Commentary on Population Health Intervention Research

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ABSTRACT

This commentary discusses the importance of the Pan-Canadian Public Health Network in facilitating the coordination and infrastructure of Canada's public health system. Within Canada, effective intervention practice and research is at the forefront of public health, but there are questions regarding how best to conduct population health intervention research, how to put the evidence into practice and where the necessary resources will come from. These issues are presented using Canadian examples drawn from public health practice, research and policy in the British Columbia context. Sustained and persistent collaboration regarding population health intervention research among Canadian public health practitioners, researchers and policy-makers akin to PHIRIC's mandate will better position Canada's public health system to respond to public health issues.

Key words: Public health; population health; Canada; intervention studies

La traduction du résumé se trouve à la fin de l'article.

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Population health intervention research is not feasible without strong partnerships between academic institutions and organizations devoted to the planning and implementation of population health interventions. In Canada, health service delivery and public health delivery are within the jurisdiction of provinces/territories. However, since communicable or non-communicable diseases are not limited to political and geographical borders, federal/ provincial/territorial coordinating mechanisms need to exist for optimal public health response in Canada. One such mechanism is the Pan-Canadian Public Health Network, which was established in April 2005 after the creation of the Public Health Agency of Canada. The network is co-chaired by a rotating provincial partner and Canada's Chief Public Health Officer. Many issues have frequently arisen respecting the public health infrastructure's capacity to implement effective interventions based on the best available evidence. The Network and its expert groups are uniquely positioned to develop and update a compendium of best and promising practices that are relevant to public health across jurisdictions. We need a pan-Canadian process to appraise the evidence and identify gaps, to prioritize a range of interventions and devise implementation studies to determine their effectiveness, rather than re-inventing the wheel in 13 jurisdictions.

There is strong momentum across the country to move towards a more systematic approach to addressing chronic disease, which is rooted in addressing not only individual behaviours but also their socio-economic and environmental determinants. However, once we start to move more upstream to look at socio-environmental factors, the level of activity is uneven, despite increased attention from public health practitioners. The other domain of interest is communicable disease prevention, particularly communicable disease control and vaccine preventable diseases. While in theory we may know what to do to address hepatitis C or HIV, effective implementation of interventions lags behind the knowledge base, which is perhaps why we are seeing an increase in the prevalence of HIV and hepatitis C. Irrespective of the public health issue, one of the most central challenges is strengthening the number and mix of public health personnel dedicated to this enterprise. In 2004, the Advisory Committee on Population Health and Health Security prepared a report on strengthening public health infrastructure that suggested a doubling of the resource base over what existed at the time. A related challenge is to ensure that the public health workforce is equipped with the knowledge, skills and resources to implement effective policies and programs.

In British Columbia, we are engaged in a process to define 21 core public health functions. We are developing evidence papers to guide intervention planning and implementation. In some public health domains, we have a considerable knowledge base, whereas in others, such as violence prevention or mental health promotion, the evidence base is scant and not very robust. While the evidence base has been naturally drawn from global sources, it still needs to be adapted to the Canadian context. What we have found in the evidence base to date ranges from broad principles akin to "we think this would work" to evidence that suggests "do this and you'll see a change". We have also generated principles derived from practice – that is, from the very programs that we know are required. These programs need to be better aligned and implemented over time and rigorously evaluated in order to better assess any meaningful changes in behaviours or population-level outcomes. Unfortunately, we do not have the commitment at the policy-funding level or the skills, capacity and infrastructure at the front line to engage in participatory research and to support the effective adaptation and implementation of programs.

We also need to select a few areas, such as early child development, in which we do have an evidence base and determine whether we can achieve population-level improvements and not continue to spread ourselves too thinly. We can certainly allow room for natural experimentation and variability in delivery between and within jurisdictions to determine the most effective and cost-effective approaches, but we need to start with interventions shown to make a difference, whenever possible. In the

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absence of evidence, we must rely on the principles of ethics to be pragmatic and sensitive to the socio-political context.

We are now better positioned than ever to lay the groundwork for sustained collaborative action akin to what PHIRIC is trying to achieve. Public health organizations at all levels, researchers, emerging schools of public health, the National Collaborating Centres for Public Health, in addition to those involved in the Public Health Network must all be actively engaged. We need to be relevant to a large number of people, to take some time to build up that relevance quotient. We can then show some persistence over time.

RÉSUMÉ

Dans ce commentaire, il est question du rôle prépondérant du Réseau de santé publique pancanadien pour faciliter la coordination du système de santé publique du Canada et lui offrir une infrastructure. Au Canada, les pratiques et la recherche interventionnelles efficaces sont à l'avant-garde de la santé publique, mais on se demande quel est le meilleur moyen d'effectuer de la recherche interventionnelle en santé des populations, comment en mettre les résultats en pratique et où trouver les ressources nécessaires. Nous présentons ces questions à l'aide d'exemples canadiens tirés des pratiques, de la recherche et des politiques de santé publique en Colombie-Britannique. Avec une collaboration soutenue et constante entre les praticiens, les chercheurs et les décideurs canadiens en santé publique concernant la recherche interventionnelle en santé des populations, conformément au mandat de l'IRISPC, le système de santé publique au Canada sera mieux en mesure de réagir aux problèmes de santé publique.

Mots clés : santé publique; santé des populations; Canada; études interventionnelles