

ABSTRACT

Background: Due to the damaging effects of hyperglycemia on the brain, patients with diabetes are more likely to experience cognitive impairment. Cognitive impairment associated with diabetes has a huge impact on patient selfcare and can worsens diabetes complications.

Objective: - To assess cognitive impairment and associated factors among people living with diabetes at 3 primary healthcare centers in western Uganda from May1-July 30,2023

Methods

We conducted a cross-sectional study. Socio-demographic, anthropometric, and clinical data was collected. The Montreal cognitive assessment tool (MOCA) and score<26 was considered as cognitive impairment. Logistic regression was used to determine the associated factors.

Results

Of the 218 participants, the majority were females 79.8% (174), with a mean age 61.8(\pm 11.6) years and median duration of diabetes of 6 (3-12) years. The prevalence of cognitive impairment among people living with diabetes was 78%. Age \geq 65 years (a OR = 4.29, 95% CI: 1.39 -13.20, P = 0.011) and FBS \geq 7mmol/l (a OR = 3.32, 95% CI: 1.42 -7.21, P = 0.005) was associated with increased odds of cognitive impairments. While secondary education (a OR = 0.16, 95% CI: 0.03-0.76 -10.31, P = 0.023) and tertiary (a OR = 0.003, 95% CI: 0.01 -0.20, P = 0.001) education were associated with decreased cognitive impairments.

Conclusion: The findings indicated high prevalence of cognitive impairment among respondents who were \geq 65 years and had a high FBS while secondary and tertiary level of education were associated with low levels of cognitive dysfunction.

Keywords: -Diabetes, cognitive impairments, MOCA