patients with complete baseline and follow-up data for each outcome. Continuous variables are presented as mean ± standard deviation or median with interquartile range, as appropriate. Exploratory analyses were undertaken to assess whether available patient factors were associated with HbA1c improvement.

RESULTS

Twenty-three patients were included. Paired HbA1c data were available for 12 patients, whereas paired TDD data were available for 21 patients. Mean HbA1c decreased from 10.78 ± 2.59% at baseline to 8.42 ± 2.29% at 3 months, representing a mean reduction of 2.36 percentage points (95% confidence interval [CI] 0.09–4.62; $p = 0.043$). Mean TDD decreased from 0.434 ± 0.248 to 0.286 ± 0.313 units/kg/day, corresponding to a mean reduction of 0.148 units/kg/day (95% CI 0.077–0.219; $p < 0.001$). Insulin was discontinued in 9 of 21 patients (42.9%). No clear association was observed between HbA1c improvement and age, sex, or number of visits. Interpretation is limited by the small sample size, reflecting the early phase of a newly established clinic.

CONCLUSION

In this early audit, ROC care was associated with clinically meaningful improvement in glycemic control and significant insulin deintensification over 3 months. These findings support the potential role of a structured multi-disciplinary optimization clinic in delivering individualized diabetes care and facilitating safe reduction of insulin burden.

EP_A042

RISK ASSESSMENT FOR RAMADAN FASTING IN PEOPLE WITH DIABETES IN HOSPITAL-BASED DIABETES CLINICS USING THE UPDATED 2026 IDF-DAR RISK CALCULATOR

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INTRODUCTION

The 2021 IDF-DAR risk calculator had been previously evaluated in multiple studies and subsequently widely accepted and applied in clinical practice as a practical standardized tool for patient risk stratification. Recently updated, the 2026 IDF-DAR Risk calculator enables a more

individualized, evidence-related evaluation of patient-related and disease-related risk factors, incorporating modern diabetes technologies, including continuous glucose monitoring (CGM), automated insulin delivery (AID) systems, and advanced insulin formulations to enhance risk stratification. This tool allows medical professionals to tailor Ramadan practices based on overall factors toward promoting safe fasting.

METHODOLOGY

This prospective multicentre observational study recruited adults with Type 1 and Type 2 diabetes attending public hospitals nationwide. People with diabetes (PwD) intending to perform Ramadan fasting were invited to participate and assessed using the 2026 IDF-DAR Risk Calculator in the 6-week pre-Ramadan period between 30th January and 19th March 2026.

RESULTS

A total of 458 PwD were evaluated and stratified into low (15.7%), moderate (41%), and high risk (43.3%) categories. Most participants had Type 2 diabetes (83.6%), with 60.3% having a disease duration exceeding 10 years and 43% exhibiting poor glycemic control (hemoglobin A1c >9%). Insulin therapy was used by 76.4% of participants, including two individuals with Type 1 diabetes using AID systems. Most participants reported no recent hypoglycemia (76.4%), 81.0% performed glucose monitoring, and 3.3% used CGM. Severe comorbidities were uncommon, with 1.1% having unstable macrovascular disease and 4.4% advanced chronic kidney disease (estimated glomerular filtration rate <30). Notably, 72.2% received structured Ramadan education.

CONCLUSION

Majority of PwD attending tertiary diabetes clinics were in the moderate- to high-risk category and intended to fast despite medical advice against fasting in some cases. Although most participants were on insulin therapy, hypoglycemia was low in the pre-Ramadan period. Integration of modern technologies, advanced insulin therapies, and structured education may support safer fasting practices.

EP_A043

EFFECTIVENESS OF ORAL SEMAGLUTIDE VERSUS INJECTABLE DULAGLUTIDE IN ADULTS WITH TYPE 2 DIABETES AND OBESITY: A SINGLE-CENTRE EXPERIENCE

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INTRODUCTION

Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are increasingly used in the management of type 2 diabetes mellitus (T2DM) and obesity because of their glucose-lowering and weight reduction benefits. However, real-world outcomes may differ from clinical trial data.

METHODOLOGY

This retrospective cohort study included adults with T2DM and obesity initiated on oral semaglutide or injectable dulaglutide at Hospital Sultan Haji Ahmad Shah between 2023 and 2025. Baseline and approximately 6-month follow-up data were obtained from electronic medical records. Outcomes included weight, body mass index (BMI), glycated hemoglobin A1c (HbA1c), total daily insulin dose (TDD), low-density lipoprotein (LDL), and gastrointestinal adverse effects. Results are presented as median (interquartile range, IQR).

RESULTS

A total of 22 patients were included, with a median age of 45 years (IQR 39.3–54.5); 13 (59.1%) were male. Thirteen patients (59.1%) received oral semaglutide and nine (40.9%) received injectable dulaglutide. In the semaglutide group, median HbA1c changed from 8.1% (7.4–9.1) to 8.2% (7.1–9.3), weight from 95.4 kg (84.0–99.1) to 89.6 kg (79.0–100.0), BMI from 33.9 kg/m² (31.4–40.8) to 33.6 kg/m² (31.2–35.6), TDD from 64 IU/day (20–82) to 46 IU/day (18–48), and LDL from 2.2 mmol/L (1.6–2.3) to 2.3 mmol/L (1.3–3.0). In the dulaglutide group, median HbA1c improved from 7.6% (7.4–9.6) to 6.9% (6.5–8.4), weight from 117.0 kg (101.0–121.0) to 111.0 kg (105.0–119.0), BMI from 41.0 kg/m² (40.0–49.0) to 42.5 kg/m² (38.0–48.0), TDD from 33 IU/day (30.5–34.0) to 34 IU/day (30.5–34.0), and LDL from 2.2 mmol/L (1.8–2.9) to 2.6 mmol/L (2.0–4.0). Gastrointestinal side effects occurred in 4/13 (30.8%) oral semaglutide users and 0/9 dulaglutide users.

CONCLUSION

Injectable dulaglutide showed greater improvement in HbA1c, while both groups demonstrated variable effects on weight, BMI, insulin requirement, and LDL in routine practice.