

# Knowledge Transfer: Adoption and Adaptation of Clinical Practice Guidelines

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This issue of *CJHP* contains 2 articles reporting adherence to internationally recognized clinical practice guidelines, one relating to diabetes management<sup>1</sup> and the other to prevention of thromboembolism.<sup>2</sup> Uptake of these guidelines by clinicians at the respective institutions where these evaluations were conducted was far from universal. Are we to believe that patient care suffered as a result?

Clinical practice guidelines are “systematically developed statements to assist practitioner and patient decisions about appropriate healthcare for specific clinical circumstances”.<sup>3</sup> Ideally, they consider not only the best available scientific evidence but also clinical expertise and patient preferences.<sup>4</sup>

Identifying the existence of a care gap is the first step in deciding whether an individual clinician or a team of clinicians should create a new clinical practice guideline or apply an existing one. To make a fully informed decision regarding the presence of a care gap, both the existing scientific evidence on the topic in question and the site-specific standard of practice must be critically appraised. If the best available evidence in one arena has already become the standard of care in a particular practice setting, it may be more efficient to tackle other issues. However, once the existence of a care gap has been identified, an individual clinician or team of clinicians must decide whether an existing clinical practice guideline merits addition to their “practice lexicon”. Tools such as the AGREE (Appraisal of Guidelines for Research and Evaluation) instrument are useful in this regard, since they offer structure and focus for a seemingly overwhelming task.<sup>5</sup> For example, the AGREE instrument evaluates the quality of the guideline development process under 6 domains: scope and purpose, stakeholder involvement, rigour of development, clarity and presentation, applicability, and editorial independence.

It is unlikely that even a clinical practice guideline that scores high with a tool like the AGREE instrument can be adopted wholesale into an individual practice setting. There will always be mitigating factors (e.g., access to equipment, drug budget constraints, and jurisdictional restrictions on drug licensure) that will dictate tailoring of the guidelines before implementation. This can also be a daunting task, but instruments such as ADAPTE<sup>6</sup> are available to streamline this process.

As reported in this issue of the *Journal*, Crossman and others<sup>1</sup> and Li and others<sup>2</sup> have identified care gaps in their institutions’ practices. Next steps for these clinicians will include detailed assessment of the gaps identified, formal assessment of the quality of the clinical practice guideline held out as the gold standard against which each institution’s practice was evaluated, and a decision about adopting or adapting the existing guidelines to meet their patients’ needs within the limitations of their respective settings. Finally, assessment of adherence to the adopted or adapted guidelines should include an evaluation of the relevant health outcomes among patients served by those guidelines.

I do not believe that nonadherence to clinical practice guidelines is synonymous with poor patient care. The rigid application of guidelines to an individual patient’s care is the application of knowledge without wisdom. In contrast, the virtuoso clinician is so completely aware of existing standards of care and the relevant scientific evidence that he or she can make a fully informed decision to operate outside clinical practice guidelines



when such is appropriate to the needs of an individual patient. Nonetheless, high-quality clinical practice guidelines can assist all of us to improve the care we provide. The inclusion of a clinical practice guideline in our clinical vocabulary must be an informed and active decision. Tools such as AGREE and ADAPTE make this process easier, but not easy.

#### References

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3. Field MJ, Lohr KN, editors. *Clinical practice guidelines: directions for a new program*. Washington (DC): National Academy Press; 1990.
4. Wollersheim H, Burgers J, Grol R. Clinical guidelines to improve patient care [editorial]. *Neth J Med* 2005;63(6):188-192.
5. The Agree Collaboration. *Appraisal of guidelines for research & evaluation (AGREE) instrument*. London (UK); AGREE Research Trust; 2001 [cited 2008 Mar 14]. Available from: <http://www.agreetrust.org/>
6. The ADAPTE Collaboration. *Adapte*; 2007 [cited 2008 Mar 14]. Available from: <http://www.adapte.org/rubrique/the-adapte-collaboration.php>

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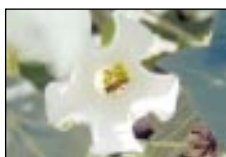
## ON THE FRONT COVER

### *Datura stramonium*

The photograph on the front cover depicts *Datura stramonium*, which goes by a variety of common names, including jimson weed, thornapple, and angel's trumpet. Photographer Ken Wou used a Canon Digital Rebel XT camera equipped with a 100-mm macro lens (f2.8 at 1/250-s exposure). The photograph was taken in Kamloops, British Columbia.

Although all parts of this plant contain atropine, scopolamine, and hyoscyamine, most of the active alkaloids are found in the seeds and leaves. These compounds are well known for their anticholinergic, antispasmodic, antisecretory, and mydriatic properties. They are also used as antidotes and in the treatment of motion sickness.

*Datura* has reportedly been used for sedation and for the treatment of a variety of conditions, including



flatulence, hyperacidity, abscesses, headaches, hemorrhoids, sprains, tumours, respiratory problems, epilepsy, and burns. The plant parts may be ingested, smoked, or applied topically.

Intoxication can produce tachycardia, dry mouth, confusion, hallucinations, blurred vision, dilated pupils, combative behaviour, coma, stimulation, seizures, delirium, and (rarely) death. Treatment of overdose may include the use of activated charcoal, gastric lavage,  $\beta$ -blockers, and physostigmine.

Jimson weed extract has been studied as a protective agent in severe organophosphate toxicity (*Acad Emerg Med* 2004;11[4]:335-338).

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*CJHP* would be pleased to consider photographs of medicinal plants taken by CSHP members for use on the cover of the Journal. If you would like to submit a photograph, please send an electronic copy (minimum resolution 300 dpi) to Sonya Heggart at [sheggart@cshp.ca](mailto:sheggart@cshp.ca).

