

PW01-160 - BURDEN OF CHRONIC INSOMNIA CHARACTERIZED BY NIGHTTIME AWAKENINGS AMONG DIABETES PATIENTS

S. Bolge¹, V.N. Joish², H. Kannan¹, C.L. Drake³

¹Consumer Health Sciences International, Princeton, ²Sanofi-Aventis, Bridgewater, NJ, ³Henry Ford Hospital Sleep Center and Psychiatry and Behavioral Neurosciences, Wayne State College of Medicine, Detroit, MI, USA

Objective: Quantify the burden of chronic insomnia characterized by nighttime awakenings (CINA) among diabetes patients.

Methods: Database analyses of National Health and Wellness Survey, an annual cross-sectional study of U.S. adults. Data were collected across the U.S. through self-administered, Internet-based questionnaires. Patients included in this study self-reported physician-diagnosed diabetes. From this cohort, subjects were categorized as CINA patients if they experienced nighttime awakenings, but did not experience difficulty falling asleep or sleep apnea. Controls did not experience sleep difficulties, sleep apnea, or symptoms of insomnia in the past twelve months. Outcomes included resource utilization in the past six months, work productivity and activity impairment as measured by validated WPAI questionnaire, and summary scores of the SF-8. Regression models were developed to assess independent effects of CINA on outcomes, adjusting for demographics and physical and psychiatric comorbidity.

Results: Among diabetes patients, 150 experienced CINA; 2,437 experienced no insomnia (projected 0.56MM adults with CINA and diabetes). After adjustments, diabetes patients with CINA had 1.9 ($p < 0.001$) more provider visits, 11.8% ($p = 0.013$) greater work impairment (among full-time employed) 17.0% ($p < 0.001$) greater activity impairment, and SF-8 physical and mental summary scores that were 5.2 and 5.2 ($p < 0.001$ for both) points lower than those without insomnia, a projected \$33MM in direct costs and a loss of nearly six weeks of work productivity per year.

Conclusions: Among patients with diabetes, CINA in relative isolation was associated with a significant negative impact on healthcare utilization and its associated costs, work productivity, and health-related quality of life.