

## Do we really need family medicine research?

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**F**amily medicine research has a low profile in Canadian medical schools and among community-based family doctors. Some family practitioners believe that all research should be done only by specialists, as they know more about conditions within their specialties. Most community practitioners are unaware of any family medicine research that has influenced the way they practise.

Ninety-three percent of medical students completing an exit survey after the Canadian Resident Matching Service matches in 2002 and 2003 said they would never consider family medicine if they were interested in an academic career; 97% said they would never consider family medicine if they were interested in a research career. Many family medicine residents complain about their program's requirement to complete an academic project during their residency. Some applicants for family medicine residencies go as far as avoiding programs that require a project.

The quality of resident academic research projects assessed by the College of Family Physicians of Canada's (CFPC's) Section of Researchers to determine the two best Canadian resident projects each year is quite exceptional. The projects are publishable and make important contributions to family medicine. Every year, many residents' career choices are influenced by the work they did on their projects.

### Is the poor perception of family medicine research justified?

In March 2003, the CFPC, along with eight other sponsors, supported an international World Organisation of Family Doctors (WONCA) meeting of family medicine researchers from 34 developed and developing countries. The title for the conference held in Kingston, Ont, was "Improving Health Globally: The Necessity of Family Medicine/General Practice Research."<sup>1</sup> Based on Canadian

perceptions of family medicine research mentioned above, how could family medicine researchers be so presumptuous as to make such a statement?

Over the past decade, evidence of the importance of primary care in influencing population health has grown. Studies estimating the value of health services have concluded that about half the improvements in population health over the past half century are attributable to health services.<sup>1,2</sup> Primary care has been shown to have the greatest impact by reducing stroke mortality, postneonatal mortality, and years of potential life lost.<sup>3-6</sup>

First-contact access to primary care is important in minimizing costs and improving outcomes.<sup>7-9</sup> Long-term, patient-focused care improves problem recognition; increases accuracy of diagnosis; and results in fewer adverse effects, less hospitalization, and lower costs.<sup>10</sup> Comprehensiveness is associated with increased possibilities for prevention and achievement of preventive practices, as well as lower costs.<sup>10</sup> Coordination (through shared care and organized relationships between primary care practitioners and specialists) produces better outcomes.<sup>10</sup>

Canadian family medicine researchers argue that better understanding of the work of family physicians provides a great opportunity to improve the health of our fellow citizens. Those at the Kingston WONCA conference agreed that, because of the effect of beliefs and culture on health, research into primary care delivery is required in each country. It is also well known that evidence arising from randomized controlled trials carried out in large teaching hospitals is usually not easily transferable to your own family practice population.<sup>11</sup>

### Has family medicine research influenced how doctors practise?

Many examples of research in family practice have affected the way we provide patient care. Some

pertinent Canadian examples include the way we manage pharyngitis. A group of family physicians at the University of Toronto in Ontario tested a sore throat scoring system in both a Toronto teaching practice and a community-based family practice in Stratford, Ont. They used an already developed scoring system as a predictor of patients with or without positive streptococcus cultures from the pharynx. Using the Toronto sore throat scoring system could reduce antibiotic prescribing by up to 75%.<sup>12,13</sup>

A group of researchers at Queen's University Centre for Studies in Primary Care in Kingston, Ont, has been conducting studies on managing hypertension in a research network of 50 community practices during the past 7 years. They found that home measurements of blood pressure provide different results from conventional office readings. They have also found that patients follow directions to lower their blood pressure and are equally satisfied by either 3- or 6-month follow up for elevated blood pressure.<sup>14</sup>

A long-term study (soon to be published) by Martin Dawes of McGill University in Montreal, Que, has found that continuous monitoring of blood pressure at home provides results that are a much better predictor of adverse outcomes from hypertension than conventional office blood pressure readings. The Queen's University Centre for Studies in Primary Care hypertension group is now determining whether results from single daily blood pressure monitoring at home are similar to continuous blood pressure monitoring at home.

Michael Klein, formerly of McGill University and now at the University of British Columbia's Department of Family Medicine, received the Maurice Wood Award in 2003 for his lifelong contribution to family medicine research. In the 1980s, he and co-workers conducted a series of trials on the value of episiotomy and found that midline episiotomies consistently produced more pain and more damage to the perineum than natural tears. Their studies further demonstrated that mediolateral episiotomy and its extensions, although less traumatic than the midline, produced significantly more pain and complications for up to 6 months after birth than did natural tears. Since these

studies were published, the episiotomy rate has declined around the world, and millions of women have avoided unnecessary suffering.<sup>15,16</sup>

For more than 20 years, an interdisciplinary group of researchers in the Department of Family Medicine at the University of Western Ontario in London has been developing and evaluating what is known as the "patient-centred clinical method." Their model provides a basic approach to interviewing patients and identifying their problems, and provides a strategy to find "common ground" with them to determine optimum management. Much of this research has been done by the Thames Valley research network of community physicians. Extensive evaluation of this approach to patient care has found substantially higher levels of patient satisfaction; higher levels of patients following physicians' advice; and better patient outcomes, including lower blood pressure, less pain and discomfort, improved sense of well-being, and lowered levels of anxiety.<sup>17,18</sup>

The University of Toronto group, led by Warren McIsaac, more recently published a study on women with symptoms of cystitis to determine whether testing their urine for white blood cells and nitrites would reduce their use of antibiotics. They found that treating women for cystitis after testing the urine for white cells and nitrites reduced antibiotic use for cystitis by 27%. This paper was selected as the outstanding Canadian family medicine research paper in 2002.<sup>19</sup>

### **Do we really need family medicine research?**

Evidence that family medicine contributes to improved population health and the effect of these examples of Canadian research strongly support the need for research in our discipline. The CFPC's Section of Researchers<sup>20</sup> is charged with the responsibility of promoting research in Canadian family medicine.

Members of the CFPC can strengthen research efforts by providing details about their style of practice to the National Physician Survey project<sup>21</sup> so that health policy makers can better understand its physician work force. Also, the National Research

System (NaReS)<sup>22</sup> invites every College member to participate in a variety of studies.

In this issue of *Canadian Family Physician*, the CFPC Section of Researchers is selecting and honouring outstanding researchers and their publications (page 1315). The Section of Researchers is also lobbying national funding agencies to provide more support for family medicine research. *Canadian Family Physician* also plans to occasionally publish abstracts of Canadian family medicine research published in other journals that is relevant to practice.

All family physicians can help change perceptions of family medicine research and can contribute to research that will improve the health of our nation. ❁

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