Are Schools of Public Health Needed to Address Public Health Workforce Development in Canada for the 21st Century?

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ABSTRACT

In addition to establishing Canadian federal institutions for public health to work in cooperation with provincial and local health authorities, the infrastructure of public health for the future depends on a multi-disciplinary and well-prepared workforce. Traditionally, Canada trained its public health workforce in schools of public health (or hygiene), but in recent decades this has been carried out in departments and centres primarily within medical faculties. Recent public health crises in Canada have led to some new federal institutions and reorganization of public health activities as well as other reforms. This commentary proposes re-examination of the context of public health workforce training and especially for schools of public health as independent faculties within universities as in the United States or, as developed more recently in Europe, semi-independent schools within medical faculties. The multi-disciplinary nature of public health professionals and the complex challenges of the "New Public Health" call for a new debate on this vital issue of public health workforce development. Public health needs a new image and higher profile of training, research and service to meet provincial and national needs, based on international standards of accreditation and recognition.

MeSH terms: Public health; Canada; health human resources; schools of public health

RÉSUMÉ

En plus de la création d'institutions fédérales de santé publique pour collaborer avec les autorités sanitaires provinciales et locales, l'avenir des infrastructures en santé publique dépend de l'existence d'une main-d'œuvre pluridisciplinaire et bien préparée. Par le passé, le Canada formait les effectifs de la santé publique dans des écoles de santé (ou d'hygiène) publique, mais depuis quelques décennies, ces cours sont principalement offerts dans les départements et les centres des facultés de médecine. Les crises de santé publique survenues récemment au Canada ont entraîné la création de quelques nouvelles institutions fédérales, la réorganisation des activités de la santé publique et plusieurs autres réformes. Nous nous proposons ici de revoir le contexte dans lequel on forme les effectifs de la santé publique, et surtout la possibilité de créer des écoles de santé publique autonomes au sein des universités, comme cela se fait aux États-Unis, ou encore, comme il en existe depuis peu en Europe, des écoles semi-autonomes au sein des facultés de médecine. La pluridisciplinarité des professionnels de la santé publique et la complexité des défis de la « nouvelle santé publique » justifieraient un nouveau débat sur la question vitale de la mise en valeur des effectifs de la santé publique. La santé publique aurait besoin de renouveler son image et de rehausser la visibilité de la formation, de la recherche et des services qu'elle offre, afin de répondre aux besoins provinciaux et nationaux tout en respectant les normes internationales d'agrément et de reconnaissance des titres de compétence.

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Canadian achievements in public health are deservedly recognized and admired worldwide, including: comprehensive national health insurance; the Lalonde Report; pioneering work in health promotion, home care and elderly persons care, integration and decentralization of health services systems; mandatory fortification of basic foods; and others.¹ At the same time, there are a sense of unease, introspection and legitimate concerns arising from a number of public health crises in Canada in recent years, with many public commissions and committee reports, as well as editorial comments in the media and medical literature. Mostly, these stressed the need for a new federal capacity primarily for communicable disease control, and a higher profile for public health with appointment of a Minister responsible for public health.²⁻⁵ The new federal Public Health Agency with its six regional establishments has undoubtedly already strengthened national and regional capacity for public health in the country.

The issue of public health education has received less attention and should be reopened for debate. One of the comments noted from regional workshops sponsored by Health Canada on this topic was:⁵ "it is not clear that US type schools will be a significant feature in the future" and suggests that "regional or national consortia of public health programs may ... meet the need for coordination and pooling of resources." This conclusion should be re-examined and, in our view, revised. We propose that Canada consider schools of public health.

Until 1962, public health training in Canada was primarily conducted in two schools of public health (Toronto and Montreal). But since then, training of the public health workforce devolved to departments of community medicine in medical faculties, with medical specialization under the aegis of the Royal College of Physicians and Surgeons of Canada.⁶ Public health training for other health professionals, such as nurses, epidemiologists and environmental health officers, evolved in community colleges and universities. Public health training programs for nurses were discontinued with the transition to baccalaureate nursing programs and the emergence of masters programs. This model has achieved much in terms of research, training and service to the country. But the question needs to be asked: is

this format adequate or optimal to address the complex current and future challenges of public health as a wide-ranging multi-disciplinary field of professional and public activity?

Public health is more than a medical specialty. It is a professional culture and commitment, a set of attitudes and knowledge of a highly trained multi-disciplinary workforce operating in a complex network of governmental and non-health programs of both prevention and curative care, including management of provincial Medicare programs as well as national aspects of health. This requires preparation in graduate-level public health educational programs to address the broad and complex nature of public health for a wide range of specialized personnel including medical doctors, health managers, nurses, economists, engineers, veterinarians, laboratory personnel, public health inspectors and many other disciplines, all of great importance to the field of public health practice. Is this best achieved within a departmental structure of medical faculties? Perhaps there is no one model suitable for all, but there are experiences and trends from other countries that should be examined, as all countries are facing similar challenges.

Schools of Public Health (SPH), established in the United States since the 1920s, now include 37 accredited programs and many other graduate programs in public health education and community medicine. These graduate programs train thousands of public health specialists annually to staff government as well as non-government health agencies and provider organizations. These have been criticized,⁷⁻¹² however since the 1980s, there has been a renaissance and expansion of US schools to meet a growing demand for graduates from many different backgrounds, including medicine, dentistry, nursing, engineering, economics, and others.¹³

In the United Kingdom, the London School of Hygiene and Tropical Medicine (LSHTM) was created in 1924, bringing together several institutes into a major centre of training and research in public health and tropical medicine. The LSHTM is perhaps an excellent example of what we are talking about. The LSHTM is not within a medical faculty but is a free-standing school within the University of London. Its mission statement is worth

noting: *"To contribute to the improvement of health worldwide through the pursuit of excellence in research, postgraduate teaching and advanced training in national and international public health and tropical medicine, and through informing policy and practice in these areas."*¹⁴ LSHTM does all of that and very well indeed, with tremendous outreach to developing and transition countries worldwide. Is there a Canadian equivalent to the best of the UK or US models?

In 1991, Fee and Acheson (United Kingdom) called for development of schools of public health in British universities to help foster professional development of public health and the National Health Service (NHS) in working toward health targets as opposed to simply managing health services.¹⁵

In the past two decades, European development of schools of public health has become a continent-wide enterprise. Older schools such as London and Zagreb were joined by many new schools in Western Europe, with encouragement and support from the Association of Schools of Public Health in the European Region (ASPHER) and the Open Society Institute (Soros Foundation). Over the past decade, many new schools have developed in countries of Eastern Europe and the former Soviet Union, largely based on pre-existing departments of social medicine, occupational and environmental health, epidemiology and others with stimulus of MPHs and PhDs newly trained abroad.¹⁶⁻¹⁹

While the US or new European models may not be ideal, there is a case to be made to develop a more comprehensive approach in Canada by unifying the multiplicity of academic departments, centres and institutes "under one umbrella", creating recognizable high-profile academic centres of excellence, preferably – but not necessarily – with independent or semi-independent faculty status. Uniting relevant departments and centres into a faculty or school with a defined common mission and objectives would enhance their combined capability to produce the needed cadre and standards of public health professionals. This would enhance and strengthen the leadership and professionalism needed for new initiatives by federal and provincial agencies and other non-governmental organizations serving the public health.

Aggregating relevant departments and institutes into a school would strengthen the principal focus of training, research and service on total population health as well as on high-risk groups, individual health and health management. A school may be located within a medical faculty, as a school of pharmacy or dentistry might, or be established as a separate faculty as recommended in the United States.¹³ The key issue is the unification of departments and institutes into a common entity. The difference is not semantic, but contextual, with vital practical implications that could foster a newly energized approach to population health problems that involve a wide range of interventions, including those associated with management of health systems.

The broader approach of a unified new entity may also enhance the attractiveness of the profession and its ability to draw new federal and provincial funding given the current political and public interest in the field. Schools of public health could be the "centres of excellence" in teaching, research and service propagating not only professional and technical skills, but also the ethics, skills and understanding of how a particular discipline relates to public health as a whole, and the value system that is inherent in public health's *raison d'être*. The public health culture would also enhance the collaborative work needed to assess and address a complex range of problems facing Canada and all other countries, such as BSE, avian influenza, water-borne diseases, Aboriginal health, diabetes, care of the elderly, and many other population health issues.

The "schools of public health approach" addresses the need to extend far beyond medicine and clinical practice. Public health traditionally lacks the prestige and glamour of clinical medicine and fails to attract media attention except in times of crisis. A higher profile of schools of public health will draw public and political attention to the field and improve funding potential.

New schools of public health, linked with enhanced regional public health agency branches, could bring together existing relevant departments of community medicine and health management, occupational and environmental health and others, but with a wider mandate and a

greater degree of autonomy, cohesiveness, higher profile and advocacy role. They would need a common multi-disciplinary core curriculum and electives. No doubt these are already available in current departments and institutes within medical faculties. But brought together, each would contribute to a larger and potentially more robust entity with the sum being greater than its parts.¹⁸ Schools of public health should attract federal and provincial recognition, support and funding. A Canada-wide system of accreditation will be equally important to promote national standards and international recognition.

The case-for-action is the need for a public health workforce of adequate size and of international calibre prepared to face the challenges of the coming decades. This includes not only global epidemics but also development of capacity for national health targets, health systems analysis, and intervention programs for chronic diseases, in the context of new challenges for an aging population within limited resources. Preparation of managers and planners skilled in data and program analysis and leadership in implementation is as important as training health care providers with a broad orientation to a "New Public Health".¹ National and provincial health departments as well as university authorities share the responsibility to set in motion a process of establishing independent schools of public health equipped to produce professionals prepared for public health issues.

Public health is more of a culture than solely a profession. It is multidisciplinary and multi-dimensional. It relies on the quality, ethics, pride and professional skills of its team members, as well as its institutions and political support. Schools of public health are needed to prepare the workforce for the many public health challenges facing all countries,²⁰ including Canada. This is a complex and possibly controversial issue that is being debated vigorously in many countries around the world. Education for the public health workforce is one element of the World Health Organization's World Health Report 2006 entitled, "Working for Health".²¹ It is a topic that deserves much thought as well as robust and open debate in Canada.

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