Session V: Public Health

Duncan Hunter (Queen's University)

Now, I've been told by the conference organizers that I have an opportunity to share some of my own views and experiences, so I thought I would take this opportunity. Very briefly, there are three things I want to remind you about. One is that major restructuring of public health in Canada is well underway. Secondly, the impact of this restructuring at the local level – i.e., front-line public health workers – is really unknown. And thirdly, I would argue that the impetus for restructuring public health was actually not entirely unpredictable. In the course of discussing these three things, I'm going to refer to the papers that we've just heard in this session.

People who've worked in public health – and I used to work in a public health unit before my career went in different directions – never thought they would see the day that we would see a national agency in Canada devoted to public health. This change, as we just heard from Professor Lazar, was motivated mostly by the SARS epidemic. The resulting National Advisory Committee, as I'm sure you know, that was charged to look into SARS, chaired by David Naylor, published a really important document. It's called "Learning from SARS: Renewal of Public Health in Canada." I urge any of you who haven't read it, and who are interested in public health to do so, as this is a fantastic document to sum up the state of play in Canada with respect to public health. You could also change the title around. "Renewal of Public Health in Canada" could be before the colon, and "Learning from SARS" could be the second clause.

The report led directly to the establishment of a new public health agency in Canada, including the appointment of a chief public health officer, who has well-defined roles and responsibilities. There is lots of money, apparently, involved in this initiative. There are new collaborating centres across Canada that are also being established.

It's hard to underestimate the extent of the vision in the Naylor Report. I thought I'd summarize some of the areas that were addressed by its recommendations. These include a national public health strategy, new funding for public health, emergency-response planning function, surveillance data collection and dissemination, clarification of legislative and regulatory issues, renewing laboratory infrastructure, building research capacity, renewing human resources for public health, and also looking at international and local issues. The question remains, of course, as to the extent to which these areas of recommendations will percolate down to the local level.

Speaking of the local level, I thought it might be useful to remind ourselves what exactly goes on in a public health unit. What are the daily activities of front-line workers? I came up with a list that is certainly not definitive. But here are some of the things I remember. They do vaccinations, of course, flu shots and shots for travellers and for children, and public health inspection of our water supply and of our restaurant kitchens. They do tobacco control. They provide nutrition advice. They do injury prevention for the elderly, for people who ride bicycles, for children in cars, for example. They are very much involved in sexual health. They encourage healthy behaviours. You'd be surprised at the range if you go inside a local health unit. For example, physical activity is a way to control obesity, and I think it's probably fair to say that health units and nutritionists are interested in some of the other sorts of things that Lisa Powell talked about in her presentation, as well as emergency response for, among other things, the pending pandemic. And for the most part, these activities are carried out in local public health units every day in Canada, competently and with very little fuss.

What I want to ask you to think about is to what extent are the papers that we heard from our panelists applicable to these front-line workers? I have a few things to say about each paper. The first one, that Lisa Powell presented, is actually the sort of paper that an epidemiologist would write. They'd look at the relationships between obesity and income, for example, and other risk factors. And the only difference that I can see, really, is that an epidemiological paper would be a lot shorter than this same paper written by an economist. The other thing that I was really interested in is, if I did a literature search in the online indices that I normally use, I'm not sure that I would find this paper. I suppose one of the outcomes from a conference like this is that maybe we should start looking into other disciplines for essentially the same research that we might find where we normally do. The other thing I liked about this paper is that it went all the way from data right through to policy recommendations. I don't see that as often in papers as I would like to.

The use of information to evaluate restructuring is what Manya Sadouski talked about. Information and surveillance data are indeed crucial to some of the activities of public health. I did a quick peek at the public health agency's web site and it is amazing how much online surveillance data there now exists in Canada, through the agency's web site. For example, if you look in the Canadian Hospital Injury Reporting and Prevention Program, you can find data tables that present firework injuries in Canada. The information is presented in the normal epidemiological way – age, time, sex, place. And the site even presents the data by type of firework that caused the injury.

I know that it's common for data technicians – and I've done this myself – to criticize data, that it's never quite good enough to drive policy. These criticisms often are based on, for example, the way the data is collected, whether it's even out there, whether the sample size is large enough, or whether it's timely. I agree with these limitations. But I actually think the main issue is whether or not there are people out there to use these data – what I would call data-receptor capacity, for example, to use some of the health services research data and results. We need more people who can understand the limitations of the data and who can use it. For example, if we look at American schools of public health, we'll find that these schools have organizations that are called health intelligence units, which can interpret these data. We used to have a health intelligence units program in Ontario, which sadly was discontinued. I don't think we're going to see the day anytime soon when we see published wait times for evidence-based, effective public health interventions.

With respect to Ana Johnson-Masotti's paper on health technologies, it's not immediately clear to me what health technologies are that get used in public health, although if you stop to think for a second, vaccines are probably a new technology, and maybe some screening tests. But if we use Tony Culyer's definition that he provided in his Sinclair Lecture last night, then technologies are all over the place in public health. I still can't see, I'm sorry to say, how the paper's framework could be used, for example, to assess whether what a public health inspector does when he or she goes into a restaurant kitchen, provides direction in terms of effectiveness.

I'm not going to say very much about pandemic planning except that we've seen an epidemic of writing about the next pandemic. It's meant to come so the experts tell us. The size of it ranges, as Michael Decter said yesterday, could be from a million to several million persons. My concern, though, is that I think it's probably likely that a vaccine's not going to help us particularly – either it won't be ready, or there won't be enough of it, or it won't be specific enough.

As a final point, the new interest in public health may well have been predictable. And I can only say that because when I first started studying epidemiology quite a long time ago, I had a little pencil sketch on a bulletin board above my desk, called "The Stages of Public Health", and they were characterized as a loop. Where you have an outbreak or epidemic, then you have disease-prevention control measures, which are effective. And then the society sinks into indifference or apathy because the prevention control measures are working. It's a truism in pubic health that, when it's doing its

job well, people forget about it because there are no epidemics that are out there. And what we've seen with the SARS outbreak is that we have moved from one part of the loop to the next stage of the loop.

What I want to finish by saying is that I have a sense that it's quite an exciting time to be working in public health in Canada. By all accounts, the recent Canadian Public Health Association meeting in Ottawa was one of the best attended in years, and apparently, it was very successful. The creation of a new public health agency seems almost miraculous to some of us who have been working in public health for so long. I still have a question, though, about what the federal public health agency is going to do for local public health workers, even though I recognize that it's still early days for what the agency does.