

## ABSTRACT

**Background :** Sri Lanka has the second highest prevalence of Diabetes Mellitus (DM) in the Southeast Asia and projected to be 13.9% by 2030. Self-care management (SCM) is vital adjunctive strategy to clinical management in diabetes to prevent morbidity, disability and mortality associated with complications.

**Objective:** To describe the diabetes self-care management practices and factors associated with, among patients attending diabetes clinic in Teaching Hospital (TH) Karapitiya

**Methods:** Cross-sectional study was conducted among systematically selected 456 patients with type 2 DM attending diabetes clinic in TH Karapitiya. SCM was assessed using culturally adopted Summary of Diabetes Self-Care Activities tool. A pre-tested interviewer administered questionnaire was used to assess the socio-demographic characteristics, and factors associated with SCM as disease characteristics, family and social support, healthcare and psychological well-being.

**Results:** Mean age ( $\pm$ SD) of the patients was  $55.7\pm 7.6$  years and 75.4% were females. Majority were rural residents, currently married, had no regular income and had secondary level education. Majority had diabetes for more than five years, two or more co-morbidities and were on oral medication. Mean score ( $\pm$ SD) for self-care management was  $4.67\pm 0.85$  (CI= 4.59-4.75). Scores for diet, physical activity, foot care and medication was  $4.12(\pm 1.36)$ ,  $2.97(\pm 1.63)$ ,  $5.07(\pm 1.34)$  and  $6.53(\pm 1.26)$  respectively. Twenty one (4.6%) patients had overall good SCM, while 15.6%, 30%, 55.3% and 80.9% had good physical activity, diet, foot care and medication practices. Fifty percent of patients on insulin had not monitored blood glucose and 3.9% were current smokers. SCM was significantly associated with gender( $p=0.034$ ), ethnicity( $p=0.001$ ), place of residence( $p=0.002$ ), income( $p=0.046$ ), employment( $p=0.016$ ), smoking( $p=0.030$ ), disease duration( $p<0.001$ ), co-morbidities ( $p=0.029$ ), living alone( $p=0.032$ ), social support( $p=0.018$ ), distance travelled to clinic ( $p=0.042$ ), SCM-education( $p=0.003$ ) and psychological wellbeing( $p<0.001$ ) in univariate analysis.

**Conclusions and Recommendations:** Practice of SCM is poor among patients as indicated by low percentages in prevalence of good SCM. Interplay of multiple factors like culture, socio-economic disparities, psychological wellbeing and availability and accessibility of healthcare defines the level SCM in patients. Evidence shows positive effects of SCM measures in glycemic

control and patient wellbeing. It is high time that current local guidelines also adopt and streamline diabetes SCM measures in to the existing DM treatment guidelines

**Keywords: Type 2 Diabetes Mellitus, Self-care management, Sri Lanka**