

## Medication concerns during Ramadan fasting

On October 4, Muslims begin the month-long Ramadan, during which they refrain from all food and drink (even water) in the daytime. Clinical concerns that may arise from fasting are:

- inability to take medications during the day
- dehydration and other somatic changes that necessitate dosing modification
- psychiatric symptom exacerbation.

Based on our experience, we offer these guidelines to address possible health risks in these patients.

**Symptom risks.** During Ramadan, even persons without mental disorders have reported irritability, decreased sleep, difficulty concentrating, and anxiety.<sup>1</sup> In patients with bipolar disorder, one study described a high rate (45%) of breakthrough manic or depressive episodes during Ramadan, despite stable lithium levels.<sup>2</sup> Fasting-related changes in circadian rhythms and insomnia are thought to contribute to psychiatric symptom exacerbation.

**Religious sensitivity.** The best way to identify a Muslim patient who intends to fast during Ramadan is to ask about religious or spiritual backgrounds as part of a thorough psychiatric intake. Ramadan serves as a reminder of the suffering of the poor and signifies an opportunity for self-restraint, prayer, and charity. Common interpretation of the Quran requires fasting unless it is medically harmful.<sup>1</sup>

If you anticipate a clinical problem, inform your patient of the risks of fasting. For patients with severe mental illness, fasting may not be reasonable. Be aware, however, that patients may

ignore your advice because of the stigma of mental illness coupled with family or community pressure to fast.

Do not underestimate the importance Muslims place on fasting. Although the consequences of psychiatric symptom exacerbation can be disastrous, your advice must be balanced by your patient's religious beliefs. Patients may be reluctant to broach this topic, but discussing it will strengthen your therapeutic alliance.

Allay natural guilt by focusing on medical necessity. Consider increased psychotherapy as a transitional possibility during Ramadan.

**Modifying pharmacotherapy.** Fasting may cause dehydration and decrease glomerular filtration, which may increase serum levels of renally dependent psychotropics such as lithium.<sup>3</sup> Fasting also changes gastric pH and phase II liver

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metabolism, altering the pharmacokinetics of valproic acid.<sup>4</sup>

For patients taking antidepressants and antipsychotics, watch for anticholinergic side effects—dry mouth, dehydration, and confusion—especially in the elderly. To avoid having patients alter their treatment regimens without consulting you, consider a temporary switch before Ramadan to longer-acting medications or medications with once- or twice-daily dosing. Increased monitoring may also be necessary during this period.

**Substance abstinence.** Fasting mandates abstinence from alcohol, caffeine, and tobacco. For users of these substances, discuss a tapering approach to preempt possible withdrawal symptoms. Changes in intake of caffeine and tobacco—inducers of cytochrome P-450 isoenzymes, especially 1A2—can alter (usually by increasing)

drug levels of antidepressants and antipsychotics metabolized by this pathway.<sup>5</sup>

#### References

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#### ACKNOWLEDGMENTS

The authors thank Hashib Faruque, MD, for his comments and suggestions.

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