

**EP\_A046****AN OVERVIEW OF ADMISSIONS FOR HYPERGLYCAEMIC CRISES IN HOSPITAL SULTANAH AMINAH JOHOR BAHRU, MALAYSIA**

<https://doi.org/10.15605/jafes.039.S1.057>

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**INTRODUCTION/BACKGROUND**

Hyperglycaemic crises are metabolic emergencies that encompass diabetic ketoacidosis (DKA) and hyperglycaemic hyperosmolar state (HHS). Both are associated with increased healthcare expenditure, morbidity and mortality.

**METHODOLOGY**

We describe the clinical and socioeconomic characteristics of patients admitted for hyperglycaemic crises from 1st June 2023 to 31st March 2024 in our hospital. An endocrine team reviewed all admissions for hyperglycaemic crises during the period mentioned above. Patients' demographic and clinical information were collected as part of routine comprehensive patient evaluation. All data were analysed using GraphPad Prism Version 9.5.0 software.

**RESULTS**

There were 132 admissions for hyperglycaemic crises (129 DKA and 3 HHS), involving 110 patients (mean age 41.3 years, SD = 17.6; 51.8% female; 57.3% Malay, 20.9% Indian, 19.1% Chinese; 71.3% completed secondary education; 23.6% active smokers). Six patients were readmitted for DKA and one for HHS within 90 days from their index admissions within this period. Fifty-three (55.2%) had a household income of RM 2500 and below. Two-thirds had type 2 diabetes mellitus, while 29.1% had type 1 diabetes. Fifteen patients (13.6%) had DKA as their first presentation of diabetes. Infection was the most common precipitant of hyperglycaemic crises, comprising 60% of cases. Among 95 patients who had pre-existing diabetes, 54.7% had their follow-up at primary care, while 24.2% received care at our endocrine clinic. Forty percent did not conduct self-monitoring of blood glucose at all. Moreover, at least two-thirds of patients with established diabetes fared poorly in sick day rules knowledge assessment.

**CONCLUSION**

More efforts are needed to reinforce diabetes self-management education and support (DSMES) services at all levels of care to reduce the healthcare burden of hyperglycaemic crises.

**EP\_A047****MEDICATION PRACTICES AND IMPACT ON GLYCAEMIC OUTCOMES AMONG FASTING MUSLIM TYPE 2 DIABETES MELLITUS IN PRIMARY CARE CLINICS DURING RAMADAN**

<https://doi.org/10.15605/jafes.039.S1.058>

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**INTRODUCTION/BACKGROUND**

Ramadan fasting has been shown to affect glycaemic outcomes among those with Type 2 Diabetes Mellitus (T2DM) due to adjustment of oral antidiabetic medications (OHA) and insulin.

**METHODOLOGY**

This study investigates how medication practices affect glycated haemoglobin (HbA1c) levels, hypoglycaemia, hyperglycaemia and hospitalization rates among fasting Muslim T2DM patients in Petaling district, Malaysia. A prospective observational study was conducted in seven government primary healthcare clinics in the Petaling district from March 14 to July 15, 2022. A questionnaire on medication types, practices and outcomes was administered to patients. Pregnant women were excluded. Chi-square and logistic regression were used to determine the association between medication practices and glycaemic outcomes.

**RESULTS**

A total of 260 participants completed the study. In this study, 96.5% of participants were taking OHA; 41.5% were taking both insulin and OHA. Despite being counseled by healthcare providers (HCPs), 8.4% of participants had self-adjusted their OHAs, and 23.1% self-modified their insulin dose during Ramadan. Among those who adjusted OHAs, 2.2% stopped taking the medication, 6.9% decreased the dose and none increased the dose. For insulin users, 2.6% increased the dose, 9.1% reduced the dose and none discontinued the insulin. Chi-square showed a significant effect of self-adjustment of medication during Ramadan with hypoglycaemia ( $P = 0.046$ ), with no significant association between self-adjustment of medication with HbA1c level ( $P = 0.48$ ), hospitalization rate ( $P = 0.693$ ), or hyperglycaemia ( $P = 0.757$ ). However, logistic regression