Nursing research identifies predictors of depression among women with diabetes

November 9 2016

Credit: New York University

Study shows almost 1 in 5 women with diabetes also suffer from

depression; younger age, poor health, not completing high school, inactivity due to pain or poor health were all women-specific predictors of comorbid depression

Research shows that adults with diabetes are disproportionately prone to depression. A breadth of research has shown this risk to be significantly greater for women than it is for men.

"The diabetes/depression comorbidity is associated with greater healthcare costs, poorer self-care, less medication compliance and dietary adherence, a greater diabetes symptom burden, poorer quality of life, and premature mortality," says Dr. Shiela Strauss, associate professor of nursing in the New York University Rory Meyers College of Nursing (NYU Meyers).

Dr. Strauss notes that while a few studies have examined the predictors of depression in women with diabetes, they are limited in a number of important respects. Now, a new study just published in *The Diabetes Educator*, "Predictors of Depression among Adult Women with Diabetes in the United States: An Analysis Using NHANES Data from 2007-2012," establishes various depression predictors among adult women of diverse ages and races and ethnicities.

Dr. Strauss analyzed NHANES (National Health and Nutrition Examination Survey) data, a program of studies designed to assess the health and nutritional status of adults and children in the United States. NHANES is a major program of the National Center for Health Statistics (NCHS), part of the Centers for Disease Control and Prevention (CDC), and is responsible for producing vital and health statistics.

"NHANES is exceptional in the collection of various types of data," says Dr. Strauss. "By combining interviews with physical examinations,

NHANES uniquely gathers sociodemographic and physiological data, including existing medical conditions and history."

The researchers confined their analysis to the specific NHANES data collected from 2007 to 2012 among women aged twenty or older with diabetes. The study sample included a diverse group of 946 women. The team found that 19% of the women represented by their study sample was clinically depressed according to a depression questionnaire that they completed.

"Our study sample represented nearly nine million women aged twenty or over in the U.S. with diabetes from 2007-2012," explained Dr. Strauss. "Our findings indicate that nearly 1.7 million of these women also had depression comorbidity. This is truly a staggering number of individuals."

"Consistent with research conducted among both male and female adults with diabetes, Strauss' results indicate that younger age, less education, self-rated poor health, and frequent pain and physical and functional impairment are significant predictors of depression among adult women with diabetes. Although existing research involving both adult men and women with diabetes has identified the importance of various diabetes-related factors, such as years living with diabetes and use of insulin, in predicting co-morbid depression, this was not the case when these variables were considered among women alone."

"What's particularly salient to me is that women who were limited in their ability to carry on their usual activities because of pain, or who were inactive due to poor health, were especially likely to have comorbid depression," said Dr. Strauss. "These may not be the first factors people would associate with depression in adult women living with diabetes; empirical evidence only goes so far. But through our analysis of the NHANES dataset we were able to identify them as strong predictors of

comorbid depression among women."

The results from Dr. Strauss' study will enable the targeting of especially vulnerable women for screening and depression treatment, recognizing that the specific combination of these female-specific characteristics are not the same as those combinations of characteristics identified in populations that include both men and women with diabetes.

  More information: S. M. Strauss et al. Predictors of Depression Among Adult Women With Diabetes in the United States: An Analysis Using National Health and Nutrition Examination Survey Data From 2007 to 2012, *The Diabetes Educator* (2016). DOI: 10.1177/0145721716672339

Provided by New York University