Perceptions of the Social Determinants of Health Across Canada

An Examination of the Literature

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Wellesley Institute works in research and policy to improve health equity in the GTA through action on the social determinants of health.

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Introduction

Most people, if you speak with them, get the basic concept of the social determinants of health (SDOH). However, it is unclear if people recognize the essential role they play in improving health. Health equity in Canada requires broad public support and therefore a better understanding of the social determinants of health among the public.

In our previous work Making the Connections (Wellesley Institute, 2015), we focused on seven social determinants of health that align with Wellesley Institute's strategic priorities: education, health care access, racism and racialization, housing, income and employment, food security, and social inclusion and community. We presented how each determinant affects our health and how these determinants relate to each other to impact our health outcomes. The aim of this scoping review of Canadian literature is to examine how the Canadian public understands these seven key social determinants of health that we identified in Making the Connections and to identify gaps in the public's understanding of the SODH and the research on this subject. Based on the findings, we discuss what we know about Canadian's perceptions of the causes of poor health, why public understanding of the social determinants of health is important for policy, and what needs to be done to improve broad public understanding of the social determinants of health to improve health and health equity.

Methods

We conducted a scoping review to examine the existing body of literature on health perceptions and the social determinants of health in Canada. Scoping reviews are a form of a literature review that seeks to identify and map out the existing body of work, the research gaps that exist, and the opportunities for knowledge mobilization and communication efforts. Using the methodological framework for scoping reviews outlined by Arksey and O'Malley (2005), the following steps were taken to conduct the work: identify a research question; determine search strategy and identify relevant studies; refine the selection of studies through the application of inclusion and exclusion criteria; extract and chart relevant data from the core studies; and collate, summarize and report the results.

Our guiding research question was: what is known from the existing academic and grey literature about the Canadian public's understanding of the SDOH? In seeking to explore existing Canadian work in this area, we took a broad approach to the literature. The SDOH are understood as the *causes of the causes* of poor health. They are "the specific mechanisms by which members of different socioeconomic groups come to experience varying degrees of health and illness" (Raphael, 2006, pg. 652).

Our review focused on Canadian studies that connected health and perceptions of health as they relate to the SDOH. To be included in the scoping review, studies must include an aspect of health (including physical or mental health, or more generally health and well-being) and one of the selected social determinants of health. There must be a measurement of public understanding of these two criteria. Our searches of the literature spanned both the peer-reviewed and grey literature, between the years 2005 and 2015, and included only those published in English.

For the peer-reviewed literature, we searched Scopus and PsycINFO databases for the Canadian literature on health, health perceptions and the SDOH. For the grey literature, we used Google as a search tool. This

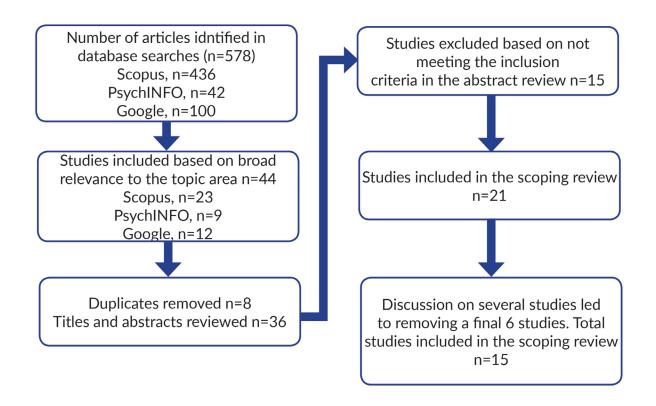
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strategy allowed us to examine research study materials produced and promoted more popularly through regional health authorities, public health units, municipalities, and research institutes.

Our initial search yielded 578 articles and reports. After duplicates were removed, and inclusion/exclusion criteria applied, 36 articles underwent abstract screening. This resulted in 21 articles that were initially identified for inclusion in the scoping review. All three authors reviewed and extracted data. Also, we compared data extraction by all team members on two articles (Krewski et al., 2008; McIntyre et al., 2013) to establish shared processes of extraction, and to ensure consistent patterns of charting information. In the process of extracting data, a further six articles were identified and excluded as not having met the inclusion criteria. This resulted in a final count of 15 articles for inclusion in the review.

Our process of data extraction was informed by Ritchie and Spencer (1994). We extracted and charted the following details: Author(s); SDOH identified; Study population; Sample size; Aims of study; Methodology; Findings/Results; and the Measurement/Definition of Health Perception. Findings were further broken down according to specific SDOH and what factors influence health perceptions, as well as any reference or discussion regarding individual behaviours and health.

Figure 1 Methodology used to conduct scoping review



Findings

This review found 15 studies that looked at Canadian's perceptions and understandings of what contributes to good health. Six studies were conducted solely in Ontario. Three studies were national. Four studies were conducted solely in Western Canada, including two studies in Saskatoon. Two of the studies looked at comparator cities in Southern Ontario and Western Canada (Hamilton, ON & Vancouver, BC; Edmonton, AB & Toronto, ON).

In terms of populations, seven studies were based on a random sample of adults over 18 years old (Aubin, 2014; Etchegary et al., 2009; Krewski et al., 2008; Lemstra et al., 2007; Lofters et al., 2014; Reutter et al., 2005; Shankardass et al., 2012). Eight studies had non-random samples of homogeneous groups, for example, the Saskatoon Health Region public opinions study, the sample was comprised of 65% females, close to 60% were over the age of 55, 89% were Caucasian, 89% were born in Canada, 35% had an income over \$75,000, 40% retired, and 73% have higher levels of education (Canadian Institute for Health Information [CIHI], 2005; Collins, 2012; Collins et al., 2007; Eyles et al., 2009; Kenney & Moore, 2013; Mcintyre et al., 2013; PHO/Saskatoon, 2014; Shyleyko & Godley, 2013).

All studies used a cross-sectional design. The majority of studies (n=11) used survey data collection methods (Aubin, 2014; CIHI, 2005; Collins, 2012; Collins, et al., 2007; Etchegary et al., 2009; Krewski et al., 2008; Lemstra et al., 2007; Lofters et al., 2014; Shankardass et al., 2012; PHO/Saskatoon, 2014; Shyleyko & Godley, 2013). Two studies used qualitative interviews or focus groups (Eyles et al., 2009; Mcintyre et al., 2013), one study used concept mapping methods (Kenney & Moore, 2013), and one study used a mixed method design with a survey and focus groups (Reutter et al., 2005).

Limitations

Scoping reviews are broad, and while extensive they may also miss some things based on search terms, namely time frames or databases.

By focusing on the determinants included in Wellesley Institute's Making the Connections exhibit our review may have missed some discussions for understanding how the general public understands health in a wider range of determinants not included here.

The time frame (2005-2015) is worth highlighting. We chose it thinking that this would move us past discussions on what the SDOH ideas are to whether they have been accepted as valid and legitimate in shaping people's everyday notions of health. However, the shifting discourse in Canada from health promotion to population health may have signalled an unintentional return to a more biomedical conceptualization of health—one that is only now being addressed through a shift in discourse towards health equity.

Findings Table

Author(s)	Title	How Perception Was Defined & Measured	Social Determinants of Health Included in our Review & Mentioned In Study	Key Findings In Relation To The Present Review
Aubin, C. (Halton Region Health Department) (2014)	Attitudes and Beliefs about the Social Determinants of Health	Survey respondents were asked to rate how important they felt 10 factors related to the SDOH were in helping make a person healthy, which was defined as physical and mental health, being free from disease and pain, and being satisfied with life.	Education Health-care access Housing Income & Employment Social Inclusion & Community	-Lifestyle choices was ranked second highest of the 10 factors rated as a very or extremely important factor in helping attain health -People with higher income were more likely to rate lifestyle choices as a very or extremely important factor in attaining healthLifestyle choices and access to quality care ranked as the two highest factors impacting people`s health. Whereas income was the lowest.
Canadian Institute for Health Information (2005)	Select Highlights on Public Views of the Determinants of Health	Participants were presented with a list of factors that might have an impact on health through closed-ended questions. The environment and social behaviours were rated relatively higher than social and economic factors.	Education Health-care Access Housing Income & Employment	-Lifestyle issues such as lack of exercise, smoking, poor nutrition and stress were considered to be important factors determining health, -The top four factors were diet & nutrition (82%), physical activity (70%), proper rest (13%) and not smoking (12%)Between 65% and 80% reported that smoking, eating, exercising and being overweight or obese influence the health of people. -70% of Canadians believed they had excellent/good knowledge of health issues, when prompted; only one in three reported that social and economic conditions (like income and housing) and community characteristics (like supportive community) had an impact on the health of Canadians.

Collin, P.A. (2012)	Do great local minds think alike? Comparing perceptions of the social determinants of health between non-profit and governmental actors in two Canadian cities	-This paper examines th perceptions held by individuals working in either Community Based Organizations or Government and their understanding of the SDOH and the impacts on health by connecting SDOH-related Perceptions with values and political orientation. -Also examined is the perception of the role of the municipality in and other sectors to address the SDOH through policy levers.	Education Health Care Access Income & Employment Social Inclusion & Community	- "The relatively high ratings assigned to healthy lifestyles in this study have been observed elsewhere in Canada, suggesting that individualistic views about responsibility for health are deeply engrained in the psyches of Canadians." - "The unwillingness among Canadians to shift health spending in a way that would favour health promotion and disease prevention, rather than the provision of 'sick care' services, is a major barrier to advancing a determinants of health agenda in Canada." - "Power and capacity to change at the policy level are limited for structural determinants like income, education, and employment." - Strong community was perceived as one of the lowest priorities and influences for health - Both groups assigned high levels of influence and priority to healthy lifestyles and clean air and water, and low levels to gender and culture and tradition.
Collins P.A. et al., (2007)	Knowledge into action? Understanding ideological barriers to addressing health inequalities at the local level	Collins et al. explore the awareness, understanding and attitudes towards the SDOH framework, SDOH-related political values, political characteristics, similarly, and the nature of involvement with Community Based Organizations.	Education Health Care Access Income & Employment Social Inclusion & Community	- Maintaining a healthy lifestyle was considered one of most influential determinants on health, and was given the highest priority for addressing health -Hospitals and health care professionals were one of highest priorities for addressing health (although it was not seen as the most influential DOHs) - Income was given lowest priority for addressing SDOH - Understanding (perception of level of influence on health): clean air and water was considered one of most influential DOHs, and was one of highest priority for addressing - Gender and culture were considered least influential DOHs
Etchegary, H. et al., (2009)	Is genetic makeup a perceived health risk: Analysis of a national survey of Canadians	Concerned with genetic risk, rather than social determinants, this paper nonetheless includes questions on disease causation,"Four opinion statements measured beliefs about disease causation"	None	- "More respondents strongly agreed that cancer depends on lifestyle (16%) than genetic makeup (10.2%) or the environment (10.1%)" - Demographic and regional variation in health-outcome risk perceptions. Significant gender differences were only found for cancer and depression "Risk-perception differences between lower and higher education respondents lend some support to the unequal distribution of power and perhaps vulnerability as possible explanations for gender differences in risk perception." - Almost 1/5 thought genetic makeup posed high health risk. However, genetic background was not considered a high health risk when compared to other hazards (e.g. SDoH). It was however considered for every health outcome considered.

Eyles J, et al., (2009)	What people think about the environment and its relationship to their health: Perceptions of health at different scales of the environment in Hamilton, Ontario	Perceptions of the environment and its perceived relation to health at three scales: the environment at large, the neighbourhood, and the home.	Housing Social Inclusion & Community	- Personal control mechanisms (like cleanliness) were believed to mitigate adverse health impacts in the home and yard, while the general environment was seen to be out of people's control - Cleanliness was associated with health inside the home Positive social aspects were linked to good neighbours -Both neighbourhoods mentioned that green spaces, trees and plants improved health through enhancing mental health and emotional wellbeing.
Kenney, K.E. & Moore, S. (2013)	Canadian adolescent perceptions and knowledge about the social determinants of health: an observational study of Kingston, Ontario youth	Number of SDOH concepts present in concept maps (income, education, unemployment, job security, food environment, Aboriginal status, housing, gender, race)	Education Racism & Racialization Housing Income & Employment Food Security	-Students were most likely to attribute health to physical activity, diet/ nutrition, and mental health in their maps -43% of maps contained no SDOH content -Students were most likely to attribute health to physical activity, diet/ nutrition, and mental health in their maps -Students in higher grades, in the vocational school, and of relatively higher socioeconomic status based on maternal education, were more likely to have SDOH concepts in their maps
Krewski, D et al. (2008)	Public perception of population health risks in Canada: Risk perception beliefs	Respondents were asked to indicate their personal opinion regarding a range of risk perception belief statements reflecting environmental concern, social concern, genetic concern, dependence on regulators, locus of health risk control, risk acceptability and technological enthusiasm that relate to SDOH.	Income & Employment	- 58.8% of people agreed to some level that "Poverty is the single most important determinant of health"; 92.1% agreed to some level that "Workrelated stress is a more serious problem than ever before"; 98.3% agreed to some level that "People can offset health risk by improving their individual lifestyle, such as exercising and eating properly." - A majority of participants strongly agreed with the statement: "workrelated stress is a more serious problem than ever before" (92.1%) and that "poverty is the single most important determinant of health" (58.8%). - A more detailed assessment of beliefs reflecting control over health risks and public trust was included in the present survey. 98.3% agreed to some level that "People can offset health risk by improving their individual lifestyle, such as exercising and eating properly"; over 50% agreed with the statement "getting cancer mostly depends on lifestyle"
Lemstra, M., Neudorf, C., & Beaudin, G. (2007)	Health disparity knowledge and support for intervention in Saskatoon	In this study health knowledge was measured by the link between the SDOH and the person's health, with income being more likely to be understood as contributing to poor health.	Education Income & Employment	-"Saskatoon residents do not have a good understanding of the magnitude of health disparity between income groups. A majority believe risk behaviours are mostly individual choices and are not associated with income status." -The interventions with the least support were increasing union membership for workers and more control for Aboriginal groups over their own land base. -People surveyed believed, however, that even a small difference in health status between income groups is unacceptable.

Lofters, A., Slater, M., Kirst, M., Shankardass, K., & Quiñonez, C. (2014)	How do people attribute income-related inequalities in health? A cross-sectional study in Ontario, Canada.	Perception was measured by whether or not the respondent was willing to attribute inequalities to the SODH.	Education Housing Income and Employment Food Security Social Inclusion & Community	-Uses Attribution Theory (certain SDOH resonate more due to the role of lived-experience): The study says that the distinctions between the willingness to attribute poor health to income-related differences (which impacted food, employment, and social status) and were less willing to attribute it to childhood development, personal health practices and coping skills) shows a better understanding of some determinants and not others that are important for health equity especially for advocates to consider when working to create wide-spread support for health-equity-focused public policy in Ontario.
Mcintyre, L., Shyleyko, R., Nicholson, C., Beanlands, H., & McLaren, L. (2013)	Perceptions of the social determinants of health by two groups more and less affiliated with public health in Canada	The purpose of this study was "To understand how each group recognizes and reacts to the SDOH and to identify how each group interprets the barriers realized in communicating and taking action to address the SDOH"	None	-Both groups could discuss the SDOH but did not acknowledge structural inequities in power/resources -Community health workers, who tended to discuss the SDOH in terms of individual behaviours and lifestyle, were overwhelmed when discussing solutions and were most comfortable with mid-level community interventions -Groups were asked different questions.
Public Health Observatory, Saskatoon Health Region, (2014)	No title	No definition	Education Health-care Access Housing Income & Employment Food Security Social Inclusion & Community	-The majority of people understood the poverty-health link: 91% agreed poverty is linked to health; 68% agreed low income people are less likely to participate in community life; 96% indicated affordable housing was hard to find when poor; 75% indicated other resources (healthy food, early childhood, healthy behaviours) were challenging when poor. -When participants had structural and sociocultural (intergenerational) causal explanations of poverty, they were more likely to understand the effects of poverty. When participants had individualistic causal explanations, they were less likely to acknowledge the negative effects of poverty.
Reutter L.I., Veenstra G., Stewart M.J., Raphael D., Love R., Makwarimba E., McMurray S. (2005)	Lay understandings of the effects of poverty: A Canadian perspective	Reutter et al. measured the attribution of poverty and understanding of the effects of poverty on participation in community life, health, and challenges experienced with low income people and exposure to poverty	Health-care Access Housing Income & Employment Food Security Social Inclusion & Community	-Majority understood poverty-health link: 91% agreed poverty is linked to health, 68% agreed low income people are less likely to participate in community life, 96% indicated affordable housing was hard to find when poor, 75% indicated other resources (healthy food, early childhood, healthy behaviours) were challenging when poor -When participants had structural and sociocultural (intergenerational) causal explanations of poverty, they were more likely to understand the effects of poverty, when participants had individualistic causal explanations, they were less likely to acknowledge the negative effects of poverty.

Shankardass, K., Lofters, A., Kirst, M., & Quiñonez, C. (2012)	Public awareness of income-related health inequalities in Ontario, Canada	This study is concerned with health inequalities (broadly) and income as a SDOH specifically; participants were asked to agree or disagree with statements regarding health inequalities, income and nine specific conditions in Ontario.	Education Income & Employment	-Almost 73% of the sample agreed with the statement that "not all people are equally healthy in Ontario." -Fewer were aware of the differences between richer and poorer in terms of health inequalities (53%-64%)Awareness of income related inequalities was considerably lower (18% for accidents; 35% for obesity).
Shyleyko R., Godley J. (2013	Post-secondary students' views on health: Support for individual and social health determinants	Participants were asked to rate the degree of influence 21 different health determinants (individual and social) had on health	Education Health-care Access Racism & racialization Housing Income & Employment Food Security Social inclusion & Community	-Participants were most likely to have individualistic understandings of health rather than the SDOH viewSex and political affiliation was associated with these views (Liberals and NDP scored Social Determinants significantly higher than Conservatives)Health Science students were significantly more likely to support SDOH understanding than students with other academic majors (independent of political affiliation) Smoking, diet/eating habits, exercise, food security and stress were rated as top most important factors believed to affect health outcomes (mostly individual DOH), race/ethnicity and sex were identified as least important DOHs.

Of the SDOH included in the reviewed papers reviewed, seven mentioned education, eight mentioned health-care access, 11 mentioned income and employment, seven mentioned housing, five mentioned food security, one mentioned racism and racialization, and seven mentioned social inclusion and community. Fourteen of the papers reviewed mentioned individual behaviour.

Overall, Canadians perceived personal behaviour as more important than the social determinants of health. In most studies included in this review, personal behaviour was perceived as the most important determinant of a person's health and the solution to the problem of poor health. For example, according to Canadian Institute for Health Information (2005), while the majority of respondents (between 65 and 80 percent) reported that smoking, eating, exercising, and being overweight or obese influence the health of people, only one in three reported that social and economic conditions (like income and housing) or community characteristics (such as a supportive community) had an impact on health. Many authors included in this scoping review have made a similar conclusion in their discussion sections. For example Collins observes that "[t]he relatively high ratings assigned to healthy lifestyles [...] have been observed elsewhere in Canada, as well as the UK, suggesting that individualistic views about responsibility for health are deeply ingrained in the psyches of Canadians" (2012, pg. 379).

Among the selected social determinants of health, people showed relatively better understanding of the impact of income inequality and poverty on health compared to other determinants. However, it was often not seen as influential as individual behaviour, and there seems to be a limited understanding of how income impacts health exactly (e.g. income based health disparities for specific health issues).

In relation to health-care access, some of the studies showed understanding of the connection between access to health care and income, including a perception that those with higher incomes have better health, in part due to access to medications and non-insured medical services like dental and vision care (Reutter et al., 2005).

In contrast, very few of the studies showed clear perceptions of the link between education and health. The findings varied, but the understanding seemed limited.

Just under half of the studies found that people perceived of housing and affordable housing as a potential determining factor in good health. Food security was considered a strong factor in determining health in five of the studies. Social Inclusion and Community were poorly understood in relation to health for most papers, with two studies showing understanding of it being very important (Aubin, 2014; Shyleyko & Godley, 2013). There was almost no mention of racism and racialization and its connection to health in the literature we found.

Discussion

How Canadians Perceive the SDOH

There remains a strong individualistic understanding of health rather than a social determinants view (Shyleyko, 2013). People seem to understand the relationship between health and the downstream factors (like lifestyle choices), better than upstream factors (such as housing and income). Canadian scholar Dennis Raphael asks why "the social determinants of health are not the primary understandings held by the public, health workers, and government policy makers when it has been pointed out that the 'holy

trinity of risk' of tobacco, diet, and physical activity receives the predominant share of attention by public health workers and government policy makers?" (2006, pg 663). Taking the findings of this scoping reveiw into consideration, it seems that in Canada our emphasis on health care and individual health choices is downstream thinking; it is where poor health is manifested.

Through this review, we found that much more research is being done on Canadian's perceptions of the income-health link than any other social determinant of health. Some studies focused exclusively on perceptions of income as a determinant of health; because of this, we have a deeper and more nuanced understanding of how people perceive the income-health link (e.g. there are findings of perception by health condition).

That said, we have a limited understanding of perceptions for other determinants of health. For example, only one out of 15 studies measured perceptions of racism as a determinant of health (Shyleyko R. & Godley J., 2013), which reveals a clear lack of understanding from researchers on this important and emerging determinant of which there is a clear need for increasing our understanding. Similarly, there are not a lot of studies looking at employment. However, because this study focused on employment as an SDOH rather than looking to understand the relationship between health and employment, it misses more nuanced discussions that may be underway in other bodies of literature. The questions are simply whether employment influences health, not including different trajectories of employment and unemployment that may lead to better or poorer health, such as unemployment, precarious work, workplace harassment, racism, and access to employment benefits. Further investigation would also shed light on to what extent researchers are looking at how people understand connections between the determinants (e.g. racism and employment and housing).

Public Policy and Public Opinion

What would it take to turn heads upstream? Upstream is where the social determinants of health, the *causes* of the causes, reside and with them many opportunities for health equity enhancing policy interventions. Effective policy interventions call for more than research evidence (Crammond and Carey, 2016). Public opinion matters, and it can be an "important driver of political will on health and social issues" (Shankardass et. al, 2012).

Effectively Communicating the SDOH

An understanding of how people understand health inequities can be used to inform framing messages "aimed at increasing public awareness of inequalities and support for policy change to promote health equity" (Lofters, et al., 2014).

There was not a lot of consistency in how the studies included in this review were conducted. A consideration of different methods, different (and limited) populations along with considerable variation in what was asked, and in what way, calls for the need for a comprehensive study to understand what the social determinants of health mean in everyday life, and what differences may exist across population groups and communities. Before we can garner broad public support and influence lasting policy change for action on the social determinants of health, for health-enhancing economic and social policy, we need to know more about how to effectively communicate the social determinants of health to different groups.

Some population groups did not appear anywhere in the literature. From a health equity perspective, it is crucial that we know how best to communicate to all populations, particularly when building language and communications around the SDOH.

In the United States, the Robert Wood Johnson Foundation (RWJF) has teamed up with National Public Radio and Harvard T. H. Chan School of Public Health to conduct a large national survey to understand what shapes health in America (2015). While the survey reveals that Americans recognize that improving health goes beyond medical care, the top five causes of poor health still fell outside of the social determinants to include lack of access to health care, personal behaviour, viruses, high stress, and pollution (2015).

Earlier efforts, in 2010, have been made by the RWJF to test the language around the SDOH, to determine what communication tactics would be more easily understood by an unspecialized audience. This work found that the concepts of the SDOH were able to gain traction, once better understood (RWJF, 2010). Here in Canada, the National Collaborating Centre for Determinants of Health (NCCDH), among other work, educates practitioner and organizations on how our terminology influences "how we frame problems and solutions, make decisions and implement activities that seek to reduce inequities between groups" (NCCDH, 2014). This is a good start.

Conclusion

Currently, work is happening across Ontario and the Greater Toronto Area to improve health equity through action on social determinants of health. However, to move the needle on this issue we need broader public support through enhanced public understanding of social determinants of health. Our review found that currently there is very limited understanding of the SDOH (and their connections) among Canadians. To increase our understanding, we need to think about the most effective ways to communicate to all Canadians.

Our health care system is an important symbol of Canadian identity (Broadbent Institute, 2013). But often we look at health care as the solution to sickness. Good health is about more than access to doctors, drugs and hospitals. Behaviour-change focused health promotion is often the best strategy to prevent the problem of sickness. Individual lifestyle changes to diet, exercise, alcohol and smoking are common focal points for decreasing our most pervasive diseases like heart disease, diabetes, and cancer. Still, these diseases flourish. For a country that spends half of its federal dollars on health care, solutions and ideas to reduce this annual expense should span treating sickness and health promotion to include a wider view of the system that contributes to our ills.

The social determinants of health are the conditions in which people are born, grow, work and age. They have clear links to our health (Raphael, 2006). The consensus is that political commitment and policy change is brought about when an issue has broad public support (and also that increasing understanding can bring about broad support). Further research is needed to improve understanding of the public's understanding of the SDOH, the causes of poor health, and how to communicate the SDOH and health equity to all.

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