National Collaborating Centre for Infectious Diseases
Centre de collaboration nationale des maladies infectieuses

Purple Paper

Highlights of the Canadian Public Health Association Conference Montreal, Quebec June 19-22, 2011

The title of this year's Canadian Public Health Association Conference (CPHA) was "Public Health in Canada: Innovative Partnership for Action", and the theme of intersectoral and transdisciplinary collaboration and partnership reverberated throughout the conference sessions. This issue of the Purple Paper will recapitulate our impressions and interpretations of some of the discussions that took place during the conference. Comments are welcome.

Setting the Stage

Social determinants of health are the conditions in which people are born, grow, live, work and age [1]. These factors affect the ability of individuals to attain good health, and also play an important role in the individuals' ability to maintain health. Based on data presented by the Canadian Institute for Health Information (CIHI), females, individuals with low socio-economic status and those living in poor neighbourhoods are less likely to access health care and to receive quality care for acute and chronic health conditions. Recognizing that factors influencing health extend beyond the clinical setting, there is now an emerging interest to approach the issue of a healthy society from a whole-of-government perspective (i.e. all government departments have role to play in developing "healthy" policies). "Health in all Policies" as a strategy to improve health for all rang loud and clear throughout the CPHA 2011 Conference. Implementing health in all policies in the Canadian context was the centre-piece for discussion at the conference.

Underlying the development of coordinated healthy public policies is an accepted ethical framework and a sound evidence base. The public health response to the 2009 influenza A/H1N1 pandemic, and natural disasters has highlighted the difficulty health care systems have when dealing with hard ethical choices that arise during times of crisis. Practitioners often feel ill-equipped to analyze and address these issues. There may also be disagreement about these issues as a result of the differences in values among stakeholders. The assumption that there are certain core values and virtues shared within public health and upon which decisions are made may be misguided. Ethical deliberation and decision frameworks need to be established in advance, and public health ethics can provide the language and space to clarify the different values, goals and limits of public health.

For complex and controversial public health issues, public engagement can meaningfully inform the issues and policy-making. Public engagement can:

- Raise awareness, inform, educate, and empower the public
- Ensure transparency
- Democratize policy-making
- Inform policy-making in the context of social and ethical dilemmas
- Find innovative and durable solutions to solve collective problems.

The increased pressure to adopt evidence-informed practice is creating challenges for public health departments on how to find and interpret evidence, and how to implement evidence-based practice. Peel Public Health has made great strides towards incorporating evidence at all levels of decision-making, drawing on available external resources such as healthevidence.ca and the National Collaborating Centre for Methods and Tools (NCCMT) as well as building their own library services with two reference librarians on staff. Strong support from senior management is indispensable for facilitating the organization-wide transformation, motivating staff to participate in training, and dealing with unease among staff due to the change in practice. Although evidence is only one of many deciding factors for changing practice, reviewing the evidence and synthesizing evidence into rapid reviews serve as the starting point for discussion and consensus-building.

Public Health Structure and Systems

The work undertaken by Peel Public Health to systematically incorporate evidence into practice is an accomplishment in knowledge translation at the local level. Provincial-level knowledge translation endeavours are exemplified by the establishment of the three provincial public health agencies – British Columbia Centre for Disease Control (BCCDC), l'Institut national de santé publique du Québec (INSPQ) and Public Health Ontario (PHO; formerly the Ontario Agency for Health Protection and Promotion). While all three agencies were created to serve their jurisdictions as information clearinghouses as part of their mandates, each agency operates under a different organizational model. In a panel session with executive representatives from the three agencies, the role of these agencies as scientific advisors and their position in the health policy process were discussed.

PHO is governed by the Ontario Agency for Health Protection and Promotion Act. The mandate of PHO is to provide scientific and technical advice to its public health partners, primarily made up of provincial ministries, local public health units, and other organizations within the health care system. While advice provided by PHO is rooted in evidence, Dr. Vivek Goel, President and CEO of PHO, emphasized that science alone cannot drive the public health agenda. As public health is value-based, the broader context in which public health is implemented cannot be neglected and evidence has to be considered repeatedly as the context evolves.

INSPQ has been in operation for 12 years. It primarily functions in an advisory capacity for both Quebec's Ministry of Health and Social Services (MSSS) and the general public. Dr. Luc Boileau, CEO of INSPQ, explained that his organization needs to tread carefully between policy and science when appealing to the two audiences whose needs for information are distinct. When supporting decision-makers in MSSS, scientific evidence needs to be considered in light of its impact on health. When communicating to the general public, INSPQ predominately takes on a scientific role, rather than a policy one.

BCCDC has existed for 20 years, although during its early operational years, it functioned as distinct government groups. Unlike PHO and INSPQ, the establishment of BCCDC was formalized through the amalgamation of these interrelated groups and not through legislation. BCCDC is the premier scientific advisory body for public health in BC, but unlike the other two provincial public health agencies, as Dr. David Patrick (Former Director of Communicable Diseases Epidemiology at BCCDC) pointed out, BCCDC also provides some core public health services in the province, including vaccine distribution and clinical services for major communicable diseases.

Thinking beyond the realm of population and public health, there is growing interest in integrating health and equity considerations within the public policy development process. This "Health in All Policies" movement advocates for coordinated and intersectoral responses to address inequities that impact health. Quebec's Public Health Act has been in force for 10 years and it mandates health impact assessments of all proposed laws and regulations. In the opening plenary, Dr. Alain Poirier, Directeur national de santé publique et sous-ministre adjoint, Ministère de la Santé et des Services sociaux, identified several factors that should be taken into consideration when applying health in all policies.

Having public health embedded in legislation is essential to ensure government accountability but is not sufficient to effect a comprehensive and coordinated intra-governmental public health system. Dr. Poirier emphasized the need for intra-governmental mechanisms to evaluate the impact of all policies on health as well as the need for the development and transfer of learnings.

In order to maintain public health as a public priority and to receive full support from ministries, constant partnership renewal is required. Pressure from civil society (e.g. large foundations supporting initiatives with the proviso of matching support from the government) has proven to be a successful motivator in the Quebec experience. In order to engage other ministries in public health, Dr. Poirier recommended the use of a common language and the use of economic arguments to generate interest and commitment, and to identify common goals.

In the follow-up panel discussion, Dr. Cordell Neudorf, Chief Medical Health Officer of Saskatoon Health Region, corroborated the points raised by Dr. Poirier, and outlined additional parameters for successful intersectoral partnerships:

- The need for strong, committed leaders

- The ability to seize opportunity
- The importance of reading the environment and context of public policy development
- Strong and ongoing communication among all stakeholders and partners
- Demonstrated benefit for all.

Dr. Margo Greenwood, Academic Lead of the National Collaborating Centre for Aboriginal Health, added that the health in all policies approach is consistent with the holistic approach to health and wellbeing undertaken by First Nations, Inuit and Métis communities. The understanding and application of the health in all policies approach could bring positive transformational change.

Public Health Research and Evaluation

Conducting public health research is no straightforward task as public health problems are complex and require complex solutions. This is further complicated by competing priorities and the lack of a monitoring system for health outcomes. In a session entitled "Building a Robust Population Health Intervention Research System in Canada: Infrastructure, Processes and Methods", Dr. Nancy Edwards, Scientific Director of the Institute of Population and Public Health at the Canadian Institute of Health Research (CIHR), led a discussion panel to examine the current state of public health research in Canada as it relates to policy and practice, and to address ways to strengthen the current public health research model to mobilize intersectoral, transdisciplinary and interjurisdictional collaborations.

The importance of capitalizing on research opportunities that appear with natural experiments was emphasized. "Natural experiments" are the unfolding of events as a result of the implementation of a new policy or change in practice. An example of a natural experiment might be the execution of anti-poverty strategies. Although natural experiments are not scientific experiments in the strictest sense, observation and documentation of the processes and both the intended and unintended outcomes of a public health response/program could yield invaluable information. Implicit to the study process is the need for knowledge translation – "translating" knowledge in terms of its transferability and applicability to other jurisdictions with their own local contexts, and making knowledge available to stakeholders who could benefit from it. Successful knowledge translation necessitates the linkages and partnerships among community stakeholders, population and public health researchers, social scientists (including historians, ethicists, theologians etc.) and public health practitioners and decision- and policy-makers. This is one of the mandates of the National Collaborating Centres for Public Health (www.nccph.ca), and the Centres strive to advance networks between public health practice and research.

In alignment with its commitment to intersectoral and transdisciplinary research, CIHR is undergoing reform and is seeking peer reviewers from a range of disciplines to be part of its grant review committee. A conference participant contended that CIHR's reform should not be limited to its grant review structure, but should be expanded to modify current funding categories and proposal requirements towards more equitable access. CIHR's current funding structure centres around competitiveness, which is heavily weighted on the scientific rigor of the study design and the research experience of the principal grant applicant. The intention of the granting structure is to ensure that new findings generated through CIHR-funded research are scientifically sound, but this process precludes community members from acting as equal contributors to research and perpetuates inequalities that already exist between academia and the community.

The importance of bidirectional dialogue and genuine partnership between public health research and practice was again highlighted in the closing plenary session, entitled "Mobilizing Science and Knowledge Resources from All Sectors". Focusing on the applicability and effective use of evidence in health promotion, Dr. Louise Potvin, Directrice scientifique at the Université de Montréal's Centre de recherche Léa-Roback sur les inégalités sociales de santé de Montréal, pointed out the dilemma in applying global scientific research to local communities. While "context-free" scientific data are useful, transforming the data to suit the local context is necessary for the meaningful incorporation of evidence into practice. There is a need for empirical research to understand the role of evidence and its various uses in health promotion to enhance program effectiveness. Dr. Laurette

Dubé, Directrice scientifique de McGill University's Plateforme mondiale pour la convergence de la santé et de l'économie, added that only by integrating knowledge across health sectors will we be able to break down our siloed approach to addressing complex health issues, and to mobilize a long-lasting transformation to better health at the political, population and individual levels.

In the plenary session entitled "Beyond the Long-Form Census: The Changing Face of Surveillance in Canada", Dr. Gilles Paradis, Professor of the Department of Epidemiology, Biostatistics and Occupational Health at McGill University, and Ms. Beth Wilson, Senior Researcher and Policy Analyst of Social Planning Toronto, discussed the implications of the loss of the mandatory long-form census to public health practice and research, and identified new strategies for data collection and knowledge translation.

As most readers of the *Purple Paper* will know, on July 13, 2010, the federal government announced the discontinuation of the mandatory long-form census and its replacement by the voluntary National Household Survey.

The information collected in the long-form census about the Canadian population was used for program planning and delivery by government and community groups. It also provided important information for population research. Although the National Household Survey will cover most of the same topics in the long-form census, it is anticipated that the response rate will drop from over 90% (with the mandatory long-form census) to 50% (with the new voluntary questionnaire).The voluntary nature of the new questionnaire will also introduce selection bias in the survey where the highest and lowest income groups and the socially disadvantaged (e.g. First Nations, disabled, new immigrants) would be less likely to respond, thus generating a population that is less varied and less unequal – "a country of greater moderation" as Dr. Paradis called it.

If the response rate is in fact as low as predicted, the replacement of the long-form censure with the voluntary National Household Survey may have negative implications for decision-making in public policies related to health, housing, employment and education at a regional and local level. This may also mean a reduced capacity to assess policy change and efficacy of public health programs.

In terms of population research, absence of reliable data will have a negative effect on the sampling frame for independent studies, and on providing a reference for data correction. As a result, the associated increased cost and time needed for additional background work may lead to delay or cancellation of some studies, particularly research on social determinants of health.

Alternative complementary sources of data may be used in conjunction with the National Household Survey, in place of the long-form census. These include data from tax-filers, medical records and government administration (e.g. driver's license), and studies conducted by private interest. Although these information sources are often inadequate and will not be a substitute for the long-form census, we will have to determine how best to deal with the new data limitations.

Education and Capacity Building

In a plenary session on "Building Capacity for Public Health Action", Dr. Alain Poirier, Directeur national de santé publique et sous-ministre adjoint, Ministère de la santé et des services sociaux, and Dr. John Frank, Director of the Scottish Collaboration for Public Health Research and Policy, compared the structure within which public health is implemented in Quebec and Scotland, and described how the structure influences the delivery of public health programs and response capacity of its practitioners.

As part of Quebec's public health reform, Dr. Poirier explained, local primary health centres were created to enable public health expertise to be built from the ground up. In addition to providing primary care services, physicians were required to address health issues pertinent to the population as a whole. This decentralized public health model resulted in limited provincial coordination and vision, creating gaps in the public health response capacity.

On the other hand, Scotland's public health system is deeply entrenched in bureaucracy, and according to Dr. Frank, there is a need to re-position power at the local level. As a result of the competing voices of public health, acute and chronic care,

administration, program planning and evaluation in a shared governance structure, doctors and epidemiologists are becoming de-skilled. Scotland has a strong focus on local policies, yet shares Quebec's difficulties in addressing problems in a coordinated way on a national scale, such as policies with regard to food labelling or agricultural practice.

In both scenarios, strong leadership with clear authority is essential to reinvigorate the current public health system. In order to develop great leaders in public health, Dr. Poirier argued that training in public health should be incorporated into the physicians' formal (university) education with university faculties of medicine. Public health needs to work collaboratively with faculties of medicine, focusing on intersectoral and transdisciplinary innovations, to provide good training, to create jobs with excellent potential and to actively recruit well-trained talented individuals to these positions. Leadership training in public health must be provided during physicians' formative years and must be nurtured as physicians grow professionally. Recognizing that public health is critical for a comprehensive health care system, Dr. Frank praised Canada's effort in establishing a number of new schools of public health to increase the current capacity and pool of expertise. However, the audience was cautioned that the syllabus of public health schools should be standardized across the country to ensure a consistency of core competencies among students.

Communication

In the session on "Health Communication and Knowledge Exchange: Using Canadian Values to Foster Health Equality", four panelists discussed how effective communication can contribute to the constructive dialogue about health and values that underlies issues of public health ethics, health equity, and knowledge translation.

Dr. Charlotte Reading, Associate Professor at the University of Victoria, commented that social conditions are shaped by inequalities that are often avoidable. First Nations, Inuit and Métis peoples continue to disproportionally suffer from poorer health outcomes compared to mainstream populations, and according to Dr. Reading, more could be done to foster health equity and to improve the health of marginalized populations. Dr. Bernie Pauly, Associate Professor at the University of Victoria, further elaborated that we need to think beyond socio-economic status, level of education, household income and other factors as the predominant social determinants that affect health. Systematic factors such as colonialism, racism, classism and sexism have a stranglehold on one's social mobility, and set into motion a series of events from birth that limits one's chance of better health in life. Dr. Pauly suggested that the ultimate end goal of public health is to achieve social justice for all.

Dr. Richard Lessard, Director of Direction de santé publique de Montréal, commented that decreasing health inequities requires a long-term view. When crafting health messages in public health, one must not lose sight of the choice of language used for communication. Dr. Lessard stressed the importance of understanding the audience. Whether the audience holds a leftist or rightist world view, the language used in messaging must be adapted to reflect the values of the audience.

Mr. Gene Long, Health Communications Consultant, noted that communication is clearly a critical function of public health. Despite the common perception expressed by some public health practitioners about the lack of communications support from the media, health inequities are generally well-known and well-understood by the general public. However, as Mr. Long remarked, there are many opportunities to expand messaging with regard to social determinants of health and social justice in the face of emerging social media trends and other communications advancements.

In the plenary session entitled "Addressing Current Complex Public Health Challenges: The Wisdom of Experience and New Technologies", the use of new technologies to promote public health initiatives was explored. Dr. David Hammond of the Department of Health Studies and Gerontology at the University of Waterloo used technological innovations employed by the tobacco industry as an example to illustrate how new technologies had been used to benefit the tobacco industry and to explain how some of the same technologies were also used to build momentum of the anti-tobacco campaign in public health. He then extrapolated on how new technologies could be used to tackle the problem of obesity in Canada.

For many years, the tobacco industry successfully increased tobacco use through industry innovation and technology. For example, the introduction of flavoured cigarettes and colourful packaging targeted specific segments of the general population. In addition, the marketing of new filters was launched in response to health risk messaging from public health.

Using similar tactics, the food industry lures consumers to make unhealthy food choices by using marketing gimmicks such as labelling food products as “natural” or “healthy” based on the presence of a single ingredient, and using toys to appeal to children. When challenged, like the tobacco industry, the food industry is quick to respond by changing its products rather than attempting to change consumer behaviour.

The question now becomes how can we use new technologies to our advantage and to promote public health causes? Dr. Hammond suggested that new technologies can be used to follow and map consumer trends, and to monitor school, workplace and retail environments. New technologies can also be used to increase the reach of interventions; for example, there are now more than 60 iPod applications to help people quit smoking. Trackers for caloric intake and physical activities have also become available and are gaining popularity. Public health is slow to adopt technology and innovations but we cannot repeat one of the biggest mistakes in the early anti-tobacco campaign – that is, to rely on the industry to voluntarily change their products. While some of these voluntary industry-led measures are likely well-intended, they often fall short.

Another important emerging issue is the use of social media in public health communication. Social media, as Mr. Thom Kearney, Partner and Principal Consultant of Rowanwood Consulting Inc. pointed out, has the capacity to mobilize and organize entire populations in ways that we have not seen before. Social media is about the people, not the technology. Thus, to be relevant, Public Health must evolve with the changing times, and social media is one communication mechanism that allows for the large-scale intersectoral and transdisciplinary collaboration needed for knowledge translation and exchange in public health.

References

1. WHO. 2011. Social Determinants of Health. http://www.who.int/social_determinants/en/ [Accessed online July 1, 2011]

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