Caveat lector: be wary of media reports about excessive Ritalin use in BC

A newspaper recently claimed that in 1998, children in some parts of British Columbia were being prescribed methylphenidate (Ritalin) at the highest known rate in North America.[1] This is untrue. The newspaper reported that 10 548 children aged 19 or younger (1% of children in this age group) had received at least one prescription for methylphenidate during the year. The article also identified areas of the province where it said up to 30% of children in some age groups received methylphenidate.

To investigate these claims, we submitted a request to PharmaNet, BC's comprehensive prescription drug database, for a count by local health area (LHA) of patients aged 19 or younger who had filled at least one of these prescriptions in 1998. The province has 88 LHAs.

Contrary to data used by the newspaper, we found that methylphenidate use in 1998 was either lower than or consistent with numbers previously reported for other North American jurisdictions.[2,3] Overall, methylphenidate was prescribed to 1% of BC residents aged 19 years of age and younger. Use was highest in the 10- to 14-year age group (2.1%). Variation in use of the drug across regions was also much smaller than reported by the newspaper. The difference between the highest and lowest regional rates reported in article was 18.8 percentage points. We found that the range of methylphenidate use in the 10- to 14-year age group was actually a fraction of the ranges cited by the newspaper, ranging from 0% to 4.9% across regions.

The newspaper reported that 10 548 BC residents were taking methylphenidate between Feb. 1, 1998, and Feb. 1, 1999. This was close to our finding of 10 742 patients for calendar year 1998. Why the difference in usage rates? This likely occurred because 1996 Statistics Canada population data used in the media article did not include the entire populations of the regions examined. These underestimates involving source populations may have inflated utilization rates used by the newspaper.

We think our analysis carries an important message: verify media reports before forming conclusions about utilization patterns for prescription drugs.

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Does premedical education make the grade?

While teaching a medical student recently I had occasion to offer some medical ethics scenarios for commentary. I pointed out that most such scenarios can be approached using 4 philosophical principles (autonomy, justice, beneficence and nonmalfeasance) and that this was an example of how nontechnical topics studied in university can be beneficial in clinical practice.

The student's response disturbed me. He indicated that he found these issues to be interesting but that getting very high course marks in his premed program was of primary and central importance to gaining acceptance into medical school. Because instructors of philosophy and other humanities courses tended to be "hard markers," taking such courses was seen (probably quite rightly) as impairing one's chances of ever becoming a doctor.

Is there a need for some fine tuning in how we select students for medical school?

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Putting together the pieces of the physician supply puzzle

I took great interest in the original Barer–Stoddart report of 1991[1] that without question has helped shape the physician workforce in this country. In their recent editorial, Greg Stoddart and Morris Barer suggested that sections of their report were effectively ignored, which has helped lead to the impending crisis we now face.[2]

As chair of the Canadian Urological Association's Manpower and Economics Committee, I know that we are headed for an enormous staffing crisis in the medical and surgical specialties within the next 10 years. Today most specialty groups are beating the same warning drum because half of our specialists will retire in the next 10 years. We immediately need either an enormous increase in the number of training programs for medical and surgical specialists or a reduction in the barriers facing foreign specialists trying to enter Canada. Physicians who leave Canada immediately after graduating already represent an enormous loss. If there was financial assistance for physicians during their training, with a commitment to practise a minimum number of years in Canada, an enormous benefit would result.

What concerns me most about the

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editorial is the mention of nurse practitioners. At present there are few convincing data to suggest that they will provide more economic delivery of primary care. We have a 24-hour toll-free service in New Brunswick that allows patients to discuss health concerns with nursing staff. Since its introduction, the number of emergency room visits has not changed appreciably and the cost of each phone call is approaching that of a visit to a physician's office.

Most health ministers realize that there is now no more efficient way to deliver primary care than through the physician. Unfortunately, doctors are aging and there are few new ones to replace them. The growing number of female physicians makes the matter more urgent, because they will inevitably have family commitments that will affect their professional productivity.

In summary, a crisis looms and health ministers must make bold policy changes now. If they don't, their window of opportunity will close.

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2. Stoddart GL, Barer ML. Will increasing medical school enrolment solve Canada's physician supply problems? [editorial]. *CMAJ* 1999; 161(8):983-4.

I am astounded that no one seems able to agree on the cause of the physician supply problem, let alone the solution.[1] A sudden increase in medical school enrolment will not solve the problem immediately. As Greg Stoddart and Morris Barer pointed out, it takes 6 to 7 years to train a physician, so we either have to live with our physician shortage or find alternatives.

One unfortunate development is the recent requirement for medical students to choose their specialty while they are undergraduates. This means they are streamlined into a surgical or medical specialty or family medicine instead of experiencing the year of general internship that prepared physicians to understand and commence general practice. With the current practice of selecting a specialty during the clinical years at medical school, my prediction is that the shortages and imbalances within specialties will become even more severe. How is a medical student supposed to select a lifelong specialty with minimal experience?

The supply of physicians is not unlike the supply of hogs. When the price goes up farmers raise more hogs, creating a surplus; when the price drops they get out of hogs, creating a shortage. Given our background and training, one would expect that we might have done better.

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1. Stoddart GL, Barer ML. Will increasing medical school enrolment solve Canada's physician supply problems? [editorial]. *CMAJ* 1999; 161(8):983-4.

Greg Stoddart and Morris Barer[1] continue to use the physician:population ratio as a measure of physician supply, but today this ratio yields a false and misleading estimate that is, in fact, an underestimate. This occurs because the population denominator fails to account for 2 other variables.

The first is a change in the *patient:population* ratio. Medicare was introduced 30 years ago to increase this ratio because of a feeling that some people needing medical care were not receiving it. Following its introduction in Saskatchewan, the portion of the population receiving medical care increased by one-third, from 67% to 90%. This would require a 33% increase in the number of doctors in order to maintain the same *physician:patient* ratio as before. However, this in turn would change the *physician:population* ratio and make it appear that there had been an unwarranted increase in the physician supply.

The second variable involves technological change. In the past 30 years many diseases that were untreatable have become treatable. This means that more physicians are required and, again, the physician:population ratio must change.

Thus, the physician:population ratio has changed considerably since the introduction of medicare. In spite of what those numbers may appear to indicate, Canada remains grossly undersupplied with physicians.

Marc A. Baltzan
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1. Stoddart GL, Barer ML. Will increasing medical school enrolment solve Canada's physician supply problems? [editorial]. *CMAJ* 1999; 161(8):983-4.

I hope that Greg Stoddart and Morris Barer[1] read an article that appeared in the same issue as theirs, and I hope that the College of Family Physicians of Ontario read it too. Comments in that article[2] certainly struck a chord with me.

I worked in a private group family practice for 14 years before I left, partly due to burnout. I only worked part time and had plenty of backup from my partners and call group, but the weight of responsibility involved with managing an office and providing comprehensive care took its toll. I now work at a community college's student health clinic and do some locum work. The pros: no administrative responsibilities, no call, no pager, no overhead, time off without having to find a locum, and working as part of a team instead of at the helm. The cons? I'm trying really hard to think of one.

I was fortunate to find another doctor to take over my practice, because most family doctors who decide to retire or change focus end up walking away from their practices, leaving patients scrambling to find a new doctor. Perhaps part of the reason there is a physician supply problem is that new graduates are not interested in setting up a private practice. The primary care reform pilot projects in Ontario and the recent initiative by the College of Family Physicians of Ontario[3] don't change the status quo, which sees the private-

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practice physician coordinate all patient care.

The method of remuneration is not the issue. I believe the shift in preference away from fee-for-service medicine reflects a desire to devolve administrative and patient care responsibilities. The community health centre model comes to mind.

K. Phillips
Family physician
Ancaster, Ont.

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1. Stoddart GL, Barer ML. Will increasing medical school enrolment solve Canada's physician supply problem? [editorial]. *CMAJ* 1999; 161(8):983-4.
2. Martin S. "Is everyone as tired as I am?" The CMA's physician survey results, 1999. *CMAJ* 1999;161(8):1020-1.
3. Sibbald B. Is fee-for-service on the way out for Ontario FPs? *CMAJ* 1999;161(7):861.

Increasing the number of medical students is not the answer to the physician supply problem.[1] As a retired rural practitioner, I speak from experience: Canada's current problem is the lack of rural physicians.

The problem exists because most university students were born and raised in the city, and these urban dwellers also account for most medical school applicants. Most likely, they will also marry another city person. If the spouse is a woman who grew up in Toronto or Winnipeg, will she wish to live in Geraldton or Minnedosa?

The answer to the problem is to increase the number of medical students who were born and raised in a rural setting. Before students are admitted to medical school, they should be advised that they will be obliged to serve in a rural town for 2 years. (I use the word "before" advisedly.) Perhaps an incentive such as a bursary during the 2 years of residency training in family medicine could be offered. Another possibility is differential fees for rural practitioners.

Alvin J. Elliott
Internist
Brandon, Man.

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1. Stoddart GL, Barer ML. Will increasing medical school enrolment solve Canada's physician supply problems? [editorial]. *CMAJ* 1999; 161(8):983-4.

Greg Stoddart and Morris Barer raise a number of interesting issues in their editorial[1] but they miss an important point. Today many physicians are women, and many physicians are married and have families. Physicians, whether male or female, who take on a rural practice will probably be busy all day. So what happens to the spouse? There is a definite pattern in today's society for both spouses to work outside the home. In many rural areas, it may be impossible for the spouse to find suitable work. Also, the opportunities available in rural schools are often less attractive than those in urban school systems, and this may also affect the decision of a family with children to move to a rural area.

Although it may not have been the authors' intention, the editorial reads as if they consider all physicians one monolithic whole. This is very unwise, because in many cases you have to give a doctor's family situation the same priority as remuneration and other factors.

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Reference

1. Stoddart GL, Barer ML. Will increasing medical school enrolment solve Canada's physician supply problems? [editorial]. *CMAJ* 1999; 161(8):983-4.

Greg Stoddart and Morris Barer[1] attempted to list the possible causes of recent physician shortages and have also questioned whether increased medical school enrolment will solve our physician supply problems. However, they did not discuss many important factors that have contributed to the shortages. For instance, a greater per-

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centage of today's physicians are involved in child rearing, which could reduce the number of hours they practise. They also failed to point out that the number of subspecialties has increased and this could contribute to the shortage as well.

They were correct to observe that doctors are increasingly concerned about lifestyle issues, which may mean a reduction in practice hours, but they did not question whether this trend is due to the type of students we now select to enter medicine. In the past, medicine was considered a vocation: the physician dedicated his life to medicine and had few outside interests. Today, medicine is a profession like any other.

Increasing medical school enrolment is important, but it is also important to select students who are going to dedicate most of their time to the practice of medicine and less time to other pursuits.

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1. Stoddart GL, Barer ML. Will increasing medical school enrolment solve Canada's physician supply problems? [editorial]. *CMAJ* 1999; 161(8):983-4.

Improving management of depression

We wish to report the follow-up results of a previously described randomized controlled trial[1] to evaluate an educational strategy to improve family physicians' use of clinical practice guidelines for the detection and management of depression. We measured depression using the Centre for Epidemiologic Studies Depression (CES-D) scale.[2] The primary outcome was the "gain" score (the difference between the first and last CES-D scores).

At 6 months, the mean gains for patients in the intervention and control groups were 17.9 and 16.5 respectively (p = 0.04) (Table 1). One year later, 18 months after the intervention, the corresponding gain scores were 17.9 and 13.4 (p = 0.09) (Table 1). There was an apparent, but not significant, deterioration of CES-D scores in the control group over the 12-month interval; the scores of the intervention group remained stable.

The numbers of patients available for follow-up dropped from 85 to 65 between 6 and 18 months; despite a greater difference in mean gain score at 18 months, the result is not statistically significant.

We also examined whether patients who saw a physician of their own gender did better than those who saw a doctor of the other gender. Interestingly, gender-matched physician–patient dyads showed higher mean gain scores (21.26 [SD 14.90]) than gender-unmatched dyads (16.40 [SD 13.91]) but, again, the sample was too small and the variance was too great for this difference to approach statistical significance (p = 0.18).

Although the loss of patients to follow-up in our study means that the results should be cautiously interpreted, and despite the various factors affecting retention, it is encouraging that the modest benefits that we detected at 6 months in our study appeared to be maintained at 18 months. The long-term effects of this and other medical education strategies require further investigation.

Table 1. Self-reported depressive symptoms at 6- and 18-month follow-up assessments

	CES-D scores					
	O mo		6 mo		18 mo	
Group	Mean (SD)	*n*	Mean (SD)	*n*	Mean (SD)	*n*
Intervention	37.3 (8.95)	91	19.4 (13.55)	57	19.4 (12.73)	40
Control	38.7 (8.11)	56	22.2 (11.73)*	28	25.3† (12.70)	25

*Gain = 16.5.
†Gain = 13.4

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The move away from fee-for-service care

A recent *CMAJ* article asked if fee-for-service is on the way out in Ontario.[1] The answer is uncertain but probably should be Yes. The detailed arguments appear in the 50-page document that the article cited (www.cfpc.ca/ocfp), which is easy to download but more difficult to read.

A couple of points can be stressed. Income based on capitation provides financial security, and the move away from fee-for-service payments removes disincentives to collaborative care involving nonphysicians. As well, rostering of patients promotes continuity of care.

However, 2 statements in the *CMAJ* article disturbed me. One was that "patients register with a single family practice that has from 7 to 30 physicians." Presumably these larger practices mean that a doctor may be on call only once a month. Although this may seem a wonderful prospect for some overstressed physicians, it makes nonsense of the notion of true continuity of care outside the office setting.

The article also stated that "physicians would be expected to see large numbers of people for very short periods (6 to 10 per hour)." How is this different from the high-volume walk-in clinics that we so rightly criticize? True patient-centred care should be reflective and thoughtful, and it can be in the

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