

## 45th Biennial Convention (16-20 November 2019)

### Predictors of Suicidal Ideation Among Older Adults: Depressive Symptoms, Sleep Duration, and Daytime Sleepiness

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#### **Abstract**

##### **Purpose**

Suicide rates in the United States among older adults continue to rise after reaching 48.7/100,000 in 2016 (World Health Organization, 2017). Sleeping problems commonly occur with aging and is one contributing factor to suicidal ideation. According to the Center for Disease Control and Prevention (CDC, 2018), suicides among older adults are rarely associated with a single factor such as a psychiatric diagnosis at the time of death. Data from The National Health and Nutrition Examination Survey (NHANES) conducted in 2015-2016 across the United States was used to examine the relationship between depressive symptoms, sleep duration, daytime sleepiness, and suicidal ideation among adults age 50 and older.

##### **Methods**

This was a secondary data analysis of the 2015-2016 CDCs National Health and Nutrition Examination Survey (NHANES). Trained interviewers used the Computer-Assisted Personal Interview (CAPI) system to administer questionnaire items. In this study of adults age 50 and older, demographics included race, gender, marital status, and family income. The original race variable was collapsed into 3 categories: Hispanic origin, Non-Hispanic White, and Non-Hispanic Non-white. Gender was defined as male or female. The original marital status variable was collapsed into *Living with partner* or *Having no partner*. Having no partner included those widowed, divorced and separate. Living with partner included those married and living with a partner. Family income was categorized as above or below 25k/year.

The Depression Screening (DPQ) assessed participants' frequency of depressive symptoms over the past two weeks and contained 9 items on a 4-point Likert scale, with 0 indicating "Not at all" and 3 indicating "Nearly every day." DPQ items take into account depression criteria from the DSM-IV. The DPQ was identical to the Patient Health Questionnaire (PHQ-9) in which a total score of 10 or greater indicated major depression while a score less than 10 indicated minor depression (Kroenke and Spitzer, 2002; Kroenke et al., 2001). Suicidal ideation was assessed based on answers to one question on the DPQ, "Thoughts that you would be better off dead or of hurting yourself in some way?"

The Sleep Disorders Questionnaire (SLQ) assessed participants' sleeping habits, frequency of snoring within the last 12 months, and daytime sleepiness within the last

month. Sleep hour was calculated using the difference between time in bed and wake up time. Using this continuous variable, sleep duration was categorized as *More than enough* if the original variable was larger than or equal to 8 hours/day, *Enough* if between 5-8, and *Not enough* if strictly less than 5. Daytime sleepiness was categorized as *Never*, *Occasionally* (1-15 times a month), or *Almost always* (16-30 times a month).

### **Results**

Of 1,860 older adults (weighted 79,233,790), 4.2% (weighted 2,574,042) reported suicidal ideation with males being more likely to wish for suicide than females. Logistic regression was performed to estimate odd ratios and 95% confidence interval controlled for demographic variables. After controlling for gender, race, marital status, and family income, the odds for suicidal ideation increased in those older adults with major depression compared to those with minor depression. Compared to older adults who slept 5-8 hours/day, those sleeping more than 8 hours/day are more likely to have suicidal ideation. Meanwhile, sleeping less than 5 hours/day did not significantly predict one's wish for suicide. Older adults who reported feeling excessively sleepy during the day, either almost always ( $t = 3.19, p = .01$ ) or occasionally ( $t = 2.17, p = .05$ ), are more likely to think they would be better off dead.

### **Conclusion and Implications**

Findings from this study suggest that excessive sleeping, rather than sleep deprivation, may be a better predictor of suicidal ideation or hopes of never waking up. Additional predictors of suicidal ideation such as cognitive impairment (e.g., poor decision-making), chronic illnesses, bereavement, and social isolation should be considered to identify high-risk subgroups among older adults (Bishop et al., 2016; Conejero, Olié, Courtet, & Calati, 2018; Lapierre et al., 2012). Given such predictors can augment depressive symptoms and sleeping problems (O'Rourke et al., 2017), clinicians should develop treatment plans to improve these areas which may in turn decrease suicidal ideation among the aging population.

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### **Title:**

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### **Keywords:**

depression and sleep quality, older adults and suicidal ideation

### **References:**

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### **Abstract Summary:**

The purpose of this educational activity is to examine the relationship between sleeping problems, depressive symptoms, and suicidal ideation among adults age 50 and older. This presentation includes results from the 2015-2016 National Health and Nutrition Examination Survey (NHANES) and implications for research and clinical practice.

### **Content Outline:**

#### **Introduction and Background**

- Discuss population of adults aged 50 and above.
- Discuss factors associated with suicidal ideation in this population.

#### **Aims of the Study**

- Discuss the aims of the study and any hypotheses.

#### **Methods and Procedures**

- Discuss NHANES database and sample size.
- Discuss variables of interest and measures.
- Discuss data cleaning and analysis.

#### **Results**

- Description of sample and demographic characteristics
- Discuss associations among depressive symptoms, sleep duration, daytime sleepiness, and suicidal ideation.
- Discuss logistic regression analysis and research strengths and limitations.

#### **Discussion and Implications for Nursing**

- Discuss challenges related to identifying older adults who are at risk for suicidal ideation.
- Discuss importance of routine screenings, prompt referrals, and holistic interventions.
- Discuss evidence-based nursing interventions and their direct and indirect effects on suicidal ideation.

- Discuss recommendations for future research and clinical practice.

First Author

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**Author Summary:** Dr. Cody has presented at several local and international conferences including a workshop at the National Academy of Neuropsychology in Fajardo, Puerto Rico in 2014. She is a well-published author of more than 20 peer reviewed manuscripts on HIV and neurocognitive aging.

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**Author Summary:** Dr. Bui has presented at local and international conferences on various topics. He collaborates with researchers across disciplines and performs data analysis in preparation for dissemination of research findings. He is a co-author for this project.

Third Primary Presenting Author

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**Author Summary:** Dr. Mumba is an innovative researcher who is well versed in both qualitative and quantitative research methodologies. Her primary research area of focus is substance abuse among nurses and their psychosocial wellbeing. Dr. Mumba has further conducted several studies involving improving patient satisfaction in acute care setting. She is a published author and has presented her research at many local, regional, and international research conferences.