A homegrown solution, via Ireland?

We were interested to read about the CMA's recent call for a made-in-Canada solution to Canada's physician shortage.[1] We have a suggestion.

There are currently many Canadian citizens studying medicine in Ireland. The main reasons are that we were unable to find positions at Canadian medical schools and that our desire to be physicians was so great that we were willing to leave Canada to study. However, when we graduate it will be next to impossible for us to obtain a residency position in Canada, where we only have access to positions left unfilled by Canadian graduates. Not only are there relatively few positions, but there are also few openings in the popular specialties.

Most of us would love to come back to Canada to practise. Because the CMA is looking for a "homegrown" solution to the physician shortage, we would like to suggest that it try to find a way to bring us back home. Why not allow us to transfer into the clinical years at Canadian schools? We would be more than willing to start a couple of months early and do any review courses or exams to ensure that our skills and knowledge are on par with those of Canadian medical students entering third year. (In Ireland we take a 6-year program, with clinical rotations beginning in the middle of our fourth year.)

Your article stated that 24% of Canada's current physicians are foreign graduates who have passed Canadian licensing examinations. The register for the College of Physicians and Surgeons of British Columbia clearly indicates that most of these physicians are from the UK, Ireland and South Africa. If they were able to pass the Canadian licensing exams, it would appear that foreign medical schools are producing doctors just as knowledgeable as the ones graduating in Canada. In other words, Canadian schools are not the only ones that produce competent physicians. Furthermore, considering the small number of students accepted for training at Canadian schools compared with the huge number of well-qualified applicants, Canadian students in the UK and Ireland are by no means "rejects" unworthy of consideration.

Now that the physician shortage has reached a critical stage in Canada, perhaps our case could be taken up and supported by the CMA and other physician groups.

Ilana Porzecanski
Magdelaine Deeby
Kimberly Wynd
Aamir Jeewa
Michael Bengough
Patrick Esperanzate
Sophia Jibodh
University College
Dublin, Ireland

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Ritalin use in BC

The letter from 3 employees of the BC Ministry of Health calling into question a series of newspaper articles I wrote on rates of methylphenidate use in BC is misleading and conveys a false impression of the series by making a direct comparison between 2 entirely different sets of data.[1] I wish to make the following corrections.

The ministry staff challenged as "untrue" the claim made in my articles that "children in some parts of British Columbia were being prescribed methylphenidate (Ritalin) at the highest known rate in North America." This is inaccurate and misleading. The government researchers reached this conclusion by mixing statistical apples and oranges.

First, in their Freedom of Information request to PharmaNet the ministry employees requested prescribing data for a different time frame than that used by *The Vancouver Province*. This explains why their 12-month total varied from mine by about 200 children.

Second, I clearly stated that my conclusions were based on a survey of prescribing rates in 39 of BC's biggest communities. It is well known that city kids are more likely than rural kids to be diagnosed and treated for attention deficit disorder. They have more access to doctors. But the ministry employees took a much broader survey approach in their Freedom of Information request. Instead of looking at the same data for the specific communities used by *The Province*, the researchers reviewed prescribing data by "region," which would include many largely rural districts. It is not surprising that direct comparisons found lower rates in these "regions" than in urban communities. I reject as meaningless the claim that "variation in use of the drug across regions was also much smaller than reported by the newspaper." I didn't report by region.

Third, a key point in my series on methylphenidate use is that boys in certain age groups are prescribed stimulants at a much higher rate than any other group in society, including girls of the same or any other age. Even when compared with girls in the same age group, up to 6 times as many boys were on stimulant medications. I published detailed graphs demonstrating the differences between boys and girls in each of the 39 communities. But the ministry researchers blended data for boys and girls and made a direct comparison with my findings for boys alone, which is meaningless.

Fourth, I found marked differences in prescribing rates among boys in different age groups. After carefully analyzing the data for the 39 communities I found that the highest prescribing rates were for boys aged 8 to 13 years. The ministry employees studied a different age group; they looked at combined statistics for boys and girls aged 10 to 14 years, a group who in the com-

munities I studied were prescribed methylphenidate at a lower rate than the 8- to 13-year-old group.

The ministry staff then averaged rates for the entire age group, rolling in boys and girls to the mix. It is not surprising that they were again able to report lower rates of prescribing than those reported for children of a specific age and sex.

Finally, the writers of the letter question my use of Statistics Canada data from the 1996 census for each of the communities involved. These were the most recent population figures available for all communities. I stated very clearly in my lead article that "population figures were obtained from the 1996 Statistics Canada census, so percentages may vary."[2] But I went a step further before publishing my results. I checked more recent BC government population statistics available for some of the communities and found that populations had either remained stable or decreased in the smaller communities with the highest rates of use.

I made the case for the highest confirmed rates in part because the PharmaNet base in BC allows a unique view of how drugs are prescribed. I have been unable to find another jurisdiction with such extensive public access to prescribing practices. Interviews with experts from across North America supported my view that no other jurisdiction has yet confirmed such high prescribing rates. I found rates as high as 1 in 4 boys in some communities. In 1 community I found that 9 of 30 boys aged 10 years received methylphenidate over the 12-month period. (I pointed out the small sample size.)

The BC Ministry of Health said at the time of my first series of articles that it would investigate methylphenidate use in BC. I hope that this dismissive and misleading piece of work by ministry staff does not represent the sum total of that effort.

I stand by my statement that children in some BC communities are being prescribed methylphenidate at the highest confirmed rates in North America. I see nothing to shake that view.

Ann Rees
Staff reporter
The Province
Vancouver, BC

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[Editor's note:]

Ms. Rees was not given the opportunity to respond to the letter from Mr. Dormuth and colleagues in the issue in which it appeared. We apologize for this oversight.

Bench research versus clinical trials: Where should Canadian grant dollars go?

I respectfully disagree with Dr. David Sackett's criticism of preclinical science.[1] Preclinical studies form the foundation for clinical trials. Without advances in bench research, there would be no GUSTO,[2] no HOPE[3] and no PRISM-PLUS.[4]

As Dr. Sackett noted in his commentary, Canada is far behind the US, Japan and Europe in biochemistry, biological sciences, preclinical studies and anatomy.[5] Rather than limiting funding to research in these areas, Canada should catch up with the rest of the world. The future of the Canadian pharmaceutical and biotechnology industries is at stake. Commercial successes such as Lipitor[6] and Canadian biotechnological innovations such as photodynamic therapy for wet macular degeneration[7] and drug-resistance genotyping for HIV[8] would have been impossible without such investment.

Dr. Sackett said that "the results of a significant proportion of pragmatic RCTs are country specific and not transferable." But the same is also true in basic research, especially in medical genetics and molecular epidemiology. For example, understanding the molecular basis for the predisposition of aboriginal Canadians to diabetes and atherosclerosis will be an important step in solving one of Canada's most difficult public health problems.[9]

Canada has a proud history of scientific accomplishment. The genes responsible for cystic fibrosis, Duchenne muscular dystrophy and Wilson's disease were discovered in Canada. With the approaching completion of the Human Genome Project and the development of new technologies such as gene therapies, molecular medicine is going to revolutionize the practice of medicine in Canada. The Canadian Institutes of Health Research will play a critical role in ensuring that the Canadian public reaps the benefits of this revolution. Limiting funding to preclinical research would lead to a worse disaster than the Canadian health care reform of the early 1990s.[10]

Paul C. Lee
Cardiologist
New York, NY

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