

**RESULTS**

A total of 22 patients were identified. From 2015 to 2020, with an average of 2.3 cases per year. In the first 5 months of 2021 alone, there is a total of 8 new cases. Majority of the patients fell in the 5-9 years age group and were of Kadazan-Dusun ethnicity. One patient was noted to be obese at time of diagnosis. 77.3 % of all the cases presented with DKA and of this, 64.7% were severe DKA. Median length of hospital stay was 7 days for children with DKA versus 3 days for those without DKA. 76% of children with DKA required ICU care. 50% of all patients had the classical triad of symptoms of polyuria, polydipsia and weight loss. Other symptoms included visual blurring, penile discharge, dysuria and light-headedness. One patient had concurrent nephritis and one had COVID-19 co-infection. One death was reported with case fatality ratio at 4.5%. Four patients were misdiagnosed at presentation. Among the cited reasons for delayed diagnosis was failure to recognise symptoms of T1DM.

**CONCLUSION**

Majority of the newly diagnosed T1DM presented with DKA with high proportion of severe disease. More health awareness is needed in our community.

**PE-10**


---

**THE IMPACT OF PRE-RAMADHAN WEBINAR ON FASTING IN ADOLESCENTS WITH TYPE 1 DIABETES MELLITUS – A PILOT STUDY**

<https://doi.org/10.15605/jafes.036.S103>

**Mazidah N,<sup>1,4</sup> Muhammad Yazid J,<sup>2</sup> Noor Shafina MN,<sup>1,4</sup> Nurshadia,<sup>2</sup> Meenal M,<sup>2</sup> Ho SC,<sup>2</sup> Tee PP,<sup>2</sup> Rokiah I,<sup>3</sup> Zarina Y,<sup>2</sup> Azleen A,<sup>2</sup> Suzilah J,<sup>4</sup> Azriyanti AZ<sup>2</sup>**

<sup>1</sup>Department of Paediatrics, Faculty of Medicine, Universiti Teknologi MARA (UiTM), Sungai Buloh, Malaysia

<sup>2</sup>Department of Paediatrics, University Malaya Medical Centre, Kuala Lumpur, Malaysia

<sup>3</sup>Department of Dietetics, University Malaya Medical Centre, Kuala Lumpur, Malaysia

<sup>4</sup>Department of Paediatrics, Hospital UiTM, Puncak Alam, Malaysia

**INTRODUCTION**

Tele-education is the new form of education delivery during the COVID-19 pandemic. Patients with Type 1 diabetes are required to attend pre-Ramadhan fasting education sessions in accordance with the latest ISPAD guideline. This study aims to assess the outcome of a structured pre-Ramadhan webinar on diabetes self-care and knowledge during fasting in Type 1 diabetes adolescents.

**METHODOLOGY**

A pilot study on adolescents with T1DM attending University Malaya Medical Centre (UMMC) or Universiti Teknologi MARA (UiTM) clinics who wished to fast in Ramadhan, was conducted. Participants and parents were invited to attend the pre-Ramadhan online education session 1-4 weeks before Ramadhan. Teaching on Ramadhan Fasting (RF) regulations, the pre-requisites for RF, insulin injections and adjustment, self-monitoring blood glucose (SMBG) and the ideal Ramadhan diet were covered. The post-webinar survey was sent to all participants 3 weeks after Ramadhan.

**RESULTS**

Fifteen adolescents attended the teaching. Majority (80%) was 10-15 years old. Sixty percent were female. Eight parents (62%) responded to the post-webinar survey. Nine in ten patients/parents were unaware on the prior regulations of RF for T1DM. Despite this, 85% were encouraged to perform RF, and 77% have performed RF previously. During previous years, 82% had difficulties with BG stabilization, 55% had hypoglycemia and 9% had experienced diabetic ketoacidosis (DKA). For RF this year, several improvements were identified post-webinar: 69% had fewer complications (hypoglycaemia and DKA), 69% were more compliant with insulin injections, 85% were more confident with insulin adjustments and 38.5% made improvements with dietary modification during RF. SMBG (more than 3 times per day) improved from 81.8% to 84.6%.

**CONCLUSION**

This pilot study demonstrates that a pre-Ramadhan webinar during the Covid19 pandemic can improve knowledge and diabetes self-care amongst T1DM adolescents. Education via online platform is indeed a valuable alternative medium to reach out to fasting T1DM patients during Ramadhan.