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Depressive episodes, weight change, and incident diabetes in a Canadian community sample

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Introduction

Depression has consistently been associated with an increased risk of diabetes in recent meta-analyses. However, depression is a highly heterogeneous construct and people with specific symptoms of depression, such as weight gain and increased sleep, may be at a higher risk of diabetes.

These results will be relevant to the development of both personalized and population-level diabetes screening and prevention strategies.

Objectives and Approach

This work will compare incident diabetes in Ontario adults with recent depressive episodes that included symptoms of weight gain, weight loss, or no weight change and in those with no recent depressive episodes. Participants will be drawn from several waves of the Canadian Community Health Survey and the National Population Health Survey. Past 12-month depressive episodes and weight change during most recent or worst episodes was measured using the CIDI/CIDI short form. Time to incident diabetes will be ascertained through linkage with the Ontario Diabetes Database. Cox proportional hazards regression will assess diabetes incidence by depression and weight change characteristics.

Results

This study will include 106 084 Ontario adults who participated in the Canadian Community Health Survey (2000/2001, 2002, 2003, 2012) and the National Population Health Survey (1996). Follow-up time will range from 4 to 19 years (until March 2017). Study covariates will include demographic and lifestyle factors, comorbidities, and health care use and will be extracted from the surveys above and from administrative health data. The dataset for this study is currently being prepared by the Institute for Clinical Evaluative Sciences (ICES) and the findings of this analysis will be presented at this conference.

Conclusion/Implications

The results of this work will provide insight into who, among those with depression, is at highest risk of new-onset diabetes.