

Managing medications during Ramadan fasting

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Fasting during Ramadan

Ramadan is a warm, community celebration for practising Muslims that involves a month of fasting, worship and feasting. Over the month of Ramadan, between dawn and sunset, individuals refrain from eating, drinking, smoking, intercourse and taking oral medications. For Muslims, the goal is to improve their spiritual and physical state and to fortify their relationship with God.

Each day of Ramadan begins with a predawn meal known as *Suhoor* that includes enough food and water to sustain the individual over a long day of fasting. At sunset, families break the fast together during a celebratory evening meal known as *Iftar*, often eating with neighbours and extended family. *Iftar* is usually rich in calories and is taken with a large amount of fluids.

Every year, Ramadan falls on the ninth month of the lunar Islamic calendar, which means it moves ahead by a couple of weeks on the Western (Gregorian) calendar. For the next few years, Ramadan will fall over the longest days of the year in May and June. For Muslims in Canada, this means that fasting can last up to 17 hours a day.

Who does and does not fast?

Generally speaking, fasting during Ramadan is mandatory for all adult Muslims who are of sound mind and physically able to tolerate it. Anyone who is travelling, sick, pregnant or breastfeeding during Ramadan can make up the missed fasts when able. Similarly, women who are menstruating or who have postpartum bleeding perform their fasts after bleeding has stopped.

Most important, exceptions are made for people who cannot perform the fasting safely, such as the elderly and those who are chronically ill (e.g., those with diabetes). Instead, they

can honor Ramadan through charity, such as by feeding a less privileged person in lieu of fasting.

It is also important to note that Ramadan is the largest Muslim celebration of the year, akin to Christmas for Christians and Diwali for Hindus. As a result, there is a strong desire to participate in all aspects, even when exceptions can be made for chronic illness. Thus, many observers still choose to fast and do not disclose this to their health care professionals, even if it puts their health at risk.¹ Similarly, some children may also insist upon fasting, although they usually fast for only a portion of the day.

Managing medications during Ramadan

Caring for patients who celebrate the month of Ramadan represents a unique undertaking for health care professionals, including pharmacists. Individuals who take chronic medications need to adjust medication schedules so they can be taken between the evening meal of *Iftar* (sunset) and the morning meal of *Suhoor* (dawn).

For medications taken multiple times during the day, recommended strategies include choosing long-acting formulations (e.g., sustained release) or changing dosing regimens to once or twice daily.² Suggested regimens are available for certain chronic conditions, including Parkinson's disease,³ thyroid disease⁴ and heart disease,⁵ although more information is needed. For short-term conditions requiring treatment, such as antibiotics for infections or nonsteroidal anti-inflammatory drugs for pain, medications with once-daily dosing should be selected. Non-oral dosage forms such as injections, inhalations, suppositories and eye/ear drops are usually allowed during the fast, although some variations of consideration exist.²

Ramadan Fasting and Medications

During the holy month of Ramadan, Muslims do not consume anything by mouth from dawn until sunset, including food, water and medications.



Safety First

Make sure that the patient can go safely from dawn to sunset without meds.

If they can't, refer the patient to their Imam for other ways to honour Ramadan.



Remember to adjust pharmacy labels, blister pack labels and to notify the physician.

Adjust Time of Meds

Adjust oral meds so that patients only need to take them 1-2 times per day (at dawn and/or sunset).

Adjust Types of Meds

If the dosing times cannot be adjusted, consider a different treatment option.

Try to choose antibiotics that are taken only once or twice daily.



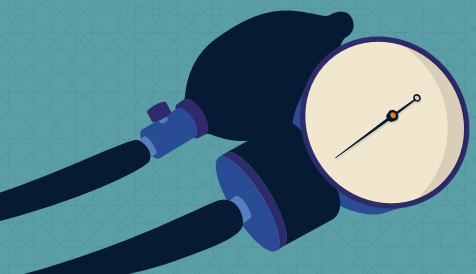
Adjust the Fast

If someone cannot fast over a long summer day, they can make up their fast over the shorter winter days.

Consider the Illness

Illnesses such as diabetes, migraine and hypertension need special attention.

Encourage patients to eat suhoor (morning meal) and to stay hydrated. Adjust med doses as needed.




For further information, refer to:
BMJ Open Diabetes Care Res 2015 16;3(1):e000108.
Prescriber 2011, vol. 22, issue 13-14, 14-21

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For certain conditions such as migraine, careful attention should be paid to avoiding triggers, such as reminding individuals to always take *Suhoor* in the morning, to stay well hydrated in the evening hours and to stay out of the heat when possible. For individuals with hypertension, health care providers should also educate their patients to avoid dehydration, to regularly monitor their blood pressure and to watch for signs of hypotension such as dizziness and lightheadedness.

Diabetes is one of the most challenging conditions to manage during Ramadan, and patients with diabetes require close monitoring. Most Muslim patients with type 2 diabetes (86%) and almost half of patients with type 1 (43%) will fast.⁶ A systematic review found that fasting is possible in patients with diabetes, even if they are insulin dependent.⁷ However, fasting can increase the risk of hypoglycemia^{6,8} and diabetic ketoacidosis.⁹ Further, individuals who adjust their own medications are more likely to experience severe hypoglycemia during Ramadan.⁶ By comparison, individualized education during Ramadan can help Muslims with type 2 diabetes lose weight, improve glycemic control and avoid severe hypoglycemia.^{10,11} For specific tips, refer to the 2015 recommendations for management of diabetes during Ramadan.¹²

Role of the pharmacist

Pharmacists have a big role to play in helping Muslims adjust medications safely during

Ramadan and to identify anyone who cannot safely do so.¹³ Recent research from Australia found that pharmacists are generally willing to counsel patients during Ramadan but tend to perceive that there is little need for intervention unless directly asked.¹⁴ In the predominantly Muslim country of Egypt, by comparison, most pharmacists adjust medications during Ramadan, including the frequency of dosing (most common), the dose, the dosage form and the medication itself (least common).¹⁵ That said, research in other predominantly Muslim countries, such as Qatar and Pakistan, has shown that pharmacists and physicians with a good knowledge of Islam still have knowledge gaps about how to adjust medications safely.¹⁶⁻¹⁸

In other words, there is plenty of opportunity to support Muslim patients during Ramadan, but we all have a lot to learn about how to do so safely.

Conclusion

Providing tools and resources related to understanding different cultures is essential for pharmacists' competency to provide optimal care. While serving Muslim patients who observe fasting during the holy month of Ramadan, pharmacists should give special consideration to the safety of fasting and address required changes in pharmacotherapy and lifestyle to avoid potential hazards of fasting. ■

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