Social Determinants of Health: A Quick Guide for Health Professionals[1]

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Introduction

The primary factors that shape the health of Canadians are not medical treatments or lifestyle choices but rather the living conditions they experience. These conditions have come to be known as the social determinants of health (SDH).[1] The importance to health of living conditions was first established in the mid-1800s[2,3] and has been enshrined in Canadian government policy documents since the mid-1970s.[4] In fact, Canadian contributions to the SDH concept have been so extensive as to make Canada a "health promotion powerhouse" in the eyes of the international health community.[5] Recent reports from Canada's Chief Public Health Officer,[6] the Canadian Senate[7], and the Public Health Agency of Canada[8] continue to document the importance of the SDH. But this information – based on decades of research and hundreds of studies in Canada and elsewhere – tells a story that is still unfamiliar to most Canadians. Canadians are largely unaware that our health is shaped by how income and wealth are distributed, whether or not we are employed, and if so, the working conditions we experience. Furthermore, our well-being is determined by the health and social services we receive, along with our access to quality education, food and housing, and other factors.[9]

Contrary to the assumption that Canadians have personal control over these factors, in most cases these living conditions are – for better or worse – imposed upon us by the quality of the communities, housing situations, work settings, health and social service agencies, and educational institutions we have access to .[10] There is much evidence that the quality of the SDH Canadians experience helps explain the wide health inequalities that exist. How long Canadians can expect to live and whether they experience cardiovascular disease or adult-onset diabetes is very much determined by their living conditions.[11,12] The same goes for the health of their children: differences among Canadian children in surviving beyond their first year of life, in experiencing afflictions such as asthma and injuries, and whether they fall behind in school, are strongly related to the SDH they are exposed to.[13]

Research is also finding that the quality of these health-shaping living conditions is strongly determined by decisions that governments make in a range of different public policy domains.[14] Governments at the municipal, provincial/territorial, and federal levels create policies, laws and regulations that influence how much income Canadians receive through employment, family benefits or social assistance, along with the quality and availability of affordable housing, the kinds of health and social services and recreational opportunities we can access, and even what happens when Canadians lose their jobs during economic downturns.

These experiences also provide the best explanations for how Canada compares to other nations in overall health. Canadians generally enjoy better health than Americans, but do not do

[1] The material presented in this article is adapted from J. Mikkonen and D. Raphael's *Social Determinants of Health: The Canadian Facts*. Toronto: School of Health Policy and Management, 2010. It was prepared for Caring for Kids New to Canada (www.kidsnewtocanada.ca) and posted in April 2013.

as well as when compared with other nations that have fully developed public policies that strengthen the SDH.[15] The World Health Organization sees health-damaging experiences as resulting from "a toxic combination of poor social policies and programmes, unfair economic arrangements, and bad politics".[1]

Despite this evidence, there has been little effort by Canadian governments and policy-makers to improve the SDH through public policy action.[16] Canada compares unfavourably to other wealthy developed nations in its support of citizens as they navigate the life span.[17] Our income inequality and poverty rates are not only growing but are among the highest for wealthy developed nations.[18] Canadian spending in support of families, persons with disabilities, older Canadians and employment training is also among the lowest for these same wealthy developed nations.[17]

The roles of insecurity and stress

Canadians who suffer from adverse social and material living conditions also experience high levels of physiological and psychological stress.[19] Stressful experiences arise from coping with conditions of low income, poor quality housing, food insecurity, inadequate working conditions and insecure employment, as well as various forms of discrimination based on Aboriginal status, disability, gender or ethnicity. The lack of supportive relationships, social isolation, and mistrust of others further increases stress.

At the physiological level, chronic stress can lead to prolonged biological reactions that strain the body physically.[19] Stressful situations and ongoing threats provoke "fight-or-flight" reactions. These reactions impose chronic stress upon the body if a person does not have enough opportunities for recovery in non-stressful environments. Research evidence is convincing that continuous stress weakens resistance to diseases hormonal and metabolic systems function. Physiological tensions provoked by stress make people more vulnerable to many serious illnesses, notably cardiovascular and immune system diseases, and adult-onset diabetes.

At the psychological level, stressful and poor living conditions can cause continuing feelings of shame, insecurity and worthlessness.[20] In adverse living conditions, everyday life often appears to be unpredictable, uncontrollable and meaningless. Uncertainty about the future raises anxiety, reinforces a sense of hopelessness or exhaustion that makes everyday coping even more difficult. People who experience high levels of stress often attempt to relieve these pressures by adopting unhealthy coping behaviours, such as the excessive use of alcohol, smoking, and overeating carbohydrates.[21]

These behaviours are generally known to be unhealthy but they are effective in bringing momentary relief. Damaging behaviours can be seen as responses to adverse life circumstances even though they make the situation worse in the long run. Stressful living conditions make it extremely hard to take up physical leisure activities or to practice healthy eating habits: most of a person's energy is directed toward coping with day-to-day life.

Key social determinant I: Income and its distribution

Income is perhaps the most important social determinant of health. Level of income shapes overall living conditions, affects psychological functioning and influences health-related behaviours such as quality of diet, extent of physical activity, smoking and excessive alcohol use. In Canada, income determines the quality of other SDH, such as food security, housing and other basic prerequisites of health. More equal income distribution has proven to be one of the best predictors of a society's overall health.

Income is especially important in societies which provide fewer important services and benefits as a matter of right. In Canada, public education until grade 12, necessary medical procedures and public libraries are funded by general revenues, while child care, housing, post-secondary education, recreational opportunities and resources for retirement must be bought and paid for by individuals. By contrast, many wealthy developed nations provide these services as citizen rights.[22]

Low income predisposes people to material and social deprivation.[23] The greater the deprivation, the less likely individuals and families are to be able to afford the basic prerequisites of health, such as food, clothing and housing. Deprivation also contributes to social exclusion by making it harder to participate in cultural, educational and recreational activities. In the long run, social exclusion affects health and limits a person's ability to live a fulfilling day-to-day life.

Researchers have also found that men in the wealthiest 20% of neighbourhoods in Canada live, on average, more than four years longer than men in the poorest 20% of neighbourhoods.[24] The comparative difference for women was found to be almost two years. This Canadian study also found out that people living in the most deprived neighbourhoods had death rates that were 28% higher than the least deprived neighbourhoods.

Suicide rates in the lowest income neighbourhoods were found to be almost twice those seen in the wealthiest neighbourhoods.[24] Additionally, a host of studies show that adult-onset diabetes and heart attacks are far more common among Canadians living on a low income.[11,12]

A recent report by the Organisation for Economic Co-operation and Development (OECD) identified Canada as being one of the two wealthy developed nations (among 30) showing the greatest increases both in income inequality and poverty from the 1990s to the mid-2000s.[18] Canada is now among those OECD nations with higher income inequality. As a result of these trends, from 1985 to 2005, 60% of Canadian families experienced an actual decline in their market income in constant dollars, while the top 20% of Canadian families did very well.[25]

Increasing income inequality has led to a 'hollowing out' of the middle class in Canada, with significant increases from 1980 to 2005 in the percentages of Canadian families who were either poor or very rich.[26] The percentage of Canadian families who earned middle-level incomes declined from 1980 to 2005. But the percentage of very wealthy Canadians increased, as did the percentage of people near the bottom of the income distribution range.

Increasing wealth inequality in Canada is even more troubling. Wealth is probably a better indicator of long-term health outcomes because it is a better measure of financial security than income. From 1984 to 2005, the bottom 30% of Canadian families had no net worth and moved into even greater debt over this period. By contrast, the net worth of the top 10% of Canadian families in 2005 was $1.2 million, an increase of $659,000 in constant dollars from 1984.[26]

Key social determinant II: Early child care and development

Early childhood experiences have strong immediate and long-lasting biological, psychological and social effects upon health.[27] "Latency effects" describe how early childhood experiences predispose children to either good or poor health regardless of later life circumstances. For example, low birthweight babies living in disadvantaged conditions are generally more susceptible to health problems than babies in advantaged populations. These latency effects result from biological processes during pregnancy associated with poor maternal

diet, parental risk behaviours and stress. On the other hand, positive health effects can result from early psychological experiences that create a sense of control or self-efficacy.

"Pathway effects" refer to children's exposures to risk factors that may not have immediate health effects but can lead to situations that do have later health consequences.[28] For instance, it is not an immediate health issue if young children lack readiness to learn when they first enter school. But limited learning abilities can lead to experiences that are harmful to health in later life, such as lower educational attainment. One way to weaken the relationship between parental socioeconomic status and their children's developmental outcomes is to provide high quality early child education regardless of a family's wealth level.

"Cumulative effects" suggest that the longer children live under conditions of material and social deprivation, the more likely they are to show adverse health and developmental outcomes. Accumulated disadvantage can lead to cognitive and emotional deficits such as incompetence and emotional immaturity. In addition, adverse childhood experiences can create a sense of inefficacy – or learned helplessness – which is a strong determinant of poor health.

The state of early child development in Canada is, however, a cause for concern. The most obvious indicator of the current situation is whether children are living in conditions of material and social deprivation. The best Canadian measure is the percentage of children living in "straitened living circumstances" or below Statistic Canada's low-income cut-offs (LICOs). LICOs identify Canadians who spend significantly more of their resources on necessities – housing, clothing and food – than the average.[29]

The child poverty figure of 15% provided by Statistics Canada's pre-tax LICO is identical to estimates provided by international organizations such as the OECD and the Innocenti Research Centre of the U.N.'s International Children Emergency Fund.[13] These organizations define child poverty as living in families which have access to less than 50% of the median family income for that nation.

In these comparisons, 15% of Canadian children are living in poverty, which puts Canada 20th out of 30 wealthy developed nations.[17] In terms of access to regulated child care – an important contributor to child well-being – only 17% of Canadian families have access to a regulated setting. Even in Quebec, where an extensive effort is underway to provide regulated, quality child care, only 25 % of families have access to it.[30]

The OECD published a report that rates Canada last among 25 wealthy developed nations in meeting various early childhood development objectives.[31] Canada is also one of the lowest spenders on early childhood education. A comprehensive OECD report ranked Canada 12th out of 21 nations on children's health and well-being using a wide range of health indicators.[32] The quality of early childhood development is shaped by the economic and social resources available to parents. Government can provide a range of supports and benefits to children through family-friendly public policies. Researchers have even stated that establishing a comprehensive early childhood education program would be the single best way to improve Canadian health outcomes.[33]

Key social determinant III: Health care services

High quality health care services are a social determinant of health as well as a basic human right. The main purpose of universal health care is to protect the health of citizens while spreading health costs across the whole of society. A universal health care system is especially effective in protecting citizens with lower incomes who cannot afford private health care insurance.

The Canada Health Act (1984) sets out requirements that provincial/territorial governments must meet through their public health care insurance plans. These are: public administration, comprehensiveness, universality, portability and accessibility. The "single payer" concept describes health care administration by public authority (a public administration). The Canada Health Act requires provinces/territories to provide all "medically necessary" services on a universal basis (comprehensiveness). All residents are provided access to public health insurance on equal terms and conditions (universality). However, individual governments have great discretionary power because the act does not list insured services in detail. Therefore, the range of insured services varies among jurisdictions. All provinces/territories provide health services to Canadian citizens when they are temporarily absent from their home province ,or out of country (portability). Canada's Health Act states that every Canadian must be afforded uniform access to health services in a manner free from financial barriers (accessibility).

No one should be discriminated against on the basis of income, age or health status. Nevertheless, there are continuing issues limiting access to care. The bottom 33% of Canadian income earners are – when compared with the top 33% of income earners – 50% less likely to see a specialist when needed, 50% more likely to find it difficult to get care on weekends or evenings, and 40% more likely to wait five days or more for an appointment with a physician.[34]

There are also issues related to medicare coverage. While Canada is in the mid-range of public spenders on health care (14th out of 30 OECD nations), it ranks among the lowest in its coverage of total health care costs.[15] Medicare covers only 70% of total health care costs – the rest is covered by private insurance plans and out-of-pocket spending – which gives Canada a rank of 22 (out of 30) OECD nations on public coverage of health care costs.

Medicare does not cover drug costs, and coverage of home care and nursing costs varies among the provinces/territories. In many other wealthy developed nations, these costs are covered by the public health care system.[22] As a result, Canadians with a below-average income are three times less likely to fill a prescription and 60% less able to get a needed test or treatment because of cost, than above-average income earners[34]. Even average-income Canadians are almost twice as likely to have problems getting prescriptions filled and paying medical bills than above-average earners.

While a pharmacare program has long been recommended by various royal commissions both to promote health equity and control costs, it has never been put into practice. This omission is of particular concern because the fastest-rising health expenditure in Canada is on pharmaceuticals. Drug costs accounted for 9 % of total health expenditures in 1975 and, by 2005, spending had doubled to 18%.[35] Drug costs are now the second-largest health expenditure, surpassing payments to physicians. Hospital costs remain first. Home care will also become increasingly important as Canada's population ages. There is also little evidence of reform in this area.

Key social determinant IV: Especially relevant to New Canadians - Social Exclusion

Social exclusion is one expression of unequal power relations among groups within society, which then determine unequal access to economic, social, political and cultural resources.[37] Social exclusion refers to specific groups being denied the opportunity to participate in Canadian life. Aboriginal Canadians, Canadians of colour, recent immigrants, women and people with

disabilities are especially likely to experience social exclusion. Many aspects of Canadian society marginalize people and limit their access to social, cultural and economic resources.

Socially excluded Canadians are more likely to be unemployed or to earn lower wages. They have less access to health and social services, and to means of furthering their education.[37] These groups are increasingly being segregated into specific neighborhoods. Excluded groups have little influence upon decisions made by governments and other institutions. They lack power. There are three main aspects to social exclusion. Denial of participation in civil affairs as a result of legal sanction and other institutional mechanisms. Laws and regulations prevent non-status residents or immigrants from participation. Systemic forms of discrimination, based on race, gender, ethnicity or disability, exclude people.

New Canadians are frequently unable to practice their profession due to a myriad of regulations and credentialing procedures that bar the way to participation. Denial of social goods, such as health care, education, housing, income security and language services, is all too common. Socially excluded groups earn lower incomes than people born in Canada. They lack affordable housing and experience limited access to services. Exclusion from social production means not having the opportunity to participate and contribute to social and cultural activities. Much of this exclusion results from not having the financial resources that facilitate involvement. Economic exclusion happens when individuals cannot access economic resources and opportunities, starting with participation in paid work. All of these forms of exclusion are common to Aboriginal Canadians, Canadians of colour, recent immigrants, women and people with disabilities.

The social exclusion of recent immigrants to Canada is well documented.[37] Their unemployment rates are higher (6.7% for Canadian-born workers, 7.9% for all immigrants, and 12.1% for recent immigrants) and their labour force participation is lower (80.3% for Canadian-born workers, 75.6% for all immigrants, and 65.8% for recent immigrants). Social exclusion creates the living conditions and generates personal experiences that endanger health. Social exclusion also causes a wide range of educational and social problems. Social exclusion feeds feelings of powerlessness, hopelessness and depression that further diminish the possibilities of full participation in society.

Studies find that the marginalization and exclusion of individuals and communities from mainstream society constitute a primary risk factor for adult-onset diabetes and a range of other chronic illnesses, such as respiratory and cardiovascular disease. Social exclusion is also associated with a range of social problems that include educational underachievement and crime.

Restructuring Canada's economy and labour markets along more 'flexible' models may help to accelerate the processes around social exclusion. The quality of jobs is becoming increasingly stratified along ethnic lines, with a disproportionate share of low-income sector employment being borne by Canadians of colour and recent immigrants. These same groups are also under-represented in high-income sectors and occupations. Social exclusion is increasing, therefore, both as a result of the increasing precariousness of employment and the fact that these precarious jobs are increasingly being filled by Canadians of colour and recent immigrants.

Public Policy Implications

Health professionals need to engage in public policy discussions about how to strengthen the SDH.[36] They can do this through their professional associations or as citizens. Below are some key issues where their involvement can make a real difference.

New Canadians

- Governments at all levels must revise laws and regulations and develop programs that allow new Canadians to practice their professions in Canada.
- They must enforce laws protecting the rights of minority groups, particularly around employment rights and antidiscrimination.
- They must direct attention to the health needs of immigrants and to the unfavourable socio-economic position of many groups, including the particular difficulties many new Canadians face in accessing health and other care services.

Income and its distribution

- There is an emerging consensus that income inequality is a key health policy issue that needs to be addressed by governments and policy-makers.
- Increasing the minimum wage and boosting assistance levels for people unable to work would provide immediate health benefits for the most disadvantaged Canadians.
- Reducing inequalities in income and wealth through progressive taxation is a highly recommended policy option shown to improve health.
- A greater degree of unionization in workplaces would help reduce income and wealth inequalities in Canada. Unionization helps to set limits to profit-making that comes at the expense of employees' health and well-being.

Early child development

- Governments must guarantee available, affordable, quality child care for all families, regardless of wealth or income level.
- Providing support and benefits to families through public policy forms a base for healthy childhood development. Providing higher wages and social assistance benefits would reduce child poverty and help to improve early childhood development.
- All Canadians benefit from improving early childhood development, in terms of the quality of community life, reduced social problems, and better Canadian economic performance.

Health care services

- District health authorities and health policy-makers must direct attention to inequities in access to health care, and identify and remove barriers to services.
- Governments must implement a pharmacare program and increase public coverage for home care and nursing home costs.
- The medicare system needs strengthening, and governments should resist the increasing involvement of for-profit companies in the organization and delivery of health care.
- Health authorities must control the use of costly but ineffective or unproven new treatments (e.g., pharmaceuticals and screening technologies) that are being marketed aggressively by private corporations.
- As the Commission on the Future of Health Care in Canada concluded, Canadians need to accept the notion that the medicare system is only "as sustainable as we want it to be".
- Consideration should be given to providing more dental care to families living on low incomes.

Health professionals are ideally positioned to see the effects of adverse SDH upon Canadians. There is increasing evidence they are willing to join in public policy debate around how to strengthen the SDH. Public dialogue and advocacy activities need to be maintained and even increased. Without such efforts, there will be a continuing decline in the SDH, along with the unnecessary suffering that results from preventable illnesses and disease.

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