# Letters
# Correspondance

## Challenges in evidence-based medicine

This is the age of evidence-based medicine. No one can argue that this is a bad thing. It is troubling, however, that we might be introducing gaps into our practices by missing the true meaning of the words evidence-based.

Evidence-based medicine implies three things: the scientific studies were done in a proper and complete way; the findings were significant enough to allow for recommendations leading to better outcomes; and the practice-based recommendations are pertinent to our particular subgroups of patients.

The third assumption is not always valid; the subgroups of patients in our practices might differ substantially from the subgroups of patients in studies. These differences could be genetic, socioeconomic, cultural, or resource based.

Before we prescribe treatments, we do not just ask, "Is this treatment based on sound evidence-based recommendations?" We also question the logistics of the proposed treatment. If patients' socioeconomic circumstances prevent implementation of the proposed treatment plan, it makes no sense to propose that plan or to write the prescription that evidence-based medicine supports. You are now faced with a choice: delay the plan until more resources are available or modify the plan to better fit the current situation.

In practice, the first question we ask patients is, "Do you have a drug card?" If coverage for medication is a problem, as it often is among the working poor or elderly people, writing a prescription according to practice guidelines is often a waste of time. Either patients will not purchase prescribed medications or will only pick up part of them. If this is the case, it would be better to prioritize the medications and to look at the ability of patients to pay. Writing prescriptions for three or four expensive medications, as indicated by best-practice guidelines, is inappropriate because these guidelines do not fit this particular patient group.

In practice, treatment plans can be modified to partially overcome this. For example, a person with ischemic heart disease, increased lipids, and diabetes will need many medications. These will include an ACE inhibitor, a lipid-lowering agent, and acetylsalicylic acid. If a prescription is written for Lipitor (20 mg daily), Altace (10 mg daily), and ASA (81 mg daily), then a 90-day supply will cost approximately $350. If a prescription is written for Lipitor (80 mg, half a tablet to be taken alternate days), along with Mavik (2 mg taken on alternate days), and enteric coated ASA (325 mg taken on alternate days), the cost for a 90-day supply is $117. This alternative plan obviously makes the prescription more affordable.

The problem is that the alternate-day regimen is not fully supported by scientific evidence. Certainly pill splitting and taking Lipitor on alternate days have been shown to be effective for decreasing lipids.[1,2] Studies also suggest that taking ASA on alternate days is probably just as effective as taking a lower dose of ASA every day.[3] Use of Mavik on an alternate-day regimen has not been studied as far as we know, however, Mavik does have a very long half-life; from a physiologic point of view, it should work. We have achieved good blood-pressure control for our patients with this alternate-day regimen.

The problem is that how medications work is a complex process. What should work in theory often does not work in practice because

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medications are working at many different sites on many different levels. For example, a patient might take a statin on alternate days and achieve lipid targets. It is not known, however, whether this would translate into the same benefits for cardiovascular morbidity and mortality as once-a-day dosing, or whether the other benefits of statins, such as effects on endothelial dysfunction, are the same.

Just achieving good blood-pressure control and good lipid levels does not necessarily mean that you are doing all you want to do for your patients.

More long-term studies are needed to look at alternate-day regimens, whether it be alternate-day dosing or other proposed evidence-based medicine plans. Such long-term studies might never be done, leaving practitioners to make tough choices between pure evidence-based medicine and less optimal treatment plans dictated by patients' circumstances. The gulf between what should be done and what can be done exists in all practices to a certain extent, but probably exists in some subgroups to a greater degree. To bridge this gap, for right or wrong, we are bending evidence-based guidelines and we probably should be. The question is, how is the bending to be done?

We should certainly not throw out evidence-based medicine, but it is challenging to use this information to benefit all our patients. We cannot take guidelines as is and use them in all situations; they are not written in stone. We must use guidelines creatively to make them practical for our patients. More studies are needed to give practitioners a better idea of how far they can wander away from the guidelines and still offer their patients sound treatment plans.

In our practice, if we can get patients' lipid levels and blood pressure down to target using pill splitting and alternate-day regimens, we do it, especially if we know the alternative is to write expensive medication lists that patients have no ability to pay for and will not use.

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**References**

1. Jafari M, Ebrahimi R, Ahmadi-Kashani M, Balian H, Bashir M. Efficacy of alternate-day dosing versus daily dosing of atorvastatin. *J Cardiovasc Pharmacol Ther* 2003;8(2):123-6.
2. Juszczyk MA, Seip RL, Thompson PD. Decreasing LDL cholesterol and medication cost with every-other-day statin therapy. *Prev Cardiol* 2005;8(4):197-9.
3. United States Preventive Services Task Force. Aspirin for the primary prevention of cardiovascular events: recommendations and rationale. *Ann Intern Med* 2002;136:157-60.

## Computerization and going paperless

I read with pleasure the October 2005 book review (2005;51:1385-6) of *Computerization and Going Paperless in Canadian Primary Care* by Nicola T. Shaw, which is indeed an excellent and timely book. Perhaps my colleagues would appreciate knowing that it is available through Canadian Medical Association Books on **cma.ca** at a better rate of $44.95 for CMA members and $51.95 for non-members.

*—Dr Alexandra Tcheremenska-Greenhill*
*Director, Office for Leadership in Medicine*
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## Ordering *Mental Disorders in Primary Care*

A revised edition of *Mental Disorders in Primary Care*, reviewed in the October 2005 issue of *Canadian Family Physician* (2005;51:1383), was released in February 2005. The revised kit includes modules on depression, anxiety, post-traumatic stress disorder, alcohol use disorders, tobacco, sleep problems, chronic tiredness, and unexplained somatic complaints. The cost of the kit is $119.00. It can be ordered from: Jeff Green, *Elgin Ventures Ltd, 134 Rolling Hill Dr, Fredericton, NB E3A 9W5; telephone (506) 451-8711; fax (506) 451-8100; e-mail* **elginventures@rogers.com.**

## Updated classification of findings for evaluation of sexual assault in children

It is a shame that the article on evaluation of sexual assault in children[1] published in your October issue only included literature published before March 2004.