

Chronic Disease and Nursing: A Summary of the Issues

What's the issue?

“Chronic diseases are now the major global disease problem facing the world and a key barrier to development, to alleviating poverty, and to implementing the Millennium Development Goals,”

– Dr. Lee Jong-wook, Director-General, World Health Organization (WHO), at the Fourth WHO Global Forum on Chronic Disease Prevention and Control in Ottawa in November 2004.

The consequences of chronic disease are far-reaching. They include premature loss of life, reduced quality of life, family stress, financial costs to the health care system, and lost productivity. According to the 1996 Statistics Canada Population Health Survey, over half of Canadians suffer from one or more chronic health conditions, and, as the population ages, this number will only increase. This growing health burden – the direct and indirect cost to Canadian society of chronic disease – will have a direct impact on nurses and on the work they do in institutions and in the community. This backgrounder outlines the issues relating to chronic disease in Canada and the role nursing can play in chronic disease prevention and management.

Chronic disease in Canada

The three most prevalent chronic diseases in Canada are cancer, cardiovascular disease, and diabetes. They also place the greatest burden on our health care system. Other prevalent chronic diseases include chronic obstructive pulmonary disease (COPD), asthma, mental illness (including depression, stress and anxiety), and arthritis.

- Impacts of chronic disease:

- o Each year about 163,000 Canadians die due to cardiovascular disease, cancer, lung disease, and diabetes, accounting for over two-thirds of the total annual death toll.
- o **Cardiovascular disease** is the greatest single cause of death, disability and illness, and was responsible for 34 per cent of lives lost in 2001 – roughly 74,824 Canadian deaths. (Advisory Committee on Population Health, 2002)
- o Over two million Canadians are estimated to have **diabetes**, with 60,000 new cases diagnosed each year. These numbers are expected to rise as the population ages and as the obesity rate rises (Alliance for the Prevention of Chronic Disease, 2002).
- o About 100,000 Canadians each year are diagnosed with **arthritis**. It is estimated that by 2026, more than 6 million Canadians will have been diagnosed with arthritis (Arthritis Society of Canada, 2005).

- **Cost:** Chronic diseases constitute the major demand on the health care system, and a major burden on the economy. The total cost of illness, disability and death due to chronic diseases in Canada is over \$80-billion annually (Health Canada, 2002).
- **Prevention:** A significant number of deaths from cancer (70 per cent), heart disease (25 per cent) and diabetes can likely be prevented or delayed (Chronic Disease Prevention Alliance of Canada, 2003).

Chronic disease globally

Chronic diseases are the leading causes of death and disability worldwide. The World Health Organization (WHO) estimates that non-communicable diseases contribute to almost 60 per cent of global deaths and 43 per cent of the global burden of disease. By 2020, this is expected to rise to 73 per cent of all deaths and 60 per cent of the global burden of disease (2005). The World Health Assembly, of which Canada is a member, endorsed the WHO *Global Strategy for the Prevention and Control of Non-Communicable Diseases* and recently released a *Global Strategy on Diet, Physical Activity and Health*. Both these strategies recognize that chronic disease is a global issue that is influenced by many factors. It is critical that Canada be part of these strategies.

“The total cost to Canada of illness, disability, and death from the four leading preventable chronic diseases – cardiovascular, cancer, respiratory and diabetes – is estimated at \$45-billion annually. The cost in terms of quality of life is immeasurable. Although these chronic diseases are among the most common and costly health problems facing Canadians, they are also among the most preventable.”

– Dr. Carolyn Bennett, Minister of State (Public Health) at the Fourth WHO Global Forum on Chronic Disease Prevention and Control

Why is this issue important?

How this issue relates to the health of Canadians

Chronic disease affects the overall health and quality of life of many Canadians, including their ability to work:

- Fifty-five per cent of Canadians suffer from one or more chronic health conditions (Statistics Canada, 1996).
- Arthritis is a leading cause of disability among Canadians. It limits daily activities, resulting in economic, psychological and social impacts.
- Diabetes is a leading cause of blindness and limb amputations.

Risk factors

Many chronic diseases can be prevented or delayed. Further, some chronic diseases share a common set of preventable biological risk factors, notably high blood pressure, high blood cholesterol and over-weight, and related behavioural risk factors, including smoking, unhealthy eating, and not enough physical activity. In addition, two-thirds of Canadians have at least one modifiable risk factor for chronic disease, including smoking, low level of physical activity, unhealthy eating habits, over-weight or obesity.

However, the risk of chronic disease is not shared evenly among the population. Certain socio-economic factors have an important influence on the occurrence of chronic disease, such as income, employment, education, geographic isolation and social exclusion. People living on low incomes, people with disabilities, Aboriginal peoples, and other marginalized groups are at significantly higher risk for chronic disease.

The risk factors for chronic disease are more prevalent in some populations than others. The most economically and socially disadvantaged people in our country face a disproportionate occurrence of health risks:

- About three million Canadians experience food insecurity each year, most notably those who rely on social assistance, lone mothers, Aboriginals and those who live in remote communities.
- Although levels of physical activity decrease with age, physical inactivity and obesity rates are higher for low income Canadians of all ages. (Health Canada, 2003)
- Some barriers to physical activity and nutrition include lack of time, skills and knowledge, as well as lack of access to affordable recreation and nutritious food. The presence or absence of supportive social and physical environments also plays a significant role.

How this issue relates to the functioning of the health system

Chronic diseases represent a huge cost to Canadian society, in terms of both treatment and lost productivity (e.g., due to time missed from work):

- Cardiovascular diseases cost \$28-billion per year.
- Diabetes and its complications cost \$14-billion per year.
- Cancers cost \$13-billion per year.
- Respiratory illnesses cost \$8-billion per year. (Chronic Disease Prevention Alliance of Canada, n.d.)
- Arthritis costs \$4-billion per year (Arthritis Society, 2005).

These diseases are also responsible for much of the ever-higher amounts of public and private funds spent on prescription drugs and alternative treatments. In 1998, \$9.3-billion were spent on prescription drugs, and of this amount \$1.8-billion were spent on drugs for cardiovascular diseases, \$1.1-billion were spent each on respiratory diseases and mental disorders, and \$270 million was spent on arthritis (Health Canada, 2002). Use of complementary and alternative health care is growing, as more people are searching for effective ways to prevent, treat and manage chronic diseases.

Why is this issue important to nurses?

The two biggest challenges in chronic disease are preventing the disease in the first place, and managing the condition effectively when it arises. Both of these are long-term challenges that are best addressed through an effective and ongoing relationship between the health care provider and the patient, based on mutual respect, trust and appropriate interventions. The primary care setting is where this long-term relationship is most often established and where interventions occur. Secondary and tertiary levels of care provide opportunities for treatment and shorter interventions at moments when the patient might be highly receptive (usually associated with the onset or worsening of a condition).

As members of integrated, multidisciplinary teams, nurses have important roles to play in the prevention and management of chronic diseases

- Nurses are usually the first – and most consistent – point of contact for patients.
- Nurses are often in the best position to gather information about a patient’s family, as well as social, cultural and economic factors that might be important to developing an intervention.
- Nurses are frequently in a position to use their skills in health education, helping patients to develop prevention and management strategies that are appropriate for their personal and family situations, and that make the best use of community resources.
- Nurses are skilled at assessment, ongoing care, education, and family support.
- Nurses play an important role advocating for and with people living with chronic diseases.

The increasing prevalence of chronic disease in Canada will affect the work of many nurses – whether they work in institutions or in the community. More effective prevention strategies need to be developed, as well as more follow-up and support to individuals and their families to help them manage their conditions. Canadian nurses need to re-evaluate their role and training to ensure that they are well prepared to address these challenges.

What has CNA done to address this issue?

- CNA is a member of the **Chronic Disease Prevention Alliance of Canada** (CDPAC). The goal of CDPAC is to foster and help sustain a coordinated, countrywide movement towards an integrated population health approach for prevention of chronic diseases in Canada through collaborative leadership, advocacy and capacity building. Other members include the Canadian Diabetes Association, Canadian Lung Association, Canadian Medical Association, Canadian Council for Tobacco Control, Canadian Parks and Recreation Association, and Canadian Public Health Association. More information is available at www.cdpac.ca.
- CNA is a partner and member of the Advisory and Communications Committees of the Primary Health Care Transition Fund project, **Getting a Grip on Arthritis: A National Arthritis Educational Intervention in Primary Health Care**. The purpose of this project is to improve chronic disease prevention and management through interdisciplinary collaboration and increased client involvement in their health care. It offers special training to selected primary health care providers, including nurses and nurse practitioners, in workshops that address diagnostic assessment and treatment of osteoarthritis and rheumatoid arthritis. These workshops take place across Canada in community health centres and other primary health care facilities. Other partners in this initiative include the Canadian Alliance of Community Health Centre Associations, the Arthritis Community Research and Evaluation Unit, and The Arthritis Society. More information is available at www.arthritis.ca/gettingagrip.

What can nurses do about this issue?

- Ensure that the patient, the patient's family and other health professionals understand the diagnosis, the treatment and where to obtain more information on the chronic disease.
- Listen to the patient's wisdom and collaborate with them – they are the ones living with the disease.
- Work with community members and patients to ensure that appropriate services are available both in institutions and in the community. If appropriate community services are not available, the nurse's role becomes that of facilitator and advocate.
- Consider the social determinants of health (e.g., income, employment, education, geographic isolation, social exclusion) in the assessment and treatment of clients with a chronic disease.
- Become aware of complementary practices available for patients to deal with existing chronic diseases or to prevent them. Determine the complementary practices your patients are using (if any), and assess the impact they may have on other treatments.
- Advocate for increased investment in health promotion and preventive care. Support the development of an integrated approach to chronic disease prevention that focuses on common major risk factors, and that integrates primary, secondary and tertiary prevention, health promotion, and related programs across sectors and disciplines.

Where can you go for further information?

- The World Health Organization website includes information about integrated chronic disease prevention and control (www.who.int/chp/about/integrated_cd/en/).
- The Chronic Disease Prevention Alliance of Canada website includes information about chronic diseases and the need for an integrated approach to chronic disease prevention (www.cdpc.ca).
- Health Canada offers a variety of resources for health professionals, community leaders and individuals on chronic disease prevention and healthy living (www.hc-sc.gc.ca/english/index.html).

Further Reading

Canadian Institute for Health Information. (2003). *Health care in Canada 2003*. Ottawa: Canadian Institute for Health Information & Statistics Canada.

Canadian Nurses Association. (2000). *Optimizing the health of the health system*. Brief to the Commission on the Future of Health Care in Canada. Ottawa: Author.

Colman, R. (2002). *The cost of chronic disease in Nova Scotia*. Nova Scotia: Dalhousie University & Health Canada.

Federal, Provincial and Territorial Advisory Committee on Population Health. (1999). *Statistical report on the health of Canadians*. Ottawa: Canadian Institute for Health Information, Health Canada and Statistics Canada.

Grandmaison-Dumond, L. (n.d.). *Unique nursing roles and responsibilities in arthritis care*. Unpublished thesis, University of Ottawa, Ottawa, Ontario.

References

Advisory Committee on Population Health. (2002). *Advancing integrated prevention strategies in Canada: An approach to reducing the burden of chronic diseases*. [Discussion paper]. Ottawa: Author.

Alliance for the Prevention of Chronic Disease. (2002). *Building the case for the prevention of chronic disease*. Winnipeg: Author.

The Arthritis Society. (2005). Getting a grip on arthritis program. Retrieved from www.arthritis.ca/gettingagrip

Chronic Disease Prevention Alliance of Canada. (2003). *Investing in our future: Preventing chronic disease in Canada*. CDPAC submission to the Pre-Budget Consultations of the House of Commons Standing Committee on Finance. Ottawa: Author.

- Chronic Disease Prevention Alliance of Canada. (n.d.). *The case for change*. Retrieved from http://www.cdpac.ca/content/case_for_change/case_for_change.asp
- Health Canada. (2002). *The economic burden of illness in Canada, 1998*. Ottawa: Author.
- Health Canada. (2003). *An integrated pan-Canadian healthy living strategy: A discussion document for the Healthy Living Symposium*. Ottawa: Author.
- Statistics Canada. (1996). *Statistical report on the health of Canadians*. Ottawa: author.
- Tataryn, D.J. & Verhoef, M. J. (2002). *Combining conventional, complementary, and alternative health care: A vision of integration*. Ottawa: Health Canada.
- World Health Organization. (2005). *Integrated chronic disease prevention and control*. Retrieved from www.who.int/chp/about/integrated_cd/en

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