Chapter 5.
Diabetes and Ramadan: A Medico-religious Perspective

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5.1 Introduction

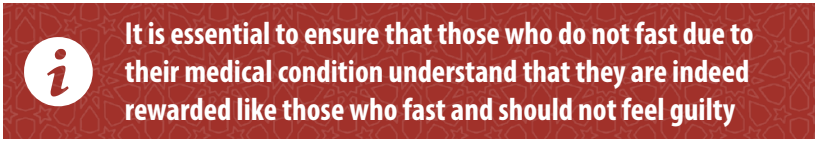
Ramadan fasting is one of the five pillars of Islam. It is incumbent upon every Muslim once puberty is attained, and thereafter, to keep fast during this month. The Holy Quran says: "O you who believe! Fasting is prescribed to you as it was prescribed to those before you so that you may attain self-restraint" [1] and "Whoever witnesses the month (of Ramadan) then he/she should fast. But, if any of you is ill or travelling – then he or she is exempted from fasting" [1].

As stated, certain categories of individuals – including children, the sick, travellers, women during menses, pregnancy or breastfeeding, and anyone with reduced mental capacity – are exempt from fasting [1]. The missed days of fast should be made up later when the individual is in sound health if the cause of not fasting was a temporary one.

5.2 Significance of Ramadan

Muslims believe that Ramadan is a blessed month as it honours the time when the Quran was revealed to the Prophet Muhammad and is the month of fasting when Allah's rewards for any good deeds are much higher than in any other time. This generally creates an intense and passionate desire to do one's utmost in order to seek the nearness and pleasure of God. In addition to fasting, Muslims engage in various other forms of devotion to a far greater degree in the month of Ramadan.

It is therefore not surprising that many Muslims who fall in the exempt categories, which would include those with acute or chronic diseases, are loath to take advantage of this concession. The reasons for such determination to keep the fast are not difficult to gauge. Perhaps a major factor is that the ill person feels that he or she would not be discharging his/her duty as a Muslim, notwithstanding the fact that he/she is aware of the exemption granted in the event of such a disease. On the other hand, many scholars, in awareness of the possible serious health risk for some people with medical conditions, feel that those who insist on fasting against medical advice are performing a seriously wrong action from a religious point of view as they could be jeopardising their health. Indeed, collaborative work between medical and religious experts is essential to ensure that those who do not fast due to their medical condition understand that they are indeed rewarded like those who fast and that they should not feel guilty.



5.3 Fasting and illness

The Quran clearly states that if one is ill, "the missed fast should be completed at another time", because "Allah intends ease for you and does not intend to put you in difficulty" [1]. But what constitutes an illness justifying such an exemption? Religious scholars have depended on the specific personal advice of an "expert Muslim physician to decide illnesses in which fasting may make conditions worse or delay healing" [2]. In contrast, doctors have often used medical jargon such as 'indications' and 'contraindications' and have offered varying opinions. This disparity is not helpful to either the patient or the healthcare professional (HCP) responsible for their care. Patients with diabetes can present with a range of complications and comorbidities all of which have an impact on the risk that fasting may impose on the individual. It should be acknowledged that not all patients will seek advice from an HCP prior to Ramadan. In fact, there is evidence to suggest that some patients prefer to discuss fasting with their local imam rather than their physician [3, 4]. A study has shown that imams are willing to include diabetes education within their teachings [5] and it is, therefore, important to have unification between HCPs and religious leaders on who should fast and who should seek exemption.

It is important to have unification between HCPs and religious leaders on which patients with diabetes should fast and who should seek exemption

5.4 Practical guidelines for the management of diabetes during Ramadan

Guidelines for the management of diabetes during Ramadan were first published by the American Diabetes Association (ADA) in 2005 [6]. Within these guidelines were recommendations for the classification of patients with diabetes into one of four risk categories: very high, high, moderate and low depending on the type of diabetes, medical history, glycaemic control, type of medication, presence of comorbidities and the individual's personal circumstances [6]. In 2009, at The Council of International Fiqh (the study of Islamic regulations) Academy of The Organisation of Islamic Conference (19th session), and as a result of deliberations by Islamic scholars and medical experts, the Fiqh Academy accepted the expert opinion expressed in the ADA Ramadan recommendations [2]. It was decided that those patients considered as very high and high risk should not fast while those in the remaining two categories could fast. With such recommendations in place, it is perhaps surprising that they are not always consulted. Analysis of patients with type 2 diabetes (T2DM) enrolled on the CREED study found that around one third of the physicians involved in their care did not consult guidelines for the management of diabetes during Ramadan [7].

When looking at the whole study population, including patients with type 1 diabetes (T1DM), the average number of days fasted by the highest and lowest risk groups only differed by three days [7]. This could suggest that either HCPs are not stratifying the patients correctly or that patients are ignoring the advice given to them by their physician and fasting even when told not to. A recent study involving nearly 200 physicians, mainly from the Middle East and North Africa, revealed that a majority stratified patients with diabetes in accordance with the categories defined in the ADA recommendations but not all the risks of fasting were identified by those providing care during Ramadan [8]. Hence, there is a clear need to reconsider the various risk categories and to provide a level of flexibility that would help the individual with diabetes and HCPs to make better decisions regarding fasting during Ramadan.

As part of these *IDF-DAR Practical Guidelines*, experts from the International Diabetes Federation (IDF) and the Diabetes and Ramadan (DAR) International Alliance have updated the risk classifications for fasting. As described in detail in Chapter 4, three categories are proposed, based on the most recent available information from science and practice during Ramadan fasting. These risk categories take into account a more practical approach while recognising the need to consider the everyday practice of many people with diabetes. Importantly, these recommendations are approved by the Mofty of Egypt, the highest religious regulatory authority in Egypt as well as being a scholar of Al-Azhar, one of the globally renowned Islamic academic organisations. The religious opinion on fasting for the three categories is outlined in ***Table 1***. All patients are instructed to follow medical advice and should not fast if the probability of harm is high. A summary of the approval by the Mofty of Egypt is available as an appendix to this document. It should be noted that this opinion may not reflect the religious rulings in all countries so further regional discussions are needed.

The new diabetes and Ramadan fasting risk categorisations described in these *IDF-DAR Practical Guidelines* have been approved by the Mofty of Egypt

Table 1. IDF-DAR risk categories and recommendations for patients with diabetes who fast during Ramadan

Risk category and religious opinion on fasting*	Patient characteristics	Comments
Category 1: very high risk **Listen to medical advice** **MUST NOT fast** 	One or more of the following: • Severe hypoglycaemia within the 3 months prior to Ramadan • DKA within the 3 months prior to Ramadan • Hyperosmolar hyperglycaemic coma within the 3 months prior to Ramadan • History of recurrent hypoglycaemia • History of hypoglycaemia unawareness • Poorly controlled T1DM • Acute illness • Pregnancy in pre-existing diabetes, or GDM treated with insulin or SUs • Chronic dialysis or CKD stage 4 & 5 • Advanced macrovascular complications • Old age with ill health	If patients insist on fasting then they should: • Receive structured education • Be followed by a qualified diabetes team • Check their blood glucose regularly (SMBG) • Adjust medication dose as per recommendations • Be prepared to break the fast in case of hypo- or hyperglycaemia • Be prepared to stop the fast in case of frequent hypo- or hyperglycaemia or worsening of other related medical conditions
Category 2: high risk **Listen to medical advice** **Should NOT fast** 	One or more of the following: • T2DM with sustained poor glycaemic control** • Well-controlled T1DM • Well-controlled T2DM on MDI or mixed insulin • Pregnant T2DM or GDM controlled by diet only or metformin • CKD stage 3 • Stable macrovascular complications • Patients with comorbid conditions that present additional risk factors • People with diabetes performing intense physical labour • Treatment with drugs that may affect cognitive function	
Category 3: moderate/low risk **Listen to medical advice** **Decision to use licence not to fast based on discretion of medical opinion and ability of the individual to tolerate fast** 	• Well-controlled T2DM treated with one or more of the following: – Lifestyle therapy – Metformin – Acarbose – Thiazolidinediones – Second-generation SUs – Incretin-based therapy – SGLT2 inhibitors – Basal insulin	Patients who fast should: • Receive structured education • Check their blood glucose regularly (SMBG) • Adjust medication dose as per recommendations

*In all categories people with diabetes should follow medical opinion if the advice is not to fast due to high probability of harm
**The level of glycaemic control is to be agreed upon between doctor and patient according to a multitude of factors

CKD, chronic kidney disease; DAR, Diabetes and Ramadan International Alliance; DKA, diabetic ketoacidosis; GDM, gestational diabetes mellitus; IDF, International Diabetes Federation; MDI, multiple dose insulin; SGLT2, sodium-glucose co-transporter-2; SMBG, self-monitoring of blood glucose; SU; sulphonylurea; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus

The recent religious opinion of the Mofty of Egypt emphasises the importance of the discussion between physician and patient when considering fasting or not and takes into consideration the ability of the person with diabetes to tolerate the fast. Furthermore, the religious advice of the Mofty of Egypt stresses that where obvious contraindications are present, it behoves the doctor to give categorical advice against fasting and highlights the importance of accepting this advice by the person with diabetes. Indeed, such patients should be reminded of the Quranic injunction: "Let not your own hands throw you into destruction" [9]. Moreover, there is a Hadith (Prophetic teaching) wherein he stated: "God has a right over you. Your body has a right over you …".

With medical and religious experts in agreement it is important that these recommendations are disseminated and implemented. For this to happen the following ideals should be realised:

- Doctors should be briefed with an acceptable knowledge of Fiqh provisions on this subject
- Religious scholars should instruct patients to consult those doctors who understand the medical and religious aspects of fasting and are God fearing
- Imams need to acquaint themselves with these regulations and with the risks of diabetes when they are advising any Muslim person with diabetes with regards to fasting regulations
- All efforts need to be made using media and other communication avenues to ensure that people with diabetes are aware of these regulations; this should help to increase the level of acceptance of the medico-religious decision in the event that it is to refrain from fasting.

In recognition of the sincere efforts made in this regard by experts in their specialty, all doctors and patients should comply with the joint medical and religious recommendations. There is also a need for continued scientific research in this area to build up practical experiences that will in turn lead to more accurate decisions. However, it is important to clarify some points that are of concern for people with diabetes who intend to fast during Ramadan:

- The religious feelings and psychological state of people with diabetes must not be overlooked, as most of them find psychological and physical comfort in fasting and will insist on the performance of this duty despite medical advice not to fast. Many will have observed fasting before with no apparent harm to their health. As psychological satisfaction is important, it is the duty of their specialist doctor to make every effort to help people with diabetes fast unless they find a real medical risk. It is also essential to educate such patients to help them avoid dramatic changes in their blood glucose while fasting and to give them strict instructions to break their fast if they need to

- Consideration should be made for the duration of the fasting hours, which may be 18 hours or more in some regions, such as Northern Europe. This undoubtedly increases the difficulty of fasting for people with diabetes
- It should be emphasised that people who have had diabetes for many years are more prone to the chronic complications of this disease and even if they were classified as low risk one year they should not assume they are still low risk the following year
- Other factors that may determine the ability of a patient with diabetes to fast should be addressed including general health, lifestyle, type and hours of work, ambient temperature and availability of medical support.

Summary

- Fasting during the month of Ramadan is a religious obligation for all healthy adults. However, Islamic regulations have exempted those afflicted with illness from this obligation.
- Harmony between medical and religious advice is essential to ensure safe fasting for people with diabetes. Indeed, the risk stratification groups defined in these *IDF-DAR Practical Guidelines* have been endorsed by the highest religious regulatory authority of Egypt.
- HCPs, religious authorities, as well as people with diabetes, need to be made aware of these regulations through all possible avenues.

References

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