

Epistemological barriers to addressing the social determinants of health among public health professionals in Ontario, Canada: a qualitative inquiry

Julia Brassolotto^{a*}, Dennis Raphael^b and Navindra Baldeo^c

^aGraduate Program in Health Policy and Equity, York University, Toronto, Canada; ^bSchool of Health Policy and Management, York University, Toronto, Canada; ^cInstitute of Health Policy, Management, and Evaluation, University of Toronto, Toronto, Canada

(Received 14 March 2013; final version received 22 June 2013)

To date, Ontario public health units (PHUs) have generally neglected the social determinants of health (SDH) concept in favor of risk aversion and behaviorally oriented health promotion approaches. Addressing SDH and responding to the presence of health inequities is required under the Ontario Public Health Standards and is a component of provincial public health documents and reports. Nevertheless, units vary in their understanding and application of the SDH concept in their activities. The authors conducted 18 interviews with Medical Officers of Health and lead staff persons from nine Ontario PHUs, in order to better understand how these differences in addressing the SDH among health units come about. The findings suggest that differences in practice largely result from epistemological variations: conceptions of the SDH; the perceived role of public health in addressing them; and understandings concerning the validity of differing forms of evidence and expected outcomes. Drawing from Bachelard's concept of *epistemological barriers* and Raphael's seven discourses on the SDH, we examine the ways in which the participating units discuss and apply the SDH concepts. We argue that a substantial barrier to further action on the SDH is the internalization of discourses and traditions that treat health as individualized and depoliticized.

Keywords: social determinants of health; public health; epistemological barriers; Canada

Introduction

Despite Canada's reputation for developing concepts related to the social determinants of health (SDH), government agencies, professional health organizations, and local public health units (PHUs) have struggled with how to apply the concept to improve the health of the Canadian public (Collins and Hayes 2007; Hancock 2011; Low and Theriault 2008). This is problematic, given that growing income inequality and deepening poverty in Canada are indicative of a deterioration of a wide range of SDH (CCPA 2013; OECD 2011).

The French philosopher and historian Gaston Bachelard introduced the concept of 'epistemological obstacles' or 'epistemological barriers' to explain the intellectual

*Corresponding author. Email: jbrass@yorku.ca

hurdles that scientists may face when they approach new scientific problems. He claimed that in order to develop new approaches to a problem, scientists must overcome the barriers posed by their prior views (Tiles 1984). In other words, past worldviews and thinking patterns can serve as obstacles to future progress and knowledge production. By this account, scientific progress is not linear; it develops via fractured points of departure, through epistemological breaks or ruptures. We argue that this concept can also be applied to research in health policy because progress in this area is similarly dependent upon critically evaluating or transcending previous ways of thinking in order to gain a greater understanding of the present-day world. For instance, differing conceptions of health and its determinants have resulted in diverse and divergent treatment and policy approaches over time and across disciplines.

Raphael (2009) claims that such variation is not simply an issue of Kuhnian *paradigms* (Kuhn 1962) that define intellectual worldviews about how such phenomena can be understood or investigated. Rather, he argues that the variation in approaches and understandings of SDH represents, ‘Foucaultian *discourses* which – since they involve issues of legitimating, power, and coercion – exert a much more powerful influence [than paradigms do] upon research and practice’ (Raphael 2011, 223). The dominant discourse in the health professions is usually biomedical, micro-level, individualized, and depoliticized (Germov and Hornosty 2012). This tradition treats health as the absence of illness or disease in individuals and seeks to improve measurable aspects of their lives through the reduction of risk factors using indicators of morbidity and mortality. Those who have internalized this worldview, ‘[o]ften (though not always) assume that work against disease is objectively desirable, and so requires no further justification: the epidemiology (the evidence) frequently thought to “speak for itself”’ (Seedhouse 2004, 85). The decontextualized and depoliticized view of health does not question social and political structures; it takes them as given and deals with issues within these preexisting structures. This approach ignores the presence and intersections of structural phenomena, such as racism, sexism, classism, homophobia, structural and systemic violence, and other forms of inequity – or treats them as irrelevant or marginal to health. Public health, however, is usually premised on the notion of community health and well-being (Baum 2008). Tensions can arise for public health professionals when they seek to address population health issues but work within a discourse or framework of individualism (Tesh 1988).

We apply the notion of epistemological barriers in our discussion of Ontario – Canada’s most populous province – PHUs and their efforts to address the SDH. In this case, the barriers may stem from particular discourses about health and society and the appropriate role for the public health community in addressing these issues. To date, Ontario PHUs have generally neglected the SDH in favor of risk aversion and behaviorally oriented health promotion approaches (NCCDH 2010). Addressing SDH and responding to the presence of health inequalities is required under the Ontario Public Health Standards (2008) and is a component of provincial public health documents (Ontario Public Health Association 2001) and reports (Ontario Public Health Association 2005). Nevertheless, units vary in their understanding and application of the SDH concept in their activities.

We carried out this study to examine our assumption that there might be epistemological challenges to PHUs applying these concepts. To explore this, we sought to understand the worldviews of public health officials concerning these issues. We therefore conducted 18 interviews with Medical Officers of Health (MOH) and lead staff persons from nine Ontario PHUs with variation in their practices to better understand

how these differences came about. Our findings suggest that these differences in practice result largely from varying conceptions of: the nature of SDH, the perceived role of public health in addressing them, and understandings concerning the validity of differing forms of evidence and expected outcomes. Based on Raphael's (2011) model of SDH discourses and the ways in which the participating units discussed the SDH, we categorized them into three clusters, those that take functional, analytical, and structural approaches. These approaches are defined in the results section.

Background and specific goals of this research

In addition to substantial academic scholarship regarding the SDH (e.g. Armstrong 2001; Bryant 2009; Coburn 2000; Marmot et al. 1991; Navarro 2009; Raphael 2009; Wilkinson and Pickett 2010), their importance is widely recognized in official documents and reports. For instance, the WHO (2008) final report from the Commission on SDH emphasized the need to refocus public health activities from 'lifestyle choices' to issues of living conditions and social justice. The Commission presented substantial evidence that health inequities result from social, economic, and political environments – and as a result, these inequities are amenable to political intervention (WHO 2008). Additionally, '[t]he report challenged health programmes and policies to tackle the leading causes of ill-health at their roots, even when these causes lie beyond the direct control of the health sector' (WHO 2010). In other words, it was globally publicized that those doing public health work have some degree of responsibility for identifying and addressing the structural causes of poor health.

In Canada, Dr Arlene King, in her 2009 Annual Report of the Chief Medical Officer of Health of Ontario to the Legislative Assembly, argued that public health is 'everyone's business' and that prevention is the 'next evolution of health care' (King 2009). She drew upon Canadian SDH-focused reports, such as the *Lalonde Report* (1974), the *Epp Report* (1986), and *Social Determinants of Health: The Canadian Facts* (2010) to argue that any successful public health strategy requires addressing health inequalities through a system-wide approach. Indeed, on the first page of the Ontario Public Health Standards – which dictates required activities of PHUs – it is stated, '[a]ddressing determinants of health and reducing health inequities are fundamental to the work of public health in Ontario. Effective public health programs and services consider the impact of the determinants of health on the achievement of intended health outcomes' (Government of Ontario, 2008, xx).

Regarding the PHUs and their professional association, the Ontario Public Health Association (OPHA) participates with the Association of Local Public Health Associations (alPHA) in the Joint Working Group on the SDH. Its purpose is to reduce social inequities using strategic approaches that promote the inclusion of activities to address the social and economic determinants of health within the mandate of local PHUs in Ontario, identify, recommend, and support the provincial advocacy efforts of alPHA and OPHA for improvements in health inequities, and monitor advocacy efforts and policy changes at the provincial and national levels that impact health inequities (OPHA 2011a). The group's listed activities and objectives also include monitoring and reporting on poverty reduction strategies and making related recommendations to government. This further reinforces public health's role in addressing health inequalities, but retains language that sees SDH efforts as targeting risk factors rather than as challenging structural inequalities. For instance, the OPHA's (2011b) response to Dr King's Chief MOH Annual Report on the SDH states,

It was encouraging to see our public health challenges framed broadly from a SDH perspective. In order to be comprehensive, a public health strategy must address all the **risk factors** [emphasis added] that impact population health, prioritize interventions based on the burden of illness and include cross-sectoral and cross-governmental contributors to public health.

The recommended targeted policies/advocacy efforts were focused on tobacco, food insecurity, early childhood development, alcohol, and violence prevention (OPHA 2011b). These efforts are certainly important and worthwhile, but they also reveal an understanding of the SDH that is not necessarily consistent with a broader SDH approach.

Despite – or perhaps because of – the requirements and tentative commitments noted above, there is an apparent gap between rhetoric and action in addressing the SDH (Raphael, Brassolotto, and Baldeo 2013). We see little evidence to date that PHUs have been successful in bridging this gap. This problem is not unique to Ontario, Canada. In the UK, Petticrew et al. (2004) explored how research evidence influences public health policy-making related to reducing health inequities and how it can be improved. They found in the UK and internationally, a lack of ‘an equity dimension’ in evaluative research and weak theoretical underpinnings for much public health research (ibid). Similarly, in the USA, White (2012) found that faculty engaged in public health education generally lacked a critical perspective and revealed a tension over public health’s role in politics and policy. Evidently, bridging the gap of SDH evidence to policy and practice has been a struggle for many.

Perhaps this should not be surprising. For decades, thinkers have commented on how key concepts of health and the nature of its determinants are contested (Aggleton 1990; Bamba, Fox, and Scott-Samuel 2005; Blaxter 2010; Raphael 2000; Seedhouse 2004; Tesh 1988). The problem is that these issues are rarely made explicit and the insights of these authors are rarely applied to understanding the gap between rhetoric and action on SDH issues. This study investigates this problem by examining how differing understandings of the SDH can serve as epistemological barriers to local PHU activity on the SDH.

Methods

We present data derived from a series of qualitative interviews with staff members from nine Ontario PHUs chosen to represent a wide variation in SDH-related activities. Based on a review of documented activities on their websites, consultation with key contacts in the public health community and the second author’s extensive involvement with the public health community, we used purposive sampling and approached 12 PHUs with varying engagement with the SDH in order to secure nine participating units. Our aim was to include three units that were publicly taking leadership action on the SDH, three that showed clear signs of SDH activity, and three where there was lesser action being taken. This was done to obtain maximum variation and illustrate the range of activities taking place. In the end, two publicly active units, four mid-range ones, and three seemingly less SDH-active units were included. These represent nine of 36 Ontario PHUs. There were no incentives offered for participation. Ethics approval was obtained from York University’s Ethics Board.

The authors developed the interview guide using sensitizing concepts based on our understanding of the related literature. Questions were designed to elicit the participants’ constructions of the SDH; their personal, professional, and community experiences/influences that inform these; and their training. We recognize that

individuals' understandings of the SDH will have implications for their actions, so we wanted to better understand these constructions and their origins (Raphael, Brassolotto, and Baldeo 2013).

Eighteen interviews were conducted in total, nine with the units' MOH – and in some cases, the associate MOH – and nine with lead staff members whose duties directly address the SDH. In some cases more than two staff members per unit were interviewed. The participants were both men ($n=5$) and women ($n=18$) and came from a mix of urban and rural areas. Their experience in public health ranged from one year to over 20 years. The participants were sent interview questions in advance.

The authors conducted and recorded open-ended, structured telephone interviews that were then transcribed. Interviews typically lasted between 60 and 90 minutes. The findings were coded and critically analyzed using the constant comparison method (Creswell 2009; Glaser 1965). We used coloured pens and highlighters to identify and associate repeated ideas. Each of the authors listened to and read over all 18 interviews. Each author was then responsible for a detailed thematic analysis of a particular cluster of units. Over several months, we had multiple meetings where we identified key concepts, and compared, discussed, synthesized, and reached consensus about these ideas. We then named the themes within which these ideas clustered. We identified the themes and activities in terms of the type of approach that the units took and the ways in which they discussed the SDH.

In addition to the interviews, the authors concurrently reviewed the units' websites, research reports, public education materials, internal committee documents, position statements, operational plans, information sheets, logic models, terms of reference, and other materials. The key concepts from these were analyzed alongside the themes identified in the interviews. The concepts and themes were consistent across the data sources.

Once this was complete, we performed member checking by sending all of the participating units a document that outlined our findings, key themes, and the typology we created to classify them. All units' responses indicated that they approved of our interpretations.

Results

All of the participants expressed an awareness of the SDH and identified the concept as having some importance. The degree of importance, however, reflected the ways in which the units engaged in advocacy, public education, and intersectoral coalitions. We identified three clusters of PHUs that we consider reflective of their approaches to the SDH at the time of study (Spring-Summer 2011). Of the nine units, three are classified as Functional, four as Analytical, and two as Structural. Interestingly, the unit clustering corresponded to the quantity of their SDH activity, but these labels reflect the *qualitative* ways in which they actually approach their SDH work.

The clusters are labeled based on the discourses they use to discuss the SDH. These are not rigid or fixed designations, but they do serve as useful tools in identifying the points of difference between the PHUs and their approaches. We recognize that unit activities may well have been modified since the time of this study.

These clusters map nicely onto Raphael's (2011) SDH typology. Raphael identifies seven different SDH discourses and provides key concepts for each: dominant research, practice paradigms, and practical implications (Table 1).

Table 1. Raphael's seven SDH discourses.

SDH discourse	Key concept	Dominant research and practice paradigms	Practical implications of the discourse	Approach in PHU activity
1. SDH as identifying those in need of health and social services.	Health and social services should be responsive to peoples' material living circumstances.	Develop and evaluate services for those experiencing adverse living conditions.	Focus limited to service provision with assumption that this will improve health.	Functional
2. SDH as identifying those with modifiable medical and behavioral risk factors.	Health behaviors (e.g. alcohol and tobacco use, physical activity, and diet) are shaped by living circumstances.	Develop and evaluate lifestyle programming that targets individuals experiencing adverse living conditions.	Focus limited to health behaviors with assumption that targeting for behavior change will improve health.	Functional
3. SDH as indicating the material living conditions that shape health.	Material living conditions operating through various pathways – including biological – shape health.	Identify the processes by which adverse living conditions come to determine health.	Identifying SDH pathways and processes reinforce concept and strengthen evidence base.	Analytical
4. SDH as indicating material living circumstances that differ as a function of group membership.	Material living conditions systematically differ among those in various social locations, such as class, disability status, gender, and race.	Carry out class-, race-, and gender-based analysis of differing living conditions and their health-related effects.	Providing evidence of systematic differences in life experiences among citizen groups form the basis for further antidiscrimination efforts.	Analytical
5. SDH and their distribution as results of public policy decisions made by governments and other societal institutions.	Public policy analysis and examination of the role of politics should form the basis of SDH analysis and advocacy efforts.	Carry out analyses of how public policy decisions are made and how these decisions impact health (i.e. health impact analysis).	Attention is directed towards governmental policy-making as the source of social and health inequalities and the role of politics.	Structural
6. SDH and their distribution result from economic and political structures and justifying ideologies.	Public policy that shapes the SDH reflects the operation of jurisdictional economic and political systems.	Identify how the political economy of a nation fosters particular approaches to addressing the SDH.	Political and economic structures that need to be modified in support of the SDH are identified.	Structural
7. SDH and their distribution result from the power and influence of those who create and benefit from health and social inequalities.	Specific classes and interests both create and benefit from the existence of social and health inequalities.	Research and advocacy efforts should identify how imbalances in power and influence can be confronted and defeated.	Identifying the classes and interests who benefit from social and health inequalities mobilizes efforts towards change.	Structural

Discourses 1–3 generally treat the SDH as identifiers of risk factors or undesirable living conditions. Discourses 4–5 build on these discussions and recognize the importance of group membership, social structures, and political environments. Discourses 6–7 incorporate discussions of the roles played by power and influence within a political economy framework. In this article, we apply the Functional, Analytical, and Structural approach framework to reflect how these discourses manifest in PHU activities.

Units using a Functional approach discussed the SDH using discourses 1 and 2 (Raphael 2011). That is, they speak about the SDH as identifying those in need of health and social services as well as those with modifiable medical and behavioral risk factors. As a result, their activities are service-delivery and healthy-lifestyle oriented in a limited behavioral fashion. These PHUs focus on developing and evaluating programs and services for marginalized or vulnerable populations and reducing barriers to accessing these resources.

The PHUs that have adopted an Analytical approach utilize SDH discourses 3 and 4. They acknowledge the multiple ways living conditions impact health and see addressing these issues as within their realm of action. As a result, these units partner with community organizations that address issues of poverty, food security, housing, early childhood development, and other SDH. Like the Functional units, these units also apply SDH thinking in the creation and evaluation of programming in addition to their strategic partnerships. The SDH serve as an important analytical framework for them.

Units that have adopted a Structural approach apply SDH discourses 4, 5, and 6. In addition to the activities of the Functional and Analytic PHUs, they also engage in public education about the SDH and direct public policy advocacy. These PHUs spoke about the impacts of race, class, and gender and were also considering using Health Impact Assessment (HIA) to investigate how policy decisions were affecting their clients' health. Discourse 7 includes the notion that, 'SDH and their distribution result from the power and influence of those who create and benefit from health and social inequalities' (Raphael 2011, 4). While we did not see this discourse explicitly used by our participants, some of the responses from the Structural units could be interpreted as implicitly addressing the implications of this perspective. Consistent with our thoughts about epistemological barriers and their role in varying approaches to addressing the SDH, we observed systematic variation in how relevant concepts were understood.

SDH as risk factors vs. indicators of structural inequality

The tension between individual risk factors and structural inequalities is prevalent in health equity scholarship. Others have revealed this by contrasting individualized approaches with structures associated with differing welfare states (Esping-Anderson 1990, 1999), by examining the role of neoliberal environments (Coburn 2000, 2004; Wilkinson 2010), and by investigating intersections of marginalization and oppression (Hankivsky and Christofferson 2008). In our case, tensions surfaced for public health professionals when they discussed the definition and application of the SDH.

All of the Functional units and some of the Analytical units described the SDH primarily as *risk factors*, more or less decontextualized from broader public policy approaches and structural inequalities. Several participants identified them as characteristics to be mindful of when providing or targeting services to specific groups experiencing specific SDH issues. Housing, income, employment, and social issues were most frequently cited. Those operating within this discourse spoke about health as

a predominantly medical matter, as the absence of disease or illness. Social structures, public policy, and classifications, such as gender, race, and class were sometimes recognized as influencing health, but measures taken to address them were seen as outside the scope of their work. For instance, one participant noted, ‘It all boils down to behaviours. And so, determinants of health, yes, are talked about in our standards, but you don’t see, I don’t see them having value in and of themselves except for how they relate to health behaviours... That’s how I see it framed.’

This view is consistent with the ways these units apply the SDH in their activities. SDH thinking is discussed by many of them as a ‘lens,’ ‘framework,’ or ‘tool’ to be used when going about their work. This is why we suggest that these units have adopted a *functional* view of SDH. In other words, the concept primarily serves a functional purpose in the PHU’s programming and activities. At the time of the interviews, the Functional units reported little systematic staff education or training about the SDH, had generally not considered taking action towards implementing HIA protocols or reports and reported minimal engagement in public education about SDH. One person noted, ‘The SDH is an underlying principle that underlines the standards and it is, if you will, a concept, a way of thinking about health that should be kept in mind as you’re implementing programs.’

The application of this thinking can be seen in the PHUs’ decisions on placement of new SDH nurses. In 2011, the Ontario provincial government allocated two permanent nursing positions to each public health unit with the understanding that these positions were to focus specifically on SDH and priority populations (Ontario Ministry of Health and Long-Term Care 2011). The Functional units and some of the Analytical units reported that they would use these new staff members to modify or extend existing programs. ‘So it’s not as though I’m going to say, “Your job is to do social determinants.” It’s everybody’s job, right? So it’s two more really to help out with the work that we’re already doing.’ Members of the Structural units and some Analytical units said that they would assign these nurses to more general SDH-focused roles that involve research, coordination, strategic planning, and outreach.

In the Structural units and a couple of Analytical units, SDH were described as *indicators of structural inequalities in society*. For instance:

I think about social determinants in terms of all of those factors beyond life style, genetics, physiology that we know influence health so those range from specific kind of material influences like access to food or housing, etc., beyond to community structures, to power differentials within communities, to issues of class, race, and then all of the policy pieces that govern each of those things.

From this perspective, the SDH extend beyond a person’s living conditions and include social categories and hierarchies, intersections of marginalization, and the past and present societal structures that create inequities. These units revealed a more contextualized and *structural* view of the SDH. From this perspective, the SDH go beyond serving an operational or analytical function and are seen as inequalities that result from societal structures, such as codified laws and policies; customs, practices, discourses, and traditions; and social locations, such as race, class, gender, disability, or sexual orientation. Under this worldview, SDH are about differences in well-being, security, equitable access, and freedom from oppression.

A participant from a Structural unit claimed that while all levels of government have a role to play, ‘[t]heir partner and their influencer is public health, because we can

work with all three levels of government... we also have the ability to identify which of the issues really belong in the federal ball court and we can challenge and advocate there.' Members of these units saw themselves as being in prime positions to witness and document inequities in their communities and as having the professional responsibility to act on them via public education and advocacy.

The role of public health

When discussing public health's role in addressing the SDH, the Structural units reported that they should be disseminating information to the public and to politicians, participating in advocacy, engaging in community partnerships and capacity building, and assessing the health impacts of various policies and political decisions. Participants from the Analytical units stated that they can and ought to be: researching, reporting, collaborating, and resource-sharing with other units. The Functional units reported their role as primarily applying knowledge of SDH to their programming, using determinant-specific approaches to identify and serve priority populations, gathering data, and engaging in strategic partnerships. Some especially illuminating quotations from the Functional units include the following:

We frankly do not see public health as in a position ... to fundamentally change every aspect of our society, particularly our economic structure... It may be emotionally satisfying to think that we can go out and restructure Canadian society. It's self-indulgent, in my opinion, and it's not the business we're in.

It's a means to an end and so you look at your basket of programs and you say to yourself "how can I influence this basket of programs by applying SDH thinking?"... I think you need to be realistic.

This perspective is notably different than that of the Structural units who spoke about economic structure as a significant determinant of health:

I think that we can and should bring the health equities knowledge that we have and the voice and the credibility that we have back to other tables – so be it education or municipal councilors, or whomever – to help them think through decisions that they make and understand the impact that [these decisions] ha[ve] on health and health equity.

We talk about "how are we going to know when we get there?" you know, 10, 20 years from now. We talk about how should our organization look different in 10 years and how should our community look different in 10 years because with our work in health equities, we have to change what we do etc., but also our community should look different at the end of all of this. And not only in "do we see a difference in health status?" but also "what differences do we see in terms of community ownership of these issues?"

We believe the work done by all nine PHUs is valuable and important. However, when it comes to effectively and meaningfully addressing the SDH, we are of the view that the Functional units and Analytical units face epistemological barriers to further action. We see these barriers as the result of predominantly biomedical discourses and understandings of the role of PHUs. These discourses emerged when participants discussed their training and their views on evidence.

Evidence as concrete outcomes vs. process indicators of structural change

A notable difference in worldviews and discourses surfaced when participants made reference to forms of *evidence* and outcomes of their SDH efforts. All of the Functional and two of the Analytical PHUs discussed evidence primarily as concrete outcomes. For instance:

[w]e want to look at and see outcomes and mostly those are defined in terms of behaviours. So how many people are smoking? How many people are eating their fruits and vegetables? So if we look at how health is even defined within public health it is defined in terms of behaviour and absence of disease.

So we've implemented a program called ... which is within the mandate of Healthy Babies, Healthy Children but much more evidence-based, much more resource intensive and randomized control level evidence showing its effectiveness in improving outcomes for mothers and children.

A few participants from Functional and Analytical PHUs claimed that there was not, in their opinions, sufficient evidence supporting the effectiveness of SDH-based interventions and that was why they had not allocated more time and resources to them. These individuals expressed greater interest in epidemiology and quantitative measurement techniques. This view can be seen as reflective of a tension between quantitative and qualitative research methods, a preference for concrete outcomes over process indicators, or of an internalized biomedical perspective that treats individuals independent of their living conditions and social context.

The Functional PHUs point to a lack of quantitative local level data as a reason to be skeptical or apprehensive about adopting more SDH focused approaches. Given that PHUs have only recently begun to embrace the SDH, comprehensive local data of this type is yet to come. Evidence in the form of qualitative data or process indicators tends to be overlooked by the Functional units.

The Analytical units and the other two Structural units spoke about evidence in similar terms, but also included *process* or *intermediary indicators*. In other words, their evaluation of initiative success or effectiveness could take different forms. The process outcome-based approach is often used/useful at earlier stages of a program evaluation process before concrete outcomes are available. However, given the long-term scale that is required of most SDH projects, we believe that process indicators can be seen as legitimate forms of evidence at this point in time. For example, one unit noted:

We've had definite success in terms of developing new partnerships. The local poverty reduction network would be a big one that we've supported at the Steering Committee level, the Planning Committee level, and many of the Work Groups. I think internally, the health unit has shifted a bit in terms of its comfort in using social determinants as a lens for analysis. We definitely have Board support now, and we have developed a health equity checklist for the planning of our programs.

Other participants from Structural units reported that some of the outcomes of their initiatives to date include: increases in services, programs, and resources available for previously underserved populations; bringing together community agencies; participation in a Homelessness Partnership Strategy; and involvement in a community initiative to help move people from Ontario Works to Ontario Disability Support Program (ODSP). Because this group's understandings of their PHU role include changing and

improving the overall well-being of their communities, their process indicators are also viewed as beneficial outcomes in and of themselves.

The Structural units do not find it necessary to wait for local data supporting the effectiveness of SDH initiatives. They reference international research that confirms that improving people's living situations is good for their health. However, this does not mean that Municipal and Provincial governments share this perspective; because of tight budgets for all PHUs, participants from a variety of units reported feeling pressure from funders to allocate their resources to acute services that provide more tangible and timely outcomes, rather than to invest long term in the SDH.

Overall, the units' comments about outcomes and evidence were consistent with their diversity in applying SDH to unit activities, staff training, public education, and advocacy. The units that have adopted a Structural discourse reported greater involvement in these activities than the units operating with a Functional discourse. We understand the Analytical units as being on a spectrum between the Functional and Structural groups. Indeed, after member checking, one of the Analytic units contacted us to let us know about efforts they were undertaking to better address the SDH and follow the leadership of the Structural units.

In this context, we see a predominantly positivist understanding as to what constitutes evidence and outcomes that acts – in our opinion – as a barrier to further action on the SDH. Perhaps it is time for the public health institution to expand its thinking about legitimate forms of evidence to include methods and measures that account for social phenomena that are detrimental to human health and flourishing.

Supports and barriers

When asked about barriers to action on the SDH, many units noted barriers that were mentioned in the 2010 National Collaborating Centre for the Determinants of Health (NCCDH) Environmental Scan (NCCDH 2010). These include the lack of clarity regarding what public health should or could do; a 'limited' evidence base; preoccupation with behavior and lifestyle approaches; bureaucratic organizational characteristics; limitations in organizational capacity; the need for leadership; more effective communication; and supportive political environments. In addition, some participants noted the impact of limited time, funds, and staffing resources; the challenge of maintaining the institutional momentum required for addressing the SDH over the long-term; developing an appropriate urban/rural approach; varying degrees of conceptual buy-in within and between units; leadership on the SDH coming from the periphery of public health rather than the center; and silo-ed operations between various organizations and PHUs.

Despite these barriers, the Structural units were still able to create public awareness campaigns, engage in coalitions, and allocate resources specifically to address the sources of health inequalities. We recognize that there are different political environments and demographics for each unit's catchment area and that these will produce some unique challenges. However, these differences should account for the *type* of SDH action the units take, not the *amount* they do.

We believe that the discrepancy in action among PHUs has more to do with the discourses and beliefs of those in leadership roles than with the resource-based barriers that they face. It does not appear to us that a lack of understanding of the SDH concept is the barrier to action, though there certainly is confusion about its reach, application, and legitimacy. All participants offered definitions that implied understanding of the

concept. As a result, all PHUs offer services for low-income and ‘at risk’ populations. However, the Functional units are apprehensive or uncomfortable with the political nature of the SDH. One participant from an Analytical unit noted, ‘In fact, [the SDH] are controversial, right? They are inherently political and that makes it challenging for a public agency like public health to address. We can’t be overtly political ... So the fact that it’s inherently political has been and continues to be a challenge for us.’ Another participant spoke about the ‘mismatch between the conservative nature of governments and the controversy of social change movements.’ These views presume that health itself is not political, only its social determinants. Additionally, it presumes that the non-SDH work that the units are currently doing is apolitical. This is problematic because those who regard health in this way neglect the ways in which health is inherently and unavoidably tied to politics. As Foucault (1963, 38) claims, ‘The first task of the doctor is therefore political: the struggle against disease must begin with a war against bad government.’

Discussion

According to Bachelard (Tiles 1984), our beliefs present limitations insofar as they narrow our foci and establish presuppositions about what is possible. We should therefore question even the most seemingly obvious of our beliefs – for instance, asking ourselves how we define health and the means of promoting it. This question is not a new one. It is well known that conceptions of health vary by location and over time (Aggleton 1990; Blaxter 2010). What we are concerned with is how public health *as an institution* understands and acts to further health. Since 1948, the World Health Organization has defined health as, ‘[a] state of complete physical, mental and social well being and not merely the absence of disease or infirmity’ (WHO 1948) and yet many see material, mental, and social well-being as beyond the scope of health work. The application of an individualized discourse of health to public health work explains why we see such challenges to effectively addressing health inequalities.

Similar to Bourdieu’s (1992) notion of reflexivity of the researcher, we all must examine the ways in which our worldviews and actions are the result of our institutional training, our own social positions and privileges, and the social structures that we have internalized. Public health professionals are no exception. As Raphael (2000) points out, Canadian public health professionals are usually trained in clinical areas that work within a discourse of individualism. As a result, many of them adopt micro-level understandings of health. The SDH do not easily lend themselves to this way of thinking because they focus on the macro and meso level contexts in which people become ill. To more effectively address SDH, public health workers must first acknowledge and grapple with the barriers that result from the micro-level ways of thinking that dominate medical discourse and education. This is not to say that the positivist approach is solely to blame or that this is merely an issue of qualitative vs. quantitative approaches to health research and practice. Rather, we take issue with approaches to health – and governance – that focus on ‘objective,’ uncritical, and noncontextualized data. What is included or excluded from an inquiry and the ways in which data are collected, presented, analyzed, and applied are indicative of the priorities, concerns, and ideologies of the researchers (Armstrong 2001). Bachelard argued that in order for science to progress, we must liberate it from the restrictions imposed by previous ways of thinking (Tiles 1984). Similarly, the health equity agenda is dependent upon an epistemological and discursive shift in regards to the politics of public health.

According to Bambra, Fox, and Scott-Samuel (2005, 187), health is political because some social groups have more of it than others, because its determinants are amenable to political interventions, and '[b]ecause the right to "a standard of living adequate for health and well being" is, or should be, an aspect of citizenship and a human right.' In light of substantial academic research on the SDH, the plethora of reports from reputable organizations, and the fact that public health is funded by municipal and provincial funds and governed by boards of elected officials, there should be little debate about the political nature of public health work. One can reasonably argue that remaining inactive on the SDH is equally as political as becoming vocal about them. As Tesh (1988, 177) so nicely articulates:

[w]e do not have to choose between a desire to find the "real" causes of disease and an acceptance of the connection between facts and values. Instead, before we ask after the cause of disease, we must ask what values should guide the search. Values are public issues ... we need public discussion about the values, beliefs, and ideologies with which scientists and policy makers begin. This is not an unwarranted intrusion of politics into science. There is no science un-influenced by politics. This is a plea to get the politics out of hiding.

Conclusion

In sum, we argue that applying the SDH in public health work is not simply a matter of differing knowledge amongst Medical Officers and staff members. Nor is it simply a matter of positivist thinking vs. qualitative thinking. Instead, we believe that inaction on the SDH results from epistemological barriers that result from internalized discourses and traditions that treat health as divorced from the societal contexts in which it occurs. We recognize the challenges faced by PHUs and commend them on their efforts to date. However, we think that there is ample room for improvement. Below are some suggestions for how public health might go about overcoming these barriers and developing a new trajectory for SDH work:

- (1) Having explicit discussions at the Ministry and PHU levels about the values and politics that inform decision-making and programming. Such discussions should also be incorporated into staff [re]training.
- (2) Incorporating research tools that address the politics of health in meaningful but nonpartisan ways. For instance, developing and implementing a sophisticated form of Health Impact Assessment (Scott-Samuel, Birley, and Arden 2001). Examining the health impact of a particular policy requires acknowledging that health is affected by policy choices and then presenting the evidence to governments to help them make more informed decisions. Another method is incorporating an intersectional lens or framework (Hankivsky 2011) in PHU research in order to better address social location and marginalization.
- (3) Centralizing and institutionalizing SDH leadership. While the importance of addressing the SDH and health inequalities is emphasized in the Public Health Standards and Joint Working Group, there are no concrete guidelines provided for doing so. These ideas are recognized in academic literature, but remain to be institutionalized. The lack of clear guidelines allows for individual MOHs' personal constructions of the SDH to take over and guide unit activity. Several participants accounted for the variation in SDH activity between units by pointing to differences in MOH interests and priorities. This was also noted as a

barrier to action in the NCCDH Environmental Scan (2010). Shifting the responsibility for guidelines and planning to the Ministry and OPHA and aLPHA levels is one way to overcome this barrier. This would also have the potential to foster greater consistency and collaboration between the units in their SDH work. Sharing of best practices between units is advisable, as is sharing best practices internationally with those who have been more successful in tackling health inequalities.

- (4) Given that tackling health inequalities is featured so prominently in the Public Health Standards, it seems reasonable that units ought to be held accountable for taking action to do so. This could take the form of: year-end reports on their SDH activities, standardizing staff training, and retraining on the SDH, requiring some form of participation in public education, and more support/encouragement towards advocacy initiatives and policy advising.

References

- Aggleton, P. 1990. *Health*. London: Routledge.
- Armstrong, P. 2001. "Evidence-Based Health-Care Reform: Women's Issues." In *Unhealthy Times: Political Economy Perspectives on Health and Care in Canada*, edited by H. Armstrong, P. Armstrong, and D. Coburn. New York: Oxford University Press.
- Bambra, C., D. Fox, and A. Scott-Samuel. 2005. "Towards a Politics of Health." *Health Promotion International* 20 (2): 187–193.
- Baum, F. E. 2008. *The New Public Health*. 3rd ed. South Melbourne: Oxford University Press.
- Baxter, M. 2010. *Health*. 2nd ed. Norwich: Polity Press.
- Bourdieu, P. 1992. *An Invitation to Reflexive Sociology*. Chicago, IL: The University of Chicago Press.
- Bryant, T. 2009. "Social Inequalities, Public Policy, and Health." *Humanity and Society* 33 (1–2): 118–144.
- CCPA (Canadian Centre for Policy Alternatives). 2013. "Income Inequality is on the Rise, Especially in Big Cities." Growing Gap Initiative update. Accessed June 13, 2013. <http://www.policyalternatives.ca/newsroom/updates/income-inequality-rise-especially-large-cities>.
- Coburn, D. 2000. "Income Inequality, Social Cohesion and the Health Status of Populations: The Role of Neo-Liberalism." *Social Science & Medicine* 51: 135–146.
- Coburn, D. 2004. "Beyond the Income Inequality Hypothesis: Class, Neo-Liberalism, and Health Inequalities." *Social Science & Medicine* 58: 41–56.
- Collins, P., and M. Hayes. 2007. "Twenty Years since Ottawa and Epp: Researchers' Reflections on Challenges, Gains, and Future Prospects for Reducing Health Inequities in Canada." *Health Promotion International* 22 (4): 337–345.
- Creswell, J. 2009. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks: Sage.
- Epp, J. 1986. *Achieving Health for All: A Framework for Health Promotion*. Ottawa: Health and Welfare Canada.
- Esping-Andersen, G. 1990. *The Three Worlds of Welfare Capitalism*. Princeton: Princeton University Press.
- Esping-Andersen, G. 1999. *The Social Foundations of Postindustrial Economies*. New York: Oxford University Press.
- Foucault, M. 1963. *The Birth of the Clinic*. New York: Routledge.
- Germov, J., and J. Hornosty. 2012. *Imagining Health Problems as Social Issues. Second Opinion: An Introduction to Health Sociology*. Don Mills: Oxford University Press.
- Glaser, B. 1965. "The Constant Comparison Method of Qualitative Research." *Social Problems* 12: 431–435.
- Hancock, T. 2011. "Health Promotion in Canada: 25 Years of Unfulfilled Promise." *Health Promotion International* 26 (2): ii263–ii267.

- Hankivsky, O. 2011. *Health Inequities in Canada: Intersectional Frameworks and Practices*. Vancouver: UBC Press.
- Hankivsky, O., and A. Christofferson. 2008. "Intersectionality and the Determinants of Health: A Canadian Perspective." *Critical Public Health* 18 (3): 271–283.
- King, A. 2009. *Public Health – Everyone's Business: 2009 Annual Report of the Chief Medical Officer of Health of Ontario to the Legislative Assembly of Ontario*. Toronto: Ontario Ministry of Health and Long-Term Care.
- Kuhn, T. 1962. *The Structure of Scientific Revolutions*. Chicago, IL: University of Chicago Press.
- Lalonde, M. 1974. *A New Perspective on the Health of Canadians: A Working Document*. Ottawa: Government of Canada.
- Low, J., and L. Thériault. 2008. "Health Promotion Policy in Canada: Lessons Forgotten, Lessons Still to Learned." *Health Promotion International* 23 (2): 200–206.
- Marmot, M., S. Stansfeld, C. Patel, F. North, J. Head, I. White, E. Brunner, A. Feeney, and G. Davey Smith. 1991. "Health Inequalities among British Civil Servants: The Whitehall II Study." *The Lancet* 337: 1387–1393.
- NCCDH (National Collaborating Centre for Determinants of Health). 2010. *Integrating Social Determinants of Health and Health Equity into Canadian Public Health Practice: Environmental Scan 2010*.
- Navarro, V. 2009. "What We Mean by Social Determinants of Health." *International Journal of Health Services* 39: 423–441.
- Ontario Ministry of Health and Long-Term Care. 2011. "More Public Health Nurses Delivering Care to Ontarians: McGuinty Government Adds 72 Public Health Nurses." Accessed July 10, 2013. <http://news.ontario.ca/mohltc/en/2011/05/more-public-health-nurses-delivering-care-to-ontarians.html>.
- OPHA (Ontario Public Health Association). 2001. *A Positive Space is a Healthy Place: Making Your Community Health Centre or Public Health Unit Inclusive to Those of All Sexual Orientations and Gender Identities*. Toronto: Ontario Public Health Association.
- OPHA (Ontario Public Health Association). 2005. *Report on Access to Dental Care and Oral Health Inequalities in Ontario*. Toronto: Ontario Public Health Association.
- OPHA (Ontario Public Health Association). 2008. *Ontario Public Health Standards 2008*. Toronto: Ontario Public Health Association.
- OPHA (Ontario Public Health Association). 2011a. "Joint Working Group on the Social Determinants of Health." Accessed June 13, 2013. http://www.opha.on.ca/our_voice/collaborations/jwd-SDH.shtml.
- OPHA (Ontario Public Health Association). 2011b. "Letters." OPHA Responds to Recently Released 2009 Chief Medical Officer of Health (CMOH) Annual Report. March 8, 2011. Accessed June 13, 2013. <http://www.opha.on.ca/Resources/Letters/CMOHReport-OPHAResponse-Ltr-8Mar11.pdf>.
- OECD (Organisation for Economic Co-operation and Development). 2011. *Divided We Stand: Why Inequality Keeps Rising*. Paris: Organisation for Economic Co-operation and Development.
- Petticrew, M., M. Whitehead, S. J. MacIntyre, H. Graham, and M. Egan. 2004. "Evidence for Public Health Policy on Inequalities: 1: The Reality according to Policymakers." *Journal of Epidemiology and Community Health* 58: 811–816.
- Raphael, D. 2000. "Health Inequalities in Canada: Current Discourses and Implications for Public Health Action." *Critical Public Health* 10 (2): 193–216.
- Raphael, D. 2009. "Reducing Social and Health Inequalities Requires Building Social and Political Movements." *Humanity and Society* 33 (1–2): 145–165.
- Raphael, D. 2011. "A Discourse Analysis of the Social Determinants of Health." *Critical Public Health* 21 (2): 221–236.
- Raphael, D., J. Brassolotto, and N. Baldeo. 2013. *Ideological and Organizational Components of Differing Public Health Strategies to Address the Social Determinants of Health*. Toronto: York University School of Health Policy and Management.
- Scott-Samuel, A., M. Birley, and K. Ardern. 2001. *The Merseyside Guidelines for Health Impact Assessment*. 2nd ed. ISBN 1 874038 56 2. Liverpool: International Health Impact Assessment Consortium.
- Seedhouse, D. 2004. *Health Promotion: Philosophy, Prejudice, and Practice*. West Sussex: Wiley.

- Tesh, S. 1988. *Hidden Arguments: Political Ideology and Disease Prevention Policy*. New Brunswick, NJ: Rutgers University Press.
- Tiles, M. 1984. *Bachelard: Science and Objectivity*. Cambridge: Cambridge University Press.
- White, S. 2012. "Public Health at a Crossroads: Assessing Teaching on Economic Globalization as a Social Determinant of Health." *Critical Public Health* 22 (3): 281–295.
- Wilkinson, R., and K. Pickett. 2010. *The Spirit Level*. New York: Penguin Books.
- WHO (World Health Organization). 1948. "Preamble to the Constitution of the World Health Organization." Accessed June 13, 2013. http://www.who.int/governance/eb/who_constitution_en.pdf.
- WHO (World Health Organization). 2008. "Closing the Gap in a Generation: Health Equity Through Addressing the Social Determinants Of Health." Accessed June 13, 2013. http://www.who.int/social_determinants/final_report/csdh_finalreport_2008.pdf.
- WHO (World Health Organization). 2010. "Equity, Social Determinants, and Public Health Programmes." Erik Blas and Anand Sivasankara Kurup, Eds. Accessed June 13, 2013. http://whqlibdoc.who.int/publications/2010/9789241563970_eng.pdf.