Comparison of Knowledge, Attitude and Practice on Hypoglycaemia Management Among Nurses and Junior Doctors in Sarawak Hospitals

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ABSTRACT
Introduction: The aim of this study was to assess the knowledge, attitude and practice (KAP) on hypoglycaemia management among nurses and junior doctors in Sarawak hospitals. **Methods:** A cross sectional study was done at 6 hospitals in Sarawak, Malaysia with a questionnaire adapted from Journal of Diabetes Nursing. A total of 405 nurses and 119 doctors were selected through convenience sampling. The data was analysed using Statistical Package for the Social Science (SPSS) version 17.0. **Results:** Overall the mean percentage of KAP regarding hypoglycaemia is higher among doctors compared to nurses, however only knowledge and attitude have a significant difference (p<0.05). **Conclusion:** This study confirms that although there is a difference in KAP regarding hypoglycaemia management between nurses and doctors, there is room for further improvement for both. The need for education and training for both nurses and doctors is highlighted in this study. Integrated education sessions should be carried out on a regular basis to standardize management of hypoglycaemia for all healthcare workers to ensure that proper management can be given.

Glycemic Control among Type 2 Diabetes Mellitus Out-Patients on Basal-Bolus Insulin

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ABSTRACT
Introduction: National Diabetes Registry shows that insulin used among type 2 diabetic (T2DM) has increased from 23.1% in 2013 to 30.3% in 2019. DiabCare also showed the increment used of basal-bolus among outpatient public hospitals from 10.6% in 2008 to 20.6% in 2013. Despite the increasing use of insulin, three-quarters of patients still do not have good glycemic control. This study aimed to describe the diabetic patients on the basal-bolus regime and the predictors of poor glycemic control. **Methods:** A cross-sectional study was conducted among T2DM patients on basal-bolus regime attending an endocrine clinic, Putrajaya Hospital, Malaysia from January to December 2019. Demographic and clinical profiles were retrieved. Logistic regressions were used to predict factors associated with poor glycemic control (defined as HbA1c >8%). **Results:** There were 789 subjects, 61.1% had HbA1c > 8.0%, with mean HbA1c of 8.87%. The mean age was 57 years, with the majority had a duration of diabetes of more than 10 years. Eighty-one percent of the subjects were on combination with oral antidiabetic drugs (OAD). The mean total insulin dose was 86.5unit/day. In multivariate analysis, combinations with OAD (OR 1.73, 95% CI 1.04-2.89); elevated low-density lipoprotein cholesterol (LDL-C) (OR 1.98, 95% CI 1.35-2.92); high fasting plasma glucose (OR 3.64, 95% CI 2.34-5.67) and total insulin requirement/day (OR 1.01, 95% CI 1.01-1.02) were associated with poor glycemic control. **Conclusion:** The glycemic control in Malaysia was suboptimal. Combinations with OAD, higher fasting plasma glucose levels, LDL-C, and total insulin requirement were predictors of poor glycemic control.