Chronic Illnesses:
The Challenge of The 21st Century
Worldwide, chronic illnesses are responsible for 63% of deaths and are the primary cause of mortality, according to the World Health Organization (WHO). In wealthy countries, more than one-quarter of deaths due to chronic illnesses occur prematurely, before the age of 70, whereas average life expectancy is about 10 years more than that.

In Canada, these illnesses cause productivity and income losses equivalent to $190 billion per year. They monopolize, on their own, 58% of the country’s health costs, representing more than $68 billion.

Jeanne no longer needs an alarm clock to wake up. For a very long time now, she has lived beside the metropolitan highway. She can tell by the intensity of the morning traffic that it’s time to get up. But when you’re 75, obese and diabetic, you don’t spring out of bed the way you did at 25! Jeanne remembers that her son, Pierre, is supposed to do the grocery shopping today. She hopes he hasn’t misplaced the coupons she gave him. Since Pierre lost his job, money is scarce. She wishes he would look for another job, but he says he’s too tired for that. She knows he’s depressed, but he won’t talk about it.

Jeanne telephones Pierre to talk about the grocery shopping. She could easily talk with him in person – he lives in the apartment next door with his daughter, Alexandra, who is in his full custody – but she gets winded even just at the idea of walking that far. No one answers the phone. Maybe Pierre is at the emergency room again with his daughter, who often has asthma attacks.

If only their family doctor hadn’t retired. While waiting for a place in a family medicine group, Jeanne can count on home care services provided by the CLSC, but she doesn’t like having strangers come into her home. Fortunately, a nurse invited her to join a patient group started by the CLSC and now she can talk about her problems there.

Jeanne, Pierre and Alexandra are not isolated cases. Like one-third of Canadians aged 12 and over, they have one or more chronic illnesses and experience, every day, the consequences of their conditions.

Chronic illnesses are long-term disorders that generally progress slowly. Examples? Cardiovascular diseases, diabetes, cancer, asthma, weight problems and obesity, mental health problems, arthritis, allergies, neurodegenerative disorders, etc. Chronic illness is a long-term burden that undermines the quality of life not only of those afflicted but also their families and loved ones.

Chronic illnesses are the challenge of the 21st century. Facing this challenge will require imagination, innovation, daring, rigour, and patience.
THE HEALTHCARE SYSTEM: EXPERIMENTING WITH INNOVATIVE APPROACHES TO PREVENTION AND MANAGEMENT

Because they are recurrent and complex, chronic illnesses require that practices be adapted. They present many challenges to health professionals, patients and families. To contend with this reality, the healthcare system will have to continually implement new interventions and innovative approaches. Some of these will involve, for example, using pivot nurses or nurse practitioners, creating centralized waiting lists for complex conditions, or bringing several types of health professionals together under one roof.

Thanks to the creativity of researchers, analysts and professionals, new chronic care management models are springing up around the world. We need to take advantage of this diversity to conduct research on these innovations. In particular, we need to examine their impacts and implementation conditions to identify best practices. Two themes along these lines emerged strongly from the discussions at the conference:

Yes to interdisciplinary teams, but...

Research has confirmed that health professionals in all sectors benefit when they collaborate to respond more effectively to the challenges of chronic illness. Here again, there are questions that need to be explored so that practices can be improved even further. What are each professional’s roles and responsibilities? How should they work together? On what basis? What structures and settings foster collaboration? What communication processes should be encouraged? How should new initiatives be evaluated in this context?

And where is the patient in all this?

Do patients have a place in the interdisciplinary team? Over time, people with chronic illnesses develop unique knowledge and competencies related to their experience of illness. Their involvement ensures that decisions take into account their real needs, so that their quality of life is improved and they are able to do the things that matter to them. From this standpoint, patients become full members of the team and enhance scientific knowledge with their experiential knowledge. As studies conducted by the Centre for Applied Teaching in Health Sciences of the Université de Montréal (CPASS - Centre de pédagogie appliquée aux sciences de la santé) have shown, health professionals also tend to collaborate more effectively when the patient or a family member is present. As such, it will be important to do more research not only on care partnerships, but also on their influence on the quality of care, quality of life and health status of patients and their families.

Take some patients, prepare them, and involve them in the reflection process – the professional and disciplinary silos fall, the discussion becomes more clearly focused, key issues are addressed – simply because the patient is there.

Vincent Dumez, Co-Director, Direction collaboration et partenariat patient, Centre de pédagogie appliquée aux sciences de la santé (CPASS), Faculty of Medicine, Université de Montréal

BEYOND THE HEALTHCARE SYSTEM: IDENTIFYING THE SOCIAL FACTORS AT PLAY IN THE EMERGENCE OF CHRONIC ILLNESSES AND TAKING ACTION UPSTREAM

Chronic illness prevention: challenging everyone concerned

Over the past three decades, research on social inequalities has established beyond any doubt the crucial role of many social factors in the genesis of illnesses. The hierarchies into which our societies are structured impact the population’s experience of health and illness. Individuals at the top of the social ladder enjoy better health than do those directly under them, who in turn are healthier than those immediately below them, and so it goes, all the way down to the bottom of the ladder. Research has also shown that, to redress these inequalities, stakeholders need to be mobilized and investments need to be made outside the health field. Conditions related to education, employment and income need to be improved, and disparities between social groups need to be lessened in this regard, as well as, more broadly, in terms of the overall quality of the environment. Researchers themselves must rethink how they address these issues, because research that further exploits those who have no voice runs the risk of contributing to the exacerbation of these inequalities. Health is no longer just medical; it has become a socioeconomic and political matter.

I am pessimistic about our ability to reduce inequalities in health following our current approach. We continue to focus on individuals and their diseases and their risk factors even though it is clear that these problems are, in large part, a consequence of larger fundamental social forces.

S. Leonard Syme, Professor Emeritus, School of Public Health, University of California at Berkeley
Education, a protective factor

Education is definitely a cornerstone of chronic illness prevention. In today’s knowledge economy, young people who do not achieve a minimal level of education have trouble integrating into society and are particularly at risk of developing chronic health problems. Investments in education are thus also investments in health. Several studies have shown, notably, that good quality preschool programs have a positive impact on children that persists for the rest of their lives. These programs actually give them the tools they need to cope with life’s challenges, including those related to health. Research has also shown the benefits of supplementing this type of preschool intervention with prevention activities in primary and secondary schools.

Keeping a close watch on the environment

The WHO has estimated that, in 2012, there were 3.7 million premature deaths caused by poor air quality. People’s cardiovascular and respiratory systems are affected, particularly, although not exclusively, in developing countries. In 2013, the International Agency for Research on Cancer determined that atmospheric pollution was carcinogenic, largely because of fine particulate matter. The presence in commonly used consumer products of substances that can interfere with the endocrine system, especially in children, is worrying. In fact, if children are exposed to these substances in the first years of life, the harmful effects on their development are manifest much later in life. Studies in environmental epidemiology are therefore becoming more relevant than ever before. Adding toxicokinetic components to such studies to better understand these substances’ sources and exposure pathways and the key moments when they become active provides valuable insights for prevention. This is a rapidly growing field of research at the IRSPUM, to which are added studies on built environments, living environments and territories, with a particular focus on access to health-promoting resources (leisure activities, nutrition, etc.) and on transportation and mobility.

As shown by the discussions at the conference, public health researchers here and elsewhere bring a unique perspective to the issue of chronic illness. It is essential, however, to align knowledge production and action even more closely by continually moving forward, not only with new forms of collaboration among decision-makers, practitioners, researchers, and the population, but also with new approaches and methods for advancing research in the context of intervention.