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EARLY REAL-WORLD EVIDENCE FOR THE USE OF ORAL SEMAGLUTIDE IN A TERTIARY CENTRE IN MALAYSIA

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INTRODUCTION
The efficacy of oral semaglutide has been well-demonstrated in the randomized controlled trials (RCT) of the PIONEER programme, but real-world evidence is lacking. We aimed to analyze the effects of oral semaglutide after six months of use in a real-world setting.

METHODOLOGY
In this prospective single-centre study, we analyzed the metabolic and renal outcomes of patients commenced on oral semaglutide for six months. Patients were seen in specialized diabetes clinics, and all other targets were managed according to the standard of care.

RESULT
A total of 177 patients were analyzed (mean age 56.3 ± 12.82 years, 46% male, mean duration of diabetes 16.2 ± 4.8 years, 38.3% had ASCVD, mean eGFR 46.3 ± 14.8 ml/min/1.73 m^2, 58% on insulin, 78% on SGLT2i, 67% on RAAS blockade). Baseline HbA1c, FPG, weight, BMI, and UACR were 7.91 ± 1.60%, 7.53 ± 2.78 mmol/L, 85.1 ± 21.2 kg, 33.5 ± 12.6 kg/m^2, and 9.8 mg/mmol (IQR 2.1-40) respectively. 80.2% tolerated semaglutide at a full dose of 14 mg daily, whilst 18.1% tolerated 7 mg daily. The discontinuation rate was 8.5%, mainly due to gastrointestinal side effects. Significant weight reduction, SBP, and HbA1c were seen with a mean difference of 3.12 kg (95% CI: 1.1 – 4.2, p <0.01), 3.76 mm Hg (95% CI: 0.6 – 6.9, p = 0.02) and 0.31% (95% CI: 0.1 – 0.4, p = 0.04) respectively. FPG and UACR showed an improving trend despite missing statistical significance, FPG: -0.15mmol/L (95% CI: -0.3 – 0.6, p = 0.053) and UACR: -9.8 to 7.7 mg/mmol (IQR -4.1 to -20, p = 0.19).

CONCLUSION
Most patients tolerated oral semaglutide at 14 mg well, with follow-up data showing significant improvement in weight, SBP, and HbA1c, comparable to that of RCTs.

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PRE-RAMADAN COUNSELLING IN ADULTS WITH TYPE 2 DIABETES (T2D) IN INSTITUT ENDOKRIN HOSPITAL PUTRAJAYA

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INTRODUCTION
Pre-Ramadan counselling is essential for safe fasting in Muslims with Type 2 Diabetes (T2D). Structured education on risk stratification, glycaemic monitoring, and medication adjustments reduces hypoglycaemia, hyperglycaemia, and dehydration risks. We audited outcomes before and after implementing pre-Ramadan continuous medical education (CME) for clinicians at Institut Endokrin Hospital Putrajaya (IEHPJ) to assess its impact on patient counselling.

METHODOLOGY
We conducted a retrospective study to audit pre-Ramadan counselling practices before (December 2024) and after (February 2025) CME implementation at IEHPJ using universal sampling from electronic medical records. We retrieved and reviewed records of all Muslim patients attending T2D clinics during the study period.

RESULT
This study included 693 patients, 309 from the pre-CME period and 384 in the post-CME period. There were 48.3% male patients with a mean age of 57.5 years (±12). Diabetes duration was >10 years at 62.5%. The mean HbA1c of our patients was 8.4% (±2.0). The majority of patients (91.6%) had eGFR >30 mL/min/1.73m^2. Regarding medications, 20.3% were on non-sulphonylurea oral glucose-lowering drugs with or without GLP-1-RA, while the remaining were on insulin and/or sulphonylurea. 16.1% were on a basal insulin regime, and 48.9% were on more complex multiple daily injection regimes.

Pre-Ramadan counselling significantly increased from 33.9% (105/309) pre-CME to 58.4% (230/394) post-CME (p <0.001). Even though most patients were on treatment regimens that predisposed them to hypoglycaemia during fasting, IDF-DAR risk scoring assessment remained low in both groups. Although IDF-DAR risk scoring improved from 13 to 42 patients after the CME, this was not statistically significant.

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CONCLUSION
CME improved counselling rates in our clinics, but gaps in risk assessment persist. Implementing structured protocols in the future could further reduce risks during Ramadan fasting.

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VALIDATION OF IDF-DAR RISK SCORE FOR FASTING IN RAMADAN FOR ADULTS WITH DIABETES MELLITUS IN PRIMARY CARE

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INTRODUCTION
Fasting during Ramadan is a religious obligation for Muslims but poses health risks for individuals with diabetes mellitus. The International Diabetes Federation–Diabetes and Ramadan Alliance (IDF-DAR) introduced a risk stratification tool in 2021 to guide clinicians, though its utility in primary care settings remains limited.

METHODOLOGY
We conducted a retrospective cohort study on adults with diabetes attending government health clinics in Malaysia from April 15 to June 15, 2024. Medical records of those who attempted fasting during Ramadan were reviewed. The primary outcome was a composite of hypoglycaemia, hyperglycaemia, diabetes-related hospitalization, or dehydration leading to breaking the fast. The discriminative performance of the IDF-DAR tool was evaluated using the area under the receiver operating characteristic curve (AUC). Calibration was assessed via the Hosmer-Lemeshow test.

RESULT
A total of 310 patients were included (99% with type 2 diabetes). The mean age was 61 years, and the median diabetes duration was 7 years. Adverse fasting outcomes were observed in 18.4% of patients, with hypoglycaemia being the most common (13.5%). The IDF-DAR risk stratification tool demonstrated good discriminative ability, achieving an area under the ROC curve (AUC) of 0.78 (95% CI: 0.72–0.84). At the recommended cut-off for distinguishing low-moderate from high-risk categories, the tool achieved a sensitivity of 92.9% and a specificity of 40.9%. The Hosmer-Lemeshow goodness-of-fit test indicated poor agreement between observed and predicted adverse outcomes, with a statistically significant result (p <0.05).

CONCLUSION
The IDF-DAR risk stratification tool identifies high-risk patients fasting during Ramadan in primary care. However, its poor calibration highlights the need to refine the model to improve its predictive accuracy. Enhancing the tool's calibration could allow for better individual risk estimation and more precise clinical decision-making in diverse primary care settings.

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INCIDENCE OF HYPOGLYCEMIA FOLLOWING "INSULIN CHASE:" A SINGLE-CENTER CLINICAL AUDIT

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INTRODUCTION
Hyperkalemia poses a significant threat due to its potential to induce fatal cardiac arrhythmias. "Insulin chase," or a combination of intravenous insulin, calcium gluconate, and dextrose, is given to rapidly lower serum potassium levels. Potential risks of this regime include hypoglycemia. This study aims to determine the incidence of hypoglycemia following the administration of "insulin chase" in our center, explore associated risk factors, and assess adherence to blood glucose (BG) monitoring when this regime is administered.

METHODOLOGY
This was a retrospective observational study. Medical records of all adult patients who received insulin chase treatment at Hospital Putrajaya between January 1, 2023, and December 31, 2024, were retrieved and reviewed.

RESULT
A total of 187 patients received insulin chase during the study period. The mean age was 58 years (SD 15.9). The