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Association Between Subthreshold Depression and Self-Care Behaviours in Adults With Type 2 Diabetes

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Purpose:

Subthreshold depression is a common comorbidity in people with diabetes. Effective management of diabetes requires adherence to self-care behaviours. There is a clear evidence that major depression in type 2 diabetes (T2D) is associated with decreased adherence to self-care behaviours. Few studies have examined the association between subthreshold depression and diabetes self-care behaviours. The main objective of the study is to determine the association between subthreshold depression and self-care behaviour in adults with T2D attending a tertiary health care service.

Methods:

A cross-sectional study was conducted among 384 adults with T2D attending endocrinology outpatient appointment at Tribhuvan University Teaching Hospital in Nepal. Patients were eligible if they were 18 years of age or older and were diagnosed with T2D for at least a year. Data was collected via face-face interviews and medical record reviews. Self-care behaviours and subthreshold depression was determined using the Summary of Diabetes Self-care activities and Patient Health Questionnaire-9 respectively. Structured questionnaires were used to measure sociodemographic and clinical characteristics, diabetes knowledge, perceived social support and self-efficacy. Means and standard deviations for continuous and frequencies and percentages for categorical variables was computed. Multiple linear regression was conducted to determine association between subthreshold depression and self-care behaviour.

Results:

Out of total recruited participants, criteria for major depression was met by 8% and subthreshold depression by 37% of the participants. After excluding the participants with major depression (PHQ-9 score \geq 10), we had 354 samples for the primary analysis. The participants overall diabetes self-care mean score was 3.34 ± 1.24 on a range of 0 to 7. Simple linear regression showed that subthreshold depression was significantly associated with self-care. After adjustment to the confounders, linear regression maintained a statistically significant association of subthreshold depression with self-care behaviour.

Conclusion:

Our study demonstrated a low level of self-care behaviour. Subthreshold depression was associated with decreased adherence to self-care behaviour. Our result suggests that intervention such as early identification and management of subthreshold depression in T2D from health care provider including nurses may improve their self-

care behaviours. However, future studies are recommended to examine the efficacy of such interventions in T2D population.

Title:

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Keywords:

Type 2 diabetes, self-care behaviours and subthreshold depression

Abstract Summary:

Subthreshold depression, a common comorbidity in type 2 diabetes may impact diabetes self-care behaviour. A cross-sectional survey was conducted to examine the association between subthreshold depression and self-care behaviour in adults with type 2 diabetes.

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Author Summary: Ms Monika Shrestha is currently undertaking a PhD programme in the School of Nursing and Midwifery at La Trobe University, Melbourne, Australia. Her PhD focuses on subthreshold depression and self-management in people with type 2 diabetes. Specifically, she is examining the association of subthreshold depression with self-management in adults with type 2 diabetes in Nepal.

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