Abstract

Hypoglycemia is one of the most common acute complications of type one diabetes mellitus(T1DM). It is an often-neglected obstacle of diabetes therapy, which has far reaching up to life threatening impact and precipitate major cardiovascular and cerebrovascular events. The knowledge of factors associated with hypoglycemia will help in the prevention and management of hypoglycemia. Therefore, this study was aimed to assess hypoglycemia and its associated factors among type one diabetic patients attended to diabetes outpatient clinics of St. Paul's Hospital Millennium Medical College (SPHMMC). A cross sectional study was conducted from June 01, 2017 to August 01,2017. Data were collected using a structured questionnaire. Multivariate logistic regression model was analyzed to find the association. In this study, among 247 participants 233(94.3%) of them were experienced hypoglycemia since diagnosed. Short duration of diabetes history (<1years) was significantly associated with less experience of hypoglycemia (AOR= 0.09, 95%CI:0.01-0.90). But, blood glucose monitoring at home were found to be significantly associated with more report of hypoglycemia (AOR=5.77,95%CI:1.16-28.66). Nearly two-third (65.2%) of patients perform self-monitoring blood glucose (SMBG) irrespective of frequency while only 68(42.2%) of them preformed three times daily. Being male was significantly associated with less performance of SMBG (AOR=0.43,95%CI:(0.23-0.80)). Whereas, educational level (primary school, AOR=4.29,95%CI:1.24-14.90) and shorter duration with diabetes (<1years and 1-5years), (AOR=4.45,95%CI:2.19-9.05 and AOR=8.85, 95%CI: 3.45-22.73) respectively, were found to be significantly associated with better performance of SMBG. Taking together, the findings indicated that prevalence of hypoglycemia was substantially high and the performance of SMBG was suboptimal, which warrants the need for health care providers engaged in diabetic care to aggressively address the issue.

Key words: T1DM, Hypoglycemia, SMBG