and perceptions of poor health may decrease insomnia and potentially improve outcomes in this large and growing patient population.