frequency, dosage, and amount—physicians, often family or emergency room doctors, actively harm thousands, if not millions, of patients, causing dependence, addiction, and myriad other social and physical harms. It not only wastes countless physician hours and drug dollars, but also costs many patients and their families (including a substantial number of teenagers) their emotional and physical well-being and, increasingly, their lives.

—Barry N. Pakes MD MPH CCFP FRCPC
North York, Ont

Competing interests
None declared

Reference

1. Dhalla IA, Mamdani MM, Gomes T, Juurlink DN. Clustering of opioid prescribing and opioid-related mortality among family physicians in Ontario. *Can Fam Physician* 2011;57:e92-6. Available from: **www.cfp.ca/content/57/3/e92.full.pdf+html**. Accessed 2011 Apr 1.

Editor's response

The editors thank Dr Pakes for his letter and comments. Electronic publication of an article in *Canadian Family Physician (CFP)* does not reflect any lesser status of the published work. All Web Exclusive publications in *CFP* are fully indexed and searchable in PubMed and PubMed Central.

There is limited print space in medical journals owing to declines in pharmaceutical advertising, which has been a large source of revenue for medical journals. Our response to this has been to publish more research in the online version of *CFP* as Web Exclusive articles. In so doing we have been able to publish more research per issue.

—Nicholas Pimlott MD CCFP
Scientific Editor, Canadian Family Physician
Mississauga, Ont

Treating patients versus numbers

As a group of Canadian physicians interested in the management of patients with chronic pain and addiction, we feel compelled to respond to the recent paper by Dhalla et al regarding opioid-related deaths in Ontario.[1]

Similar to a previous paper by some of the same authors,[2] Dhalla and colleagues once again confuse association with causation. They overinterpret statistics from administrative databases to make pronouncements on clinical pain management practice—an area in which none of the authors profess to have any expertise.

They have failed to discuss relevant confounders. It is like saying that cardiac surgeons in leading institutions have worse results than those in provincial hospitals, without taking into account the severity of the conditions treated. They have failed to consider alternative explanations for their results or discuss other important limitations of their study.

In 2006, there were approximately 12 million people in the province of Ontario. This would mean approximately 2.3 million people with moderate to severe chronic pain.[3] If we assumed that somewhere from 30% to 50% might be taking regular opioid therapy (likely higher than this), 406 deaths would result in a crude death rate of 50 to 60 per 100 000 people with pain who were taking opioids (or about 3 per 100 000 total population). With such small numbers, any flaws in the methodology of this study that change the numbers would have a very big effect on the reported percentages.

The reported suicide rate in the Canadian population is about 15 per 100 000 people.[4] In patients with persistent pain that number is at least doubled, to about 30 per 100 000 people.[5] Higher doses of opioids often are consistent with a longer time in treatment, poorer efficacy of other treatments, and more opportunity for patients to realize that their pain will not go away. There is little organized support and a lack of other, nonpharmacologic treatment options compared with other chronic diseases. All of us can recount hearing patients with chronic severe pain say they feel like they have nothing to live for. If we subtract the number of people who might have committed suicide from Dhalla's numbers, then the number of deaths "caused" by opioids shrinks substantially.

The authors used data from coroners to assign deaths "related to opioids." With all due respect to our hard-working coroners, assigning a cause of death in the case of a patient taking therapeutic opioids can be an extremely difficult challenge.[6-8] There can be a very large overlap between the blood levels of someone stable on long-term opioid therapy and those of someone found dead with opioids in their blood, and there is a poor correlation between opioid blood levels and death.[9] The definition of opioid-related death among coroners can be variable and can have a large influence (up to a 2-fold difference) on reported death rates.[10]

How did the authors account for the effects of other substances also found in the blood of decedents? Which substance actually caused the patients' deaths? Were the deaths most likely due to substance abuse or addiction (more than 90% in a study by Hall et al[11]) or was it therapeutic misadventure? The authors stated that they adjudicated questionable cases among themselves to come to a decision on cause of death, yet they did not report any expertise to allow them to do so.

The authors have suggested that there is an association between the number of deaths and the number of prescriptions written, particularly in the antemortem period. No information is provided regarding the drug or quantity prescribed. Therefore, the authors provide no evidence that the deaths among the patients of high prescribers are due to the drug they prescribed or the dose prescribed. What was the length of time between death and last prescription? If a physician writes a prescription for an opioid 12 months before the patient dies, is that doctor somehow responsible?