Global health curriculum in family medicine

Resident perspective

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The Section of Residents' (SOR) Council of the College of Family Physicians of Canada (CFPC) has representation from each training program across the nation; collectively, we represent all family medicine residents in Canada. Our mandate is to improve the quality of the family medicine residency experience and to have a positive effect on the delivery of health care to Canadians.[1] As a section of the CFPC, we believe that there is an unmet need within family medicine training in the area of global health. As such, the goal of this paper is to advocate for the implementation of a well-supported global health curriculum from which both family medicine residents and patients will benefit.

Delivering care from a global health perspective is necessary for physicians and health care providers. *Global health* refers to a broad spectrum of health issues encountered by physicians worldwide. Acknowledgment of its importance in helping us learn to provide quality care for patients is often overlooked, likely because the definition of global health is sometimes confused or used interchangeably with both *international health* and *public health*. This was addressed in the *Lancet* in 2009 by Koplan et al:

> [Global health is] an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants, and solutions; involves many disciplines within and beyond the health sciences and promotes interdisciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care.[2]

It should be emphasized that global health does not only involve going overseas and volunteering for disaster-stricken areas or low-income countries, but also includes advocating and providing care for underserved populations within Canada, such as the homeless, refugees and immigrants, and remote communities.

Graduating family medicine residents should be skilled, well-rounded physicians with the capacity to work in any primary care setting. In Canada, family medicine specialty training is built on the 7 CanMEDS–Family Medicine (CanMEDS-FM) roles. These roles are family medicine expert, collaborator, manager, communicator, advocate, scholar, and professional.[3] We believe that to practise effectively in global health settings, one must be knowledgeable in all of these roles; participation in global health initiatives thus provides an avenue for residents to learn these skills. For example, a family medicine expert should be knowledgeable about the distinct health needs of different Canadian populations, including immigrants and refugees, aboriginals, and inner-city populations.[4] An effective communicator should be able to recognize the communication needs of those patients who are illiterate, semiliterate, or literate in a language other than English.[5] Such examples exist for each of the CanMEDS-FM roles.[5] We are not alone in this belief; the Ontario Global Health Family Medicine Curriculum Working Group has recently acknowledged the alignment of global health competencies with the CanMEDS-FM education framework and has identified enhanced competencies for global health under each of these roles.[6]

We recognize that in a 2-year residency program it is often difficult to include all potential topics in formal educational programming. We do not suggest increasing the length of postgraduate training in family medicine, rather we highlight pre-existing areas in the current curriculum that integrate global health concepts and provide opportunities for enhanced training. Ideally, global health education would begin at the undergraduate level and be further developed throughout residency.

Family medicine programs nationwide have already begun to develop creative means of incorporating global health concepts into formal teaching. A national survey by the SOR Council found that at least 88% of family medicine programs have some formal global health curriculum; however, most schools devote less than 10 hours to the subject during the 2 years of training.[7] This survey is a biannual questionnaire completed by members of the SOR Council, which comprises 2 residents from each family medicine program across the country, with the purpose of identifying similarities and differences among programs nationally. **Table 1** provides some examples of current global health educational practices. Academic days, teaching rounds, problem-based

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Table 1. Examples of current global health educational practices at Canadian universities

UNIVERSITY*	NO. OF ACADEMIC HALF-DAYS IN GLOBAL HEALTH	THIRD-YEAR RESIDENCY IN GLOBAL HEALTH	OTHER
University of British Columbia	2	Yes	Aboriginal Health Program
University of Alberta	0	No	
University of Calgary	2	Yes	
University of Saskatchewan	4-5	No	
University of Manitoba	6	No	Residents Without Borders[†] Northern Remote Program
Northern Ontario School of Medicine	1	No	Rural and Remote Program
University of Ottawa	1	Yes	Global Health Stream[‡]
Queen's University	2	Yes	6 online global health modules Queen's Social Medicine Group (group for social justice issues run by family medicine residents)
University of Toronto	4	Yes	Global Health Education Institute Certificate[§] Markham family medicine teaching unit Health for All Family Health Team Residents Without Borders[†]
McMaster University	3	Self-designed program allows for global health focus	Global Health Interest Group Global health curriculum in development
University of Western Ontario	1	No	Bimonthly global health speaker series[‖]
Université de Montréal	8	No	
Laval University	0-2	No	
McGill University	1-2	Yes	McGill Humanitarian Studies Initiative[¶] McGill Interprofessional Global Health Course[#]
Dalhousie University	1	In development	Global Health Interest Group
Memorial University	2	No	

*There was no resident representative from University of Sherbrooke on the Section of Residents' Council at the time of this survey, so no data are presented for University of Sherbrooke.
[†]Open to all postgraduate residents; not specifically for family medicine residents.
[‡]This involves extra elective lectures (1 h/mo), electives in inner-city health, and mentorship opportunities.
[§]Provides residents with knowledge and skills relevant to global health practice. It is delivered as a series of modules: participants are required to attend 6 core modules (of 8) and 6 elective modules (of 16). Tuition for this 2-y program is $1500.
[‖]Run by the Global Health Office and open to all residents.
[¶]Student-organized elective course available to students in the health professions and graduate students; it runs in the evenings during the winter term.
[#]Multidisciplinary program that provides residents with robust, didactic teaching in humanitarian studies (monthly evening seminars plus a 2-wk intensive course at Harvard University), a 3-d weekend disaster simulation in Massachusetts, as well as a 1- to 3-mo international field placement.

small group cases, and online modules are all methods through which global health can be incorporated into core academic requirements. Such didactic and case-based learning lays the foundation for, and reinforces knowledge and skills attained through, clinical practice.

Clinical experiences

Clinical elective experiences focusing on attaining key competencies in global health should be readily accessible to all family medicine trainees. Any work involving service to marginalized populations that is carried out within the principles of social equity or environmental sustainability applies. Local elective experiences are currently available in a range of areas: from focused practices caring for new immigrants or street-involved youth, to caring for patients with HIV, to full-service practices in northern and remote communities. However, in order for learners to gain the most from these experiences there should be a component of organized service-learning, an approach in which meaningful community service is integrated with instruction and reflection[8] to improve learning and encourage civic responsibility.[9]

Clinical experience through international electives is also often used by residents as a way of working with

underserved populations. On the national SOR Council survey it was determined that anywhere between 10% and 30% of family medicine residents participate in international electives.[7] Learners who have completed rotations in developing countries report increased skills and confidence, enhanced sensitivity to cost issues, less reliance on technology, and greater appreciation of cross-cultural communication.[10] This highlights the role of international electives helping residents become effective managers, communicators, and collaborators.[3] International exposure also increases awareness of the determinants of health and stimulates residents to take on advocacy roles both at home and overseas.

Despite increasing numbers of family medicine residents undertaking overseas electives, the presence of institutionally supported global health programs in departments of family medicine in Canada is quite sporadic. For example, structured predeparture training and posttravel debriefing are imperative to ensuring safety, cultural sensitivity, and self-reflection. A critical aspect of predeparture training for students includes education and training around global health ethics, and this is often overlooked when structured programs are not in place. Without appropriate training students will not be prepared to face unique ethical dilemmas encountered while working in global health settings and will risk causing harm to the patients and communities they work with.[11] While no medical faculty in Canada prevents residents from undertaking electives in the developing world, currently only 1 requires mandatory predeparture training for all family medicine residents traveling overseas.[7] Others have ongoing relationships with certain communities where faculty and residents regularly spend clinical time. Presumably, participants engage in departmental preparation for travel to these communities, but there is little evidence that residents traveling elsewhere are similarly supported. Still other schools have nothing in place, despite permitting residents to go overseas.[7] This lack of institutional support represents an important unmet need.

The situation in undergraduate medical education is quite different and represents an opportunity for collaboration. According to a 2009 survey by the Canadian Federation of Medical Students, 9 of the 14 medical schools it represents have centralized global health offices with paid staff to manage them.[12] Most such offices deliver predeparture training to departing medical students, and in those schools without formal institutional support, predeparture sessions are organized by trainees themselves.[13] The ethical and safety concerns around overseas electives do not change upon graduation. Pooling resources to provide institutional support for students and residents and to build long-term memory for faculties offers considerable potential. Lack of support to residents from their postgraduate programs to address these concerns might be a disservice to both trainees and host communities and might serve as a barrier to learning potential.

Mentorship

Alongside the need for institutionally supported global health programs is the need for mentors in the field. *Mentoring* is the process by which "an experienced person provides guidance, support, and encouragement to a less experienced person."[14] The process of reflecting on global health experiences and internalizing global health knowledge, skills, and attitudes is best facilitated by mentors.[15] "A mentor/mentee relationship can be developed either formally or informally; most importantly the relationship must be recognized by both parties."[16] Mentors model positive attitudes and behaviour as they treat the medically indigent and foster enthusiasm for correcting health inequities. Greater faculty interest in global health increases resident participation.[17]

An example of a national mentorship program is the student-led project organized through the Canadian Federation of Medical Students called the Global Health Mentorship Project. This program matches medical students with leaders working in global health as a response to the lack of a standardized global health curriculum across Canada. In a recent post-mentorship survey, 88% of those being mentored and 81% of mentors themselves believed that mentorship was worthwhile.[18] A similar Canada-wide mentorship program could be designed using the same principles, in which faculty and resident leaders in this area could be encouraged to be mentors for junior residents and medical students as they gain more experience and knowledge in the area. The establishment of resident-led global health interest groups at the postgraduate level is one way in which this could be implemented. The Canadian Coalition for Global Health Research has already developed a module on how to build a mentorship program.[19] The next key step would be for collaboration among all stakeholders and academic departments to ensure that such a program is available consistently to residents nationwide.

Mentorship is also a key component in fostering resident interest in research and contribution to evidence-based practices in a global health context. Primary care research has an important role to play here, in that many of the health issues that affect underserved populations might be best addressed at the levels of prevention and health promotion. Family physicians have the opportunity to identify best practices and evidence-based methods of preventing and addressing health issues at a community level where

application is possible across several different populations globally. As all family medicine residents are required to engage in scholarly activity during residency, support for global health–related projects is a simple way to foster the development of academic expertise in the field.

Family physicians are fundamental to the provision of care to marginalized and underserved populations. With this awareness, we as residents across the country are seeking out opportunities to get involved and gain experience in global health. We strongly encourage our postgraduate education departments and the CFPC, to identify global health as a key area for curriculum development in family medicine, thus preparing us to be well-rounded physicians who can practise in any population. As our medical training education system evolves to meet the health care needs of the 21st century, a formal curriculum integrating global health learning experiences both locally and internationally is essential.

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Competing interests
None declared

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