

Research Article

Journey Through Ramadhan – A Novel Diabetes in Ramadhan Patient Education Program

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Abstract: The incidence of Type 2 Diabetes Mellitus (DM) in Malaysia is increasing, with 59% in Malays followed by the other races. Fasting in Ramadhan for those with DM is challenging and needs close monitoring with sufficient and comprehensive medical advice. Diabetic complications during fasting is mainly seen in patients with improper disease control or inadequate information. This novel diabetes in Ramadhan patient education program aims to facilitate knowledge attainment and improve dissemination of information to mitigate the risk of complications in Ramadhan and to pave the way to fasting safely. This program provided comprehensive education on fasting in Ramadhan for people with DM in an engaging manner. The program was organised into three main parts: (1) patient self-educating activity; (2) specialized medical advice; and (3) lifestyle guide. This program was conducted at the UiTM Medical clinic facilities by the Endocrine team consisting mainly of physicians and diabetic educators. This program was facilitated by a specially designed educational guide, detailing important information on the risk categories for fasting in Ramadhan, timing of blood sugar monitoring, when to break the fast in the event of complication with management steps, medication adjustment, dietary advice and tips on keeping active during the fasting month. This innovative program has been tailored for use in the local population, and provides an essential service that is hugely beneficial, but currently lacking in this country. With this comprehensive and engaging platform, important information on managing diabetes in Ramadhan can be accessible to a wider population, leading to better patient care, and hence a has huge potential for sustainability.

Keywords: diabetes in Ramadhan; fasting; patient education program.



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1. INTRODUCTION

The incidence of Type 2 Diabetes Mellitus (DM) in Malaysia is increasing, with an estimation of 3.9 million adults diagnosed according to the recent Malaysian National Health and Morbidity Survey (NHMS) in 2019. This is contributed largely by the Malay race with a prevalence of 59%, followed by the other races (National Health and Morbidity Survey [NHMS] 2019), translating into a significant proportion of people with diabetes who will be fasting in the month of Ramadhan in Malaysia. Indeed, Malaysia lies in the geographical region with the highest muslim population in the world (International Diabetes Federation [IDF] 2021), and in an international survey assessing people

with Type 2 DM it was seen that more than 95% of these patients fast in Ramadhan regardless of their diabetic control, contributing to the largest number when compared to the other participating countries (Salti I, Benard E, & Detournay B et al, 2004).

Fasting in Ramadhan for those with DM is challenging and needs close monitoring with sufficient and comprehensive medical advice. Diabetic complications during fasting is mainly seen in patients with improper disease control or inadequate information. This was illustrated in a nationwide survey looking at admissions to general hospital across the different states in Malaysia during the month of Ramadhan, which revealed a high number of admission due to diabetic emergencies, with more than half of the assessed population unable to recall receiving medical advice regarding managing diabetes in Ramadhan (Chin V.T. et al, 2021). To address this issue, a special program was fashioned for patients attending the endocrine clinics in Universiti Teknologi MARA (UiTM) medical centre.

2. METHOD & MATERIAL

A diabetes in Ramadhan patient education program was specifically designed and conducted for the muslim diabetic patients in UiTM. This program aimed to: 1) facilitate knowledge attainment and improve dissemination of information, 2) mitigate the risk of diabetic complications in Ramadhan and 3) pave the way to fasting safely. Referencing the Malaysian Type 2 DM clinical practice guidelines (Ministry of Health, 2020) and the International Diabetes Federation (IDF) Diabetes in Ramadan Guideline (IDF, 2021), important information on managing the challenges DM patients face in the fasting month was assembled and subsequently translated into an interactive and educational training program tailored for the local population.

3. INNOVATIVE PROGRAM

Themed ‘Journey Through Ramadhan’, this novel program was conducted in the diabetes and endocrine clinics both at the Hospital Al-Sultan Abdullah (HASA) UiTM Puncak Alam and at the UiTM medical center at Sungai Buloh. Organized into three distinct parts, this program enabled effective multi-directional communication between patients, family members and healthcare professionals.

3.1 Patient self-empowerment

Commencing with a self-educating activity, patients and care-givers familiarized themselves with handling diabetes during fasting from information posted on poster boards, prepared specifically for the program. This part of the program enabled patients to discover various information regarding diabetes in Ramadhan and some of the conceivable challenges in management.

3.2 Specialized medical advice

Next, each patient had an individualized consultation with an appointed specialist from the endocrine team, where they had a risk calculation of fasting in Ramadhan and further explanation on managing diabetes during the fasting month. The risk of fasting was calculated based on the International Diabetes Federation – Diabetes in Ramadan (IDF-DAR) practical guideline (IDF, 2021), where the personalized score was categorized into high, moderate and low risk of fasting in Ramadhan. The participants were taught the optimal timing for monitoring their blood sugar levels with contingency strategies. They even received guidance on recognizing the complications, especially symptoms of low blood sugar and the prescribed action plan. They were also acquainted with situations where they would have to break their fast and the reasons for doing so. The patients were then given

detailed information on management of their medications during fasting, ranging from the timing to titration.

3.3 Lifestyle guide

The subsequent part of this program was information sharing by diabetic educators. The participants received customized guidance on dietary recommendations and judicious physical activity endorsed during the month of Ramadhan. Further avenues of assistance were provided for the patients to communicate with the diabetic educators during the fasting month if required.

3.3 Comprehensive guide

This whole education process was facilitated by a booklet, which was designed and produced specially for this program. This compendium was fashioned mainly in the Malay language to enable better understanding in the local population. This guide detailed essential knowledge on fasting in Ramadhan for people with diabetes, starting off with describing the challenges encountered by people with DM fasting in Ramadhan and the possible complications, and going on to detail approaches and approved steps in management. This guide was then divided into a few categories, comprising of: the population at high risk for continuous fasting, adequate and timing of blood sugar monitoring, when to break the fast in the event of complication and steps to handle the situation, medication adjustment, dietary advice and tips on keeping active during the fasting month

3.4 Certificate of completion

At the completion of program, each participant received a certificate in the form of a fridge magnet, as an acknowledgement of their involvement as well as a tool of reminder, to facilitate better management of diabetes in Ramadhan.

4. CONCLUSION

This novel and innovative diabetes in Ramadhan patient education program was specially designed for better management of diabetes for patient fasting in the month of Ramadhan. It provides an essential service and aims to fill the gap in crucial knowledge dissemination that is urgently required in this country. This comprehensive and engaging program has been tailored to local specifications with potential for multi-centre engagement, as well as to enable patient empowerment and pave the way to fasting safely.

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