

INTRODUCTION

- Subthreshold depression, a common comorbidity in diabetes ^{1,2}, is associated with poorer health outcome ³.
- Effective management of diabetes requires adherence to self-care behaviours.
- 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 behaviour ⁴.

Objective: To determine the association between subthreshold depression and self-care behaviour in adults with T2D attending a tertiary health care service.

STUDY METHODOLOGY

Study design

Cross-sectional survey

Study site

Tribhuvan University Teaching Hospital, Kathmandu, Nepal

Study participants

People with T2D attending endocrinology outpatient

Inclusion criteria

≥18 years of age and T2D diabetes for at least a year

Data collection method

Face-to-face interview and medical record review

Data collection tools

Subthreshold depression determined using Patient Health Questionnaire-9 (PHQ9 score of 5-9).

Diabetes self-care assessed using Summary of Diabetes Self-care Activities (SDSCA).

Questionnaires to measure sociodemographic, clinical characteristics, diabetes knowledge, perceived social support and self-efficacy.

Data analysis

Compared diabetes self-care behaviour by depression status by students t-test. Change in estimate (CIE) method to identify confounders.

Multiple linear regression to determine the association between subthreshold depression and self-care behaviour.

RESULTS

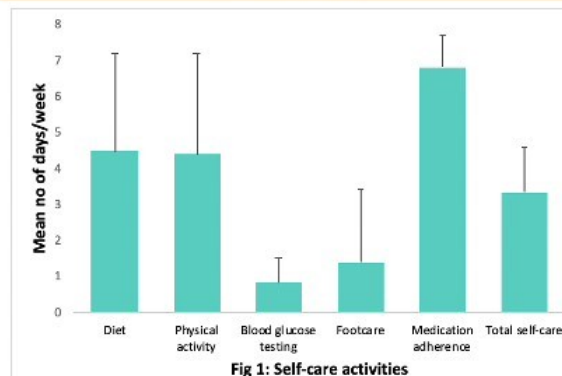


Fig 1: Self-care activities

Table 1: Descriptive characteristics of participants (n=354)

Characteristics	Number (%)
Sociodemographic characteristics	
Age in years (Mean ± SD)	52 ± 13
Family income, USD per month (Mean ± sd)	375 ± 182
Male	198 (56)
Urban residence	298 (84)
Religion, Hindu	299 (84)
Ethnicity, upper caste	174 (49)
Formal education	223 (63)
Married	318 (90)
Unemployed	217 (61)
Clinical characteristics	
Diabetes duration, <5 years	190 (54)
Diabetes complication, at least one	212 (60)
Comorbidities, at least one	54 (15)
BMI, <25 kg/m ²	184 (52)
Treatment cost, <40 USD per month	217 (61)
Family history of diabetes, yes	91 (26)
Glycaemic control, good	195 (56)
Treatment type, with insulin	29 (8)
Current smoker	37 (10)
Current drinker	23 (6)
Others	
Diabetes education, yes	7 (2)
Diabetes knowledge (Mean ± sd) ^a	14 ± 3
Perceived social support, High ^b	331 (94)
Self-efficacy, High ^c	322 (91)

^a Total score 0-24, ^b 5.1-7 (range 1-7), ^c >100 (range 0-150)

Table 2: Unadjusted and adjusted regression coefficient (B) at 95% confidence interval for the association between subthreshold depression and self-care behaviour

	Depression status		B coefficient (95% CI)	B coefficient (95% CI) [†]	p value
	No depression	Subthreshold depression			
Total	3.47	3.14	-0.33	-0.27	0.04*
SDSCA score			(-0.59, -0.07)	(-0.54, -0.009)	

[†] Adjusted for: adjusted for place of residence, diabetes complications, treatment cost and diabetes knowledge

* p< 0.05

CONCLUSION

Our study demonstrated a low level of self-care behaviour. Subthreshold depression is associated with decreased adherence to self-care behaviour. Our result suggests that intervention such as screening and management of subthreshold depression from health care provider including nurses may improve self-care behaviours in people with T2D. Future studies are recommended to examine the efficacy of such interventions in T2D population.

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