

CHAPTER 8

Hajj: journey of a lifetime

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Ever since childhood, five times a day, many a Muslim will have turned his whole being in prayer towards The Sacred Mosque in Mecca, Saudi Arabia. Journeying to Mecca for Hajj (pilgrimage) is therefore no ordinary undertaking. For many, Hajj represents the culmination of years of spiritual preparation and planning. Once completed the pilgrim is given the honorific title *Hajji* (pilgrim).

Hajj commemorates the Patriarch Abraham's readiness to sacrifice his son Ishmael in biblical times. Performing Hajj is one of the five pillars of Islam and is therefore obligatory for all adult Muslims who can afford to undertake the journey and are in good health. Hajj lasts for five days and as the Islamic calendar is lunar, the precise Gregorian calendar dates will vary each year by about 10 days. Muslims travel to Mecca at other times to perform a lesser pilgrimage called *Umrah*.

Mecca has a resident population of about 200 000, this swelling to well over two million during the Hajj season. This rapid increase in numbers poses many challenges, including ensuring adequate food, water and sanitary facilities both in Mecca and the neighbouring deserts of Mina and Arafat, which pilgrims must visit as part of the Hajj ritual.

Although only incumbent on a Muslim once in a lifetime, many, and in particular those residing in the West, will journey far more frequently. For example, over 20 000 Britons perform the Hajj each year and the current annual figure for Umrah stands at almost 29 000.¹ In view of the very large numbers of people from disparate regions and the hostile climate of the Arabian Desert, the chance of disease striking, particularly the elderly and the infirm, is high.

In this chapter, we briefly describe the main rites of the Hajj before focusing on particular health risks associated with the Hajj and measures that may be taken to minimise such risks.

The significance of Hajj

The Sacred Mosque (Ka'bah)

'A curious object, that Ka'bah! There it stands at this hour, in the black cloth-covering the Sultan sends it yearly; 'twenty-seven cubits high'; with circuit, with double circuit of pillars, with festoon-rows of lamps and quaint ornaments: the lamps will be lighted again this night – to glitter again under the stars. An authentic fragment of the oldest Past. It is the Qiblah (direction of prayer) of all Muslims: from Delhi all onwards to Morocco, the eyes of innumerable praying men are turned towards it, five times, this day and all days: one of the notablest centres in the Habitation of Men.'

– Thomas Carlyle²

According to Muslim tradition, The Sacred Mosque was the first temple erected for the worship of Allah. It stands then as a symbol of monotheism. Many of the rites of the Hajj date back to the Prophet Abraham, one of the outstanding figures in Muslim history. Mecca is also honoured because it is the birthplace of Muhammad, Allah's final Messenger to Man. In common with pilgrimages in other faiths, the Hajj is a deeply spiritual exercise; a journey of heightened self-consciousness and individual self-renewal.

Journeying home

'And when, as a pilgrim, he stands before the Ka'bah in Mecca (after circling it seven times), the centrality already prefigured by his orientation when he prayed far off is made actual. Clothed only in two pieces of plain, unsewn cloth, he has left behind him the characteristics which identified him in the world, his race, his nationality, his status; he is no longer so-and-so from such-and-such a place, but simply a pilgrim.

'Beneath his bare feet, like mother-of-pearl, is the pale marble of this amphitheatre at the centre of the world, and although he is commanded to lower his eyes when praying elsewhere, he is now permitted to raise them and look upon the Ka'bah, which is the earthly shadow of the Pole or Pivot around which circle the starry heavens. Although Paradise may still seem far distant, he has already come home.'

– Gai Eaton³

The rites of Hajj

Many prospective pilgrims fail to appreciate that Hajj is physically demanding. It is the most complex of the Islamic rituals and involves, among other things, walking long distances and camping in desert tents, often with only the most basic sanitation.⁴ Centrepiece in these activities is the pilgrim's presence on the desert plain of Arafah, from noon until sundown. Here, dressed in the simplest

possible garb made up of two pieces of unstitched cloth for men (*Ihram*), with women wearing their usual clothing, with a head scarf, pilgrims will spend much of the day standing in humility and prayer, performing a dress rehearsal for the final standing before God on Judgement Day.

Because of the sheer volume of human traffic, performing even the simplest rites can take an extraordinary length of time. There is a religious dispensation for those in poor health and many will make use of this allowance after consultation with their doctor;⁵ some will, however, travel against medical advice, often in the hope of dying in the Holy Land. For Muslims living in the West the decision of whether or not to travel on health grounds is often more complex since few health professionals have an awareness of what the Hajj entails and its associated health risks, and therefore typically find it difficult to offer an informed opinion.

Health problems and approaches to minimising risks

Problems of sun and heat

Next please!

'In the next few days prostration from (heat) exposure passed at a rapid clip through the hotel. Striking down groups of four or five, it moved from room to room and floor to floor. Soon the hotel began to resemble an infirmary, with dozens of guests in various stages of illness strewn around the lobby every night. Guides were not spared.

'Every day the temperature climbed by one or two degrees. At midnight the mercury remained above one hundred Fahrenheit . . .'

– Michael Wolfe⁶

Travelling to Mecca in advance of the Hajj is sensible, particularly for those unaccustomed to the oppressive climate of the Arab Desert. Pilgrims need to be made aware that acclimatisation – which occurs through a gradual increase in sweat production thereby facilitating cooling through increased water evaporation – to very high temperatures can take between one and two weeks.⁷

Sunburn is a significant hazard, particularly for the light-skinned. The use of an appropriate strength sun block is important to minimise the risks of burning, with its associated risk of malignant tumours. More importantly, it is crucial that sun exposure is kept to a minimum as discussed below.

Heat exhaustion and heat stroke are common, and can be fatal. The Saudi authorities, in their role as the pilgrims' hosts, undertake valuable health promotional work, distributing leaflets and issuing radio and television warnings of the dangers of excessive sun exposure. The number of people who still succumb to the heat is, however, evidence enough that the message needs to be reiterated at every possible opportunity.⁸

During the Hajj men are prohibited from directly covering their heads

(with a hat or scarf, for example), thereby increasing the risk of significant heat exposure. The usefulness of a quality umbrella, preferably white in colour, so as to reflect away the sun's rays, cannot be overemphasised. Such simple measures may be life-saving if the pilgrim were to lose his or her bearing in the desert, as is easily and not infrequently done. Other important precautionary measures that may be taken are summarised in Table 8.1.

TABLE 8.1 Precautionary measures to minimise the risk of heat exhaustion and heat stroke

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- Avoid spending long periods of time in the sun, particularly when it is at its zenith.
 - Travel by night whenever possible (which may also avoid stampedes).
 - Keep heads covered during the day (with an umbrella if necessary).
 - Consume large volumes of fluid throughout the day.
 - Always keep a canister of fluid in your possession.
 - Increase dietary salt intake or use salt tablets.
 - Avoid transport in 'open top' buses.
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Heat exhaustion typically occurs in subjects who are not acclimatised and undertake strenuous exercise. Water depletion or a combination of salt and water depletion, due to excessive sweating, is the underlying cause. Water loss can be as much as five litres per day, and up to 20 grams of salt may be lost. Most cases are relatively mild, with symptoms of weakness, light-headedness and muscle cramps that will respond to a combination of rest, cooling, fluid and salt replacement. If not adequately treated, however, heat stroke may occur.^{7,9}

Heat stroke is a medical emergency (Table 8.2; and *see* Table 8.3 for emergency contact numbers). Skin is hot to the touch and there is a notable absence of sweating. The very young, the elderly and diabetics are most at risk. The extreme rise in body temperature makes prompt and appropriate treatment mandatory. The patient should be moved into the shade, stripped, cooled with a combination of fanning and spraying the body with cold water, and, if conscious, given fluid replacement, while expert medical attention is urgently sought.

TABLE 8.2 Symptoms suggestive of heat exhaustion and heat stroke

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- Fatigue, weakness and leg cramps.
 - Headache, nausea and vomiting.
 - Giddiness.
 - Delirium.
 - Syncope and coma.
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TABLE 8.3 Emergency numbers in Saudia Arabia

Ambulance	997
Police	999

Since the early 1980s, cooling units have been installed along the pilgrim route. Emergency services will often suspend patients in a hammock-like bed and spray them liberally with an air/water mixture. The water is warm and cools the body through evaporation, simultaneously also preventing further dehydration. Research suggests that these simple devices are significantly quicker in reducing body temperature than the usual method of placing victims in an ice bath. This is possibly explained by the fact that unlike with the ice bath method, vasoconstriction and shivering are not induced – responses which ultimately cause the body temperature to rise.¹⁰

Most pilgrims travel on foot; quality footwear is important, though in our experience, frequently overlooked. During the day, the desert sand typically becomes burning hot. Care needs to be taken to avoid walking barefoot because of the serious risks of foot burns. This is particularly important for diabetics with a neuropathy, as very extensive damage may quickly occur, often compounded by the problems of poor wound healing and the increased risks of infection. Footwear needs to be removed before prayers and those who have not been on Hajj are often unaware of the ease with which footwear can become confused with another pilgrim's and thus inadvertently taken. One may be forced to walk barefoot in an attempt to reclaim one's footwear, with potentially devastating consequences.

Infectious diseases

An outbreak of group A meningococcal meningitis occurred among British Muslim pilgrims following the 1987 Hajj. There were 18 primary cases among pilgrims and 15 subsequent cases among their direct and indirect contacts.^{11,12} Similarly, an outbreak of W135 meningococcal disease occurred among British pilgrims in 2000 and 2001. In an attempt to prevent a further outbreak the Saudi authorities now insist that all pilgrims be vaccinated with a single dose of the ACWYVax with conjugate meningitis vaccination.¹³ Immunity is thought to last for approximately three years. A medical certificate confirming vaccination is now required before visas will be issued.

Vaccination against hepatitis A and malaria prophylaxis, together with advice on measures to minimise the risk of exposure, are important. We would also recommend vaccination against hepatitis B (*see below*) and influenza, particularly in the context of a possible global influenza pandemic originating from the Hajj.¹⁴ In addition to checking tetanus and polio status, typhoid and diphtheria vaccination should also be considered. Many people decide to travel on from the Hajj, particularly to Africa and the Indian subcontinent, and, therefore, as in all travel consultations, taking a detailed intended travel history is important. Pilgrims need to be reminded of the importance of seeking medical attention for any unexpected symptoms, such as fever, diarrhoea, jaundice or a high fever on their return. A persistent cough is also significant because of the reported high incidence of pneumonia (particularly tuberculous) among pilgrims.^{15,16}

One of the rites of the Hajj is for men to have the head shaved (although trimming the hair is also acceptable). Most will have their heads shaved, often in makeshift centres, run by opportunistic 'barbers'. A razor blade is commonly used, and may be used on several scalps before being ultimately discarded. The risks of important blood-borne infections such as HIV and hepatitis B and C are obvious, especially considering that many pilgrims will come from regions of the world where such infections are now endemic.¹⁷ Pilgrims need to be aware of these potential dangers and should insist on the use of a new blade. Physical relationships are prohibited during Hajj, even between husband and wife, and so the risks of acquiring sexually transmitted diseases are minimal.

Injuries

Injuries, particularly to toes, are relatively common, typically resulting from inadvertently being stamped on while barefoot when circumambulating the Ka'bah. More serious injuries, some of which prove to be fatal, occur each year during stampedes in Mina as pilgrims undertake the stoning rite. Pilgrims should be advised to avoid peak times and the old and infirm advised to consider appointing a proxy for the performance of this rite.

General advice

Menstruation is considered a state of ritual impurity, and hence menstruating women are not permitted to perform the Hajj. This often causes a great deal of concern; an emotion that is perfectly understandable if one remembers the importance of the journey and the time, effort and money that may have been invested. Delaying menstrual bleeding, by using the combined oral contraceptive pill or daily progesterone, for example, is perfectly acceptable and many women consult their general practitioners or family planning clinics for this reason in the run up to the Hajj season.

Contact lenses are also often problematic, particularly in arid conditions where sand can often be blown into the eyes. Ocular lubricants (such as Hypromellose 1% eye drops) should be used liberally to stop lenses adhering to the cornea. Temporarily resorting to the use of spectacles may be another option. Although there are a number of makeshift dispensaries erected during the Hajj season, these are often difficult to access, largely on account of the human mass. Pilgrims should therefore ensure that they take enough of their regular medication and small supplies of common remedies, such as analgesia, oral rehydration salts and clove oil for dental pain. A simple travel pack comprising adhesive dressings, an insect repellent, antiseptic cream and water sterilisation tablets is also useful.

Conclusions: the ‘Hajj travel consultation’

There are a number of known risks associated with pilgrimage to Mecca which can mar the entire experience. That said, most of these problems should, with sensible precautions, now be preventable. All potential pilgrims must now be protected against meningococcal disease and this opportunity to review patients can be used to impart other key areas of advice discussed above. These issues are summarised in Table 8.4.^{18,19}

TABLE 8.4 Issues to consider in the ‘Hajj travel consultation’

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- Fit to perform the Hajj?
 - Heat exhaustion and heat stroke.
 - Foot burns and sunburn.
 - Infectious diseases.
 - General travel advice.
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Summary

- ❖ Hajj, the journey to The Sacred Mosque in Mecca, is a once-in-a-lifetime obligation for all adult Muslims who are physically and financially able.
- ❖ Over two million people globally perform the Hajj each year.
- ❖ If unprepared, health risks associated with the Hajj are considerable. Most important are the risks of heat exhaustion, heat stroke and infectious diseases.
- ❖ All pilgrims must be vaccinated against meningococcal disease. A ‘Hajj travel consultation’ is thus mandatory, offering the ideal opportunity for health promotional advice.

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