Evidence-based medicine designed to save physicians time, energy, FPs told

Michael OReilly

In brief

ALTHOUGH NOT ALL PHYSICIANS WELCOME THE CURRENT MOVE toward evidence-based medicine, Dr. Warren McIsaac, a member of the Institute for Clinical Evaluative Sciences in Ontario, says it is designed to save them time and energy. He made the comments during a meeting of family physicians in Ontario.

En bref

MÊME SI LE MOUVEMENT EN COURS VERS LA MÉDECINE fondée sur des données probantes ne réjouit pas tous les médecins, le Dr Warren McIsaac, membre de l'Institute for Clinical Evaluative Sciences in Ontario, affirme qu'il vise à leur épargner temps et énergie. Il a formulé ces observations au cours d'une réunion de médecins de famille tenue en Ontario.

The movement toward evidence-based medicine may not be welcomed by all doctors, family physicians were told at a recent meeting, but in fact it does not represent anything new.

"As medical practitioners we've always [used data to improve clinical practice]," said Dr. Warren McIsaac, a family physician and member of the Institute for Clinical Evaluative Sciences in Ontario (ICES). "The only difference is that we've had to rely on [inadequate] information in the past."

McIsaac, who addressed the 34th Annual Scientific and Business Meeting of the Ontario College of Family Physicians in Toronto, said ICES was formed simply because few practising physicians have enough time to review and integrate the huge amount of research being made available into everyday practice.

"It just makes no sense to have [hundreds of] family physicians each taking the time and energy to assess each new development in each area and then to figure out how to apply it in their practice," he said. "All we're doing is taking the information and putting it in a usable form."

Using current research, ICES publishes practice guidelines that are made available through a quarterly newsletter (*informed*) and a World Wide Web site (**www.ices.on.ca**). As Dr. Edward Brown, the editor of *informed*, states: "Our goal is to put health services information and clinical research together in a clear and concise format to give practising physicians material that is directly relevant to their practice. . . . We try to do it in a short, clear and easy to read format — call it 'research lite.' "

McIsaac presented several examples of "research lite" at the meeting:

- acute low back pain
- the use of angiotensin-converting enzyme inhibitors to treat congestive heart failure
- prostate-specific antigen testing
- the use of antibiotics to treat patients with a sore throat
- identification of depression
- use of x-rays for acute ankle injuries

In the case of antibiotics used to treat sore throats, McIsaac and his ICES colleagues conducted a study to see how physicians might best respond to this ailment.

It is estimated that 13% of all visits to Ontario family physicians are made because of upper-respiratory-tract illness, with many of the complaints involving a

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sore throat. The problem is generally harmless, causing only temporary pain and discomfort. However, in a small percentage of cases sore throats will lead to more severe respiratory problems. A common approach is to prescribe antibiotics.

The problem, according to ICES research, is that 80% to 90% of patients with pharyngitis are not infected with group A streptococci (GAS) and hence are not in danger of developing anything worse. However, research has determined that physicians diagnose up to 40% of all patients with sore throats as having GAS-related pharyngitis. As a result, said McIsaac, not only is a great deal of money is being wasted but also the problem of antibiotic resistance is being exacerbated.

"The real problem is that no one has given doctors practical tools to identify the patients who are most likely to benefit from antibiotics," he said. That is, until now.

Using current research involving sore throats, including a study conducted by ICES and family physicians at the Stratford General Hospital in Stratford, Ont., McIsaac and his colleagues developed a "sore throat score card."

It gives physicians an easy method for rating a patient's chance of actually needing antibiotics. It requires doctors to study 4 clinical characteristics: fever, tonsillar exudate, swollen or tender anterior cervical nodes, and the absence of a cough.

Adult patients with none or one of these symptoms have only a 2% to 7% chance of being infected with GAS, and no action should be taken to treat them. For patients with a score of 2 or 3, physicians should take a throat culture and wait for the results before prescribing antibiotics.

Finally, a throat culture is still recommended for patients with a score of 4, but physicians should use their clinical judgement when deciding whether or not to start treatment with antibiotics immediately.

"These patients [with a score of 4] are usually sicker and may get some symptom relief from antibiotics," said McIsaac. "But they actually form a very small group — about 10% to 15% of all cases involving sore throat."

The main reason for treating sore throats with antibiotics is to prevent rheumatic fever, he explained, not to relieve the symptoms. He thinks that lesson has disappeared in recent decades. Since the incidence of rheumatic fever in the general population is very low, and has declined dramatically over the past 40 years, the number of prescriptions written for antibiotic drugs can safely be reduced.

McIsaac added that only 8% to 20% of patients with a sore throat visit a physician "and yet people aren't developing rheumatic fever at any great rate. What we've tried to do is remove the fear of missing that rare case of rheumatic fever, and raise some questions about the possible overuse of antibiotics."

However, he stressed that the research being done by ICES is not meant to detract from the work done by practising physicians. The need to make use of a physician's professional judgement and personal understanding will never disappear, he said. ❦