Fasting and Health During Ramadan

As the start of Ramadan nears, we look at the various health challenges that GPs need to consider in patients observing the annual Muslim fast.

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Fasting is an age-old practice that transcends a number of faiths and customs. It is observed by Muslims during Ramadan and parts of other months; by Jews on days including Yom Kippur; by Christians during Lent and on the fast of the Apostles; and by Hindus on a regular basis. This article will focus on the main Muslim fast of Ramadan taking place over the summer months this year in the UK (30 days from June 29).

What is Ramadan?
Ramadan is the ninth month of the Islamic calendar, in which Muslims observe daily fasts. Fasting is one of the five tenets of the Islamic faith, which also include the proclamation of faith in one God, giving regular charity (zakat), performing the Hajj pilgrimage to Makkah and establishing regular prayer (salat). As the Islamic calendar follows the lunar cycle, Ramadan occurs approximately 11 days earlier each year and thus the season in which it falls varies periodically.

What does the Ramadan fast involve?
Muslims observe a complete fast from dawn to sunset each day during the month. Neither food nor drink (including water) is permitted between these times. When, as in this year, Ramadan falls in the summer months, the fast can therefore last up to 18 hours.

Muslims also refrain from smoking and intimate relations, and exert a greater than usual effort to focus on good manners, inner reflection and charitable acts to others. This striving to perfect one's character during Ramadan is further reflected in the fact that most of the charitable donations given by Muslims over the year are donated during this month. Greater attention is also paid to the five daily prayers and in addition, many Muslims will attend special congregational prayers at their local mosque that continue into the late evening after the break of fast. As a result, Ramadan can be physically arduous, particularly with the longer duration of fasts seen in Northern Europe.

Is fasting obligatory for all Muslims?
Fasting is an obligatory part of faith for all Muslims who are fit and well. There is, however, clear dispensation in Islam to exempt a person from fasting where it may adversely affect a person's physical or mental health. As such, people with complex and particularly chronic illnesses are advised to seek medical advice and to consult their local Islamic scholar to help determine whether they may be exempted from fasting. Elderly people, pregnant women and breastfeeding mothers are also exempt. Additionally, those who have jobs that require them to be in peak physical health, such as surgeons performing complex surgery or airline pilots, are given dispensation to delay fasting until a time outside of Ramadan where they can make up these fasts.

Despite these dispensations, patients with complex medical conditions, and in particular those who do not feel physically unwell, will often choose to fast, even if medical and scholarly advice permits exemption. This may be due to feelings of obligation, social pressure or guilt, or simply due to spiritual need. Indeed, one epidemiological study showed that up to 79% of patients with type 2 diabetes chose to fast during Ramadan.1

When consulting with patients seeking medical advice on fasting during Ramadan, it is thus useful firstly to explore the motivation for fasting (in those planning on doing so) and to ask patients if they have sought the advice of a religious scholar. Advice should be targeted to support patients in appraising the benefits and risks, in order to make their own decisions on whether to fast.

Where patients consequently make an informed decision to fast, further advice will be required to ensure that this is undertaken safely. Particular challenges will be to set clear parameters for
suspending fasting if patients feel unwell and also to manage medication regimens as oral medications are not permitted during fasting hours.

**Meal patterns and dietary advice**

There is a very different meal routine during Ramadan. Those who fast typically eat two meals a day – the Suhur (pre-dawn meal) that begins the fast prior to sunrise (which may be as early as 03:30 in summer) and the Iftar (meal at sunset) that ends the fast, around 21:00 during the summer.

Due to the long length of the fast, these meals may be very calorific, and a substantial amount of food may be eaten within a small period of time. Furthermore, many Muslims in the UK are of South Asian origin and tradition in these cultures has tended to promote a diet rich in fat, sugar and carbohydrates – particularly so during Ramadan.

Patients should be reminded of the importance of maintaining a healthy, balanced diet. Excessive food consumption during non-fasting hours can be a problem, and patients should be reminded not to overeat. Foods high in complex carbohydrates such as wholemeal bread, lentils, beans and rice will help to reduce feelings of hunger. Fruit and vegetables, along with natural yoghurt, are of course recommended as essential components of a healthy diet. Additionally, the consumption of sugar-free drinks during non-fasting hours should be promoted.

**Common complaints during Ramadan**

**Indigestion**

Due to the intake of high calorie meals early in the morning and late in the evening, indigestion is a common problem among those who fast – particularly so after the pre-dawn meal – and may disrupt usual sleeping patterns. Patients can sometimes suffer from indigestion after they return to sleep. To reduce the burden of ingestion, small frequent meals during non-fasting hours should be advised. Once more, meals should be healthy, and fatty or spicy foods should be avoided. Weight loss and sleeping on raised pillows may also be beneficial. If required, medications including antacids, ranitidine or proton-pump inhibitors can be used.

**Headaches**

There are a number of reasons why headaches are a frequently reported ailment among those who fast, and particularly during the first week of Ramadan. This is due to the body adapting to the pattern of fasting, and reasons include disturbed sleeping and working patterns, stress and dehydration.

Patients should be advised to lighten their daily activities where this is practical. In particular, strenuous or physically demanding activities should be avoided. Where stressors are unavoidable, for example for those employed in physically demanding roles of high intensity, such as airline pilots as mentioned, fasting can be postponed to alternative dates when they are not working. The importance of ensuring good hydration during non-fasting periods should be emphasised to all. Appropriate analgesia may be required, and in severe cases fasting should be terminated to allow for treatment to be taken.

**Constipation**

This is a commonly reported problem, and particularly so during the long summer fasts. A high fibre diet should be recommended in addition to ensuring adequate intake of fluid during non-fasting hours. For example, eating a bran cereal will help to limit the effects of constipation. If required, a bulk-forming laxative (fibre supplement) such as ispaghula husk, methylcellulose or sterculia may be prescribed to ease symptoms.

**Rheumatological complaints**

Common symptoms such as aches and pains continue to cause problems during Ramadan and may be exacerbated by dehydration and extra physical effort, for example attending nightly congregational prayers. Where feasible, all patients should be advised to continue light exercise while fasting, and once again patients should ensure good hydration during non-fasting hours. If regular analgesia is required, this should ideally be taken with meals at sunrise.
SEASONAL FEATURE

For patients who do fast, it is important to reduce the lability of blood sugar during the day and to advise that they eat regular, healthy meals during non-fasting hours.

and sunset. If patients are on specialist therapy, for example for rheumatoid arthritis, they should seek scholarly and specialist advice to determine whether they are exempted from fasting.

Fasting and common medical conditions

Diabetes
For patients with diet controlled diabetes where weight loss is advised, fasting may have a beneficial effect on health. Many patients with tablet or insulin dependent diabetes are however exempted from fasting, but for reasons outlined, many will still choose to fast in order to experience the spiritual high of Ramadan. For patients who do fast, it is important to reduce the lability of blood sugar during the day and to advise that they eat regular, healthy meals during non-fasting hours. In this, regard, Ramadan may be used as an ideal motivator for a diabetes health check, for example with the aid of a dietician. High fibre and low glycaemic index foods should be encouraged.5

Regular blood sugar testing does not invalidate a fast and should be encouraged in order to monitor for hypoglycaemia.6 Additionally, medications – both oral and injectable – will need to be altered to reduce this risk. Figure 1 summarises some of the changes that may need to be made to medications.

For a more detailed review of diabetes management during Ramadan, see BJFM Issue 1, June 2013.7

Asthma
It is generally accepted that inhaled medications, although not oral medications, are acceptable to use while fasting.9 Nevertheless, opinions on permissibility may vary. It is thus important to explore the types of treatment patients consider acceptable for use while fasting.

Research has shown that culturally sensitive medical counselling can improve symptoms in patients with asthma.10 As such, it is important to explore patients’ previous experiences of fasting during Ramadan and with this information arrive at a joint management plan with clear criteria for terminating a fast if a patient feels unwell. In patients with asthma who prefer not to use inhalers during fasting hours, one should consider switching to a regimen of a long-acting beta-2 agonist and/or a twice-daily inhaled corticosteroid dose prior to and after the fast.11

Figure 1: An approach to management of type 2 diabetes during Ramadan for patients planning to fast. (Adapted from Hui et al, 20108)
Cardiovascular disease
Though there is a paucity of clinical data regarding the impact of fasting on cardiovascular disease, the limited studies performed have suggested that there is no major adverse impact on cardiovascular health.12-13 One recent systematic review of data concluded that most patients with heart disease may fast without difficulty and highlighted data suggesting that fasting may confer an improvement in aspects of cardiovascular disease, for example on a patient’s lipid profile.14 Once again, care should be taken to counsel patients to continue taking any regular medications, but the timings of these should where possible be altered to avoid fasting hours.

Ramadan is an ideal time to capitalise on the feeling of wellbeing to impart good health advice to patients

Ramadan as an opportunity for health promotion
Ramadan is the month of spiritual renewal where many Muslims will pause to reflect on their lives in all spiritual, mental and physical dimensions. Most people will come together to create a vibrant individual and community spirit that is not observed throughout the rest of the year. As such, it is an ideal time to capitalise on this feeling of wellbeing to impart good health advice to patients.

A case study where this may have been used to good effect was the 2010 Ramadan Education and Awareness in Diabetes (READ) study17 assessing patients with diabetes who underwent a Ramadan-focused structured educational programme. Results showed participating patients achieved weight loss and a reduction in hypoglycaemic events in contrast to those who did not receive guidance. Furthermore, HbA1c changes were sustained longer term.

As such, Ramadan is a useful tool to help facilitate goal-directed therapy. For example, where patients are overweight, Ramadan may be used as a lever to promote weight loss and to set achievable targets for patients over the month to assist them in doing so.

This goal-directed therapy may also be used in assisting patients in stopping smoking. In Islam, smoking is at best makruh (disliked) and at worst haram (forbidden) due to the harms it confers on the body, and smoking during fasting hours is not permitted. Though there is rarely an inconvenient time to impart smoking cessation advice, Ramadan provides an ideal opportunity to promote these services.16

Conclusions
Religious practices such as fasting during Ramadan can have a significant effect on people’s lives. In patients with complex or chronic illnesses, the decision to fast may necessitate significant adjustments to treatment and medication regimens. Early consultation and discussion with patients to explore their ideas and concerns as well as their plans for the month will help to identify any major challenges that require addressing prior to patients beginning fasting.

It is crucial to emphasise that patients should not stop taking their medications or make abrupt changes to their treatment unless specifically advised by their GP or specialist. Utilising a targeted approach with shared decision making to create suitable management plans will ultimately assist patients to enjoy a healthy and spiritually uplifting Ramadan.

References

ADDITIONAL RESOURCES
NHS Choices. Ramadan health FAQs. www.nhs.uk/Livewell/Healthyramadan/Pages/faqs.aspx