Socioeconomic determinants of health and access to health care in rural Canada

Sophiya Garasia[1]; Graham Dobbs[1]

[1]McMaster University

Abstract

Determinants of health are a complex set of interactions among a range of socioeconomic, environmental, behavioral, and biological factors. They are recognized globally as predictors of both individual and population health. Factors associated with poor health in rural Canada include, but are not limited to: poverty, low level of education, unsafe housing, poor quality of water, food insecurity, and isolation. The most thorough investigation on rural health status and health determinants was conducted in 2006 by the initiative, "Canada's Rural Communities: Understanding Rural Health and Its Determinants."[4] In this commentary, we discuss the hypothesized relationships between various determinants of health and the health status of rural populations, and present a framework that highlights these relationships.

Introduction

Canada, similar to many high-income countries, has a relatively healthy population and high standard of living. In Canada, life expectancy at birth is estimated to be 81.7 years and infant mortality is less than 5 deaths per 1000 live births.[1] High health status is not shared equitably around the country. Rural Canadians, defined as populations residing in regions with less than 400 residents per square kilometre have poorer health status than their urban and non-metropolitan counterparts.[2] National differences in life expectancy between urban and rural populations is close to one year. Life expectancy among rural populations varies by approximately nine years.[3]

Rural Health Policy Reforms

To address the rural-urban gradient in Canadian health, many primary care and public health reforms in the last decade have made conscious efforts to consider rural health issues. For instance, medical schools have increased enrolment for students from rural regions and physicians are provided financial incentives to practice in rural areas. More recently, in 2017, the Canadian Collaborative Taskforce launched 20 actions, published in "Rural Road Map for Action (RRM): Directions." These actions aimed to reinforce the social accountability mandate of medical schools, implement policy interventions aligning medical education and rural health care, establish rural specific practice models and networks, and launch a pan-Canadian rural research agenda.[5] That being said, much has yet to be done as people who live in rural, remote, and isolated regions in this country still encounter numerous challenges. To address these, a determinant of health approach, which is often a missing piece in the policy dialogue, is warranted.

Rural Health Services

Low access to healthcare in rural areas can be attributed to a lack of services and limited ability to travel to services. Rural residents are approximately four times farther from physician services as compared to urban residents.[6] In Arctic regions, people travel up to six hours by plane for hospital-based services, and more than two-thirds of residents in northern and remote regions live over 100 km away from a physician, resulting in jarring travel distances for primary care services. Travelling long distances for health care substantiates the already high transportation costs. This is not to mention patients being separated from families and community supports, delays in accessing care, and lack of procedural continuity of specialized care in rural and remote regions. These conditions are only a few of the barriers faced by rural Canadians. This explains why rural areas are associated with higher emergency department visits and lower physician visits compared to urban areas.[7] The delivery and distribution of health services in large catchment regions like that of rural areas have always proven difficult to equitably and efficiently distribute healthcare resources to Canadians. The entanglement of deteriorating or nonexistent public infrastructure as well as distant primary and secondary health care centres proves a significant and longstanding barrier to accessing healthcare for rural Canadians. These findings suggest that the coupling of physical constraints of rural living in conjunction with the limitations of the current physical infrastructure of the health care system in Canada may inhibit health care access for rural communities.

A shortage of rural physicians has been at the forefront of healthcare policy for several years.[8] Increasing retention of rural doctors remains an issue as shortages of professionals, increased stress and pressure, limited opportunities for training, and lack of employment opportunities for partners and education opportunities for children continue to be major barriers to rural practice long-term.[9] Prioritization of best practice in supporting health practitioners in rural and remote areas ought to be a cornerstone discussion in health policy decision-making. Similarly, matching health care needs of people living in rural Canada with the availability of health care practitioners and health services

will demand a larger portion of discussion in the coming years. Traditional health planning and programs have been found to be less effective in rural regions where residents and services are few and far between. There is a lack of diagnostic services, poor access to emergency care, and a lack of medical specialists (i.e. mental health providers, physical and occupational therapists, etc.). Moreover, special needs of vulnerable populations such as persons living with disabilities, immigrants, women, children and youth and elderly are not being met,[3] while it is known that they exhibit higher risk of preventable disease and illness.

Mental Health and Rural Canada

Perhaps the most alarming and least documented phenomenon is the incidence of mental health issues in rural Canada. Government reporting and surveys indicate that rural Canadians exhibit a higher propensity to abusing substances, living in isolation, facing poverty and experiencing domestic abuse compared to those living in more urbanized regions.[10] The direct and indirect effects of the physical environment rural residents endure as well as the cultural influence may explain some of these disparities in mental health. The isolated nature of rural living may diminish an individual's ability to socialize as well as seek emotional support or professional health services. Physicians need to learn and consider predictors of poor mental health such as isolation, poverty, substance use and domestic abuse when interacting with rural patients.

Indigenous Populations in Rural and Remote Canada

A determinant of health approach is needed to improve the health of rural Indigenous communities who make up a large proportion of rural residents. Approximately 39% of the Indigenous population in Canada lived in rural areas in 2016.[11] A systematic review assessed Indigenous mortality rates across urban, rural and very remote areas and concluded that mortality is higher in rural areas for both First Nations and non-First Nations populations.[12] Life expectancy in youth populations and infant mortality among Indigenous rural communities are estimated to be double that of non-rural non-Indigenous populations. The prevalence of substance abuse, motorized vehicle injuries, and mental health disorders is also high among Indigenous populations.

Health care service, access, and distribution issues for Indigenous populations manifest in similar pathways as non-Indigenous rural populations. While the determinants of health may emanate from similar processes, the increased food insecurity, income, housing, water, and unemployment perpetuates the gradient of Indigenous rural health. Outcomes such as infant mortality, life expectancy, mental health and substance abuse are substantially greater but inversely related to the socioeconomic outcomes of rural Indigenous populations.[13] Among Indigenous communities, there are a number of unique determinants of health that have shaped their health status and wellbeing.[14] These include exposure to environmental contaminants, connection to nature and land, impacts of colonialism and cultural continuity. In addition, a coordinated health services system is required to meet the needs of Indigenous populations that includes cultural safety and competencies.

In terms of what is currently being done in Indigenous health policy, the newly defined Sustainable Development Goals (SDG's), supported by the current Liberal government and United Nations Declaration on Rights of Indigenous Peoples (UNDRIP) has set to improve four key social determinants in improving the health and quality of life of Indigenous peoples in Canada:

1. Reduce socioeconomic marginalization of Indigenous communities.
2. Promote healthy behaviours and wellbeing of Indigenous populations.
3. Improve equality and social inclusiveness among Indigenous communities and regions.

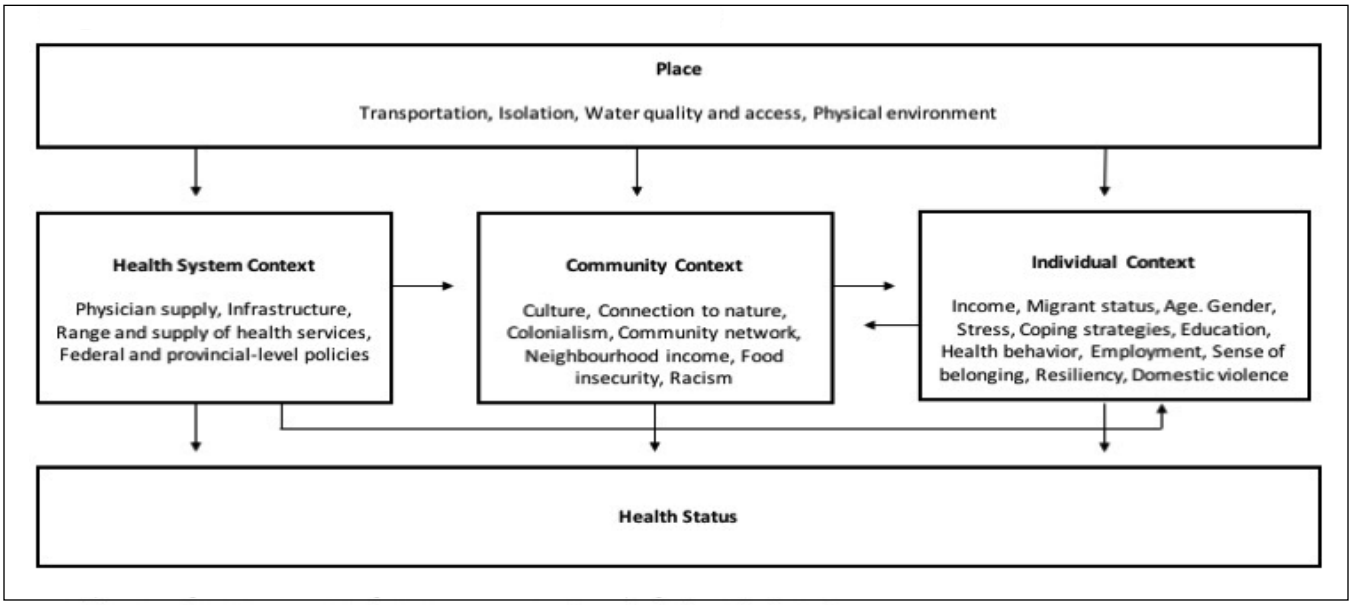

Figure 1. Rural determinants of health framework. *This figure is an adaptation of the framework presented in Rural Health Summary Report, 2006 (CIHI, 2006)

4. Improve environmental and physical barriers to healthcare access in areas with Indigenous populations.

The inception of the SDGs and public support lends to a political environment that could substantially improve health and socioeconomic outcomes of Indigenous peoples living in rural Canada.[15]

Policy Recommendations

A resurgence in research on socioeconomic determinants of Indigenous and rural health has provided many avenues for policy makers and evaluators to produce novel policy recommendations. The Canadian Council on Social Determinants of Health works to influence the factors that shape health and wellbeing in Canada. The council produced a report in 2014 entitled "Roots of Resilience" that highlights several initiatives on reducing health inequities among Indigenous populations. An example is the inception of the Community Holistic Circle Healing, a domestic abuse and violence centre for residential school victims, which was constructed in the community of Hollow Water, Manitoba. Another example is The Tripartite Framework Agreement, as agreed upon by the British Columbia First Nations and federal government, which increases sovereignty over the governance and delivery of health care services of the 203 First Nations groups in the province.

In consideration of the gradient in socioeconomic outcomes rural populations face, a multitargeted approach may be necessary to improve the health and wellbeing of these regions that goes far beyond the health care system. Specifically, increased funding for youth seeking post-secondary attainment in primary and secondary industry innovation and design as well as reforms of community transportation provisions. These policy prescriptions have shown some impact in improving access and uptake to health care for vulnerable populations in rural and remote areas.

Public health and health-related behaviours continue to be a contentious issue in Canadian health policy. The increased prevalence of recreational drug use among rural regions is a contemporaneous issue that cannot be remedied in a political lifetime. International research finds that investments to extracurricular activities and health promotion in youth are the best policy levers in reducing overall illicit drug use and criminality from a socioeconomic determinant approach.[16] As suggested by the Lalonde report, the greatest investments to Canadian healthcare and wellbeing should look to social, physical, and behavioural policy approaches in reducing rural health inequalities.[17] The complex relationships between these determinants of health are highlighted in the framework presented in Figure 1.

Conclusion

Approximately one third of the Canadian population is rural.[10] Within the last decade, the rural population grew at a slower rate than that of rest of Canada but in absolute terms, the rural population is in fact growing. Canada's new immigration policies project an increase of migrants to rural areas.[10] The distribution of health services among provinces raises questions about the equity of access in rural Canada. Retrospective studies have found staunch differences in access to emergency departments, specialized surgery, and mental health services across provincial health jurisdictions.[18] Considering the Canadian healthcare system subsidizes hospital and physicians for all, one may ask if the pillar of universality truly bears weight for our rural and remote communities.

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