

The limitations of population health as a model for a new public health

DENNIS RAPHAEL and TOBA BRYANT¹

York University, Toronto, Ontario and ¹University of Toronto, Toronto, Ontario, Canada

SUMMARY

Population health as developed by the Canadian Institute for Advanced Research (CIAR) has influenced the shape and direction of Canadian public health policy, and has the potential to do so in the USA and elsewhere. There is reason to be concerned about this ascendance of CIAR thinking: population health is rooted within epidemiology, a militantly

quantitative discipline; population health eschews analysis of societal structures as determinants of health; and population health elevates scientific understanding over health promotion action. Its lack of an explicit values base is also problematic. Policy makers should recognize these and other limitations as they consider models for a new public health.

Key words: adolescents; environmental factors; physical activity

OVERVIEW

Population health has a variety of meanings, but in Canada it has come to signify the Canadian Institute for Advanced Research's (CIAR) analysis of how system-level variables influence the health of populations. The CIAR approach has influenced the direction of health policy in Canada, and there is evidence that it is poised to influence health policy in the USA. In this paper we argue that while CIAR concepts add to the debate concerning the determinants of health, its ascendance as a model for a new public health in Canada and elsewhere threatens progress in improving the health of populations.

Three propositions inform this analysis. The first is that while there are differing concepts of what constitutes population health—including differences in emphasis among CIAR adherents—an orthodoxy is arising of what constitutes the determinants of health and the means of examining their effects. The second proposition is that the CIAR version of population health limits consideration of various forms of evidence and means of improving health. The third proposition

is that CIAR's lack of concern with social theory and values serves to conceal the potent social forces that influence the health of populations.

THE CIAR VERSION OF POPULATION HEALTH

The debate in Canada between health promoters and population health advocates is difficult for health workers to understand (Labonte, 1995; Coburn and Poland, 1996; Labonte, 1997; Wong, 1997; Poland *et al.*, 1998; Robertson, 1998). One barrier to understanding is that there has been little penetration of WHO concepts of health promotion into daily public health discourse, such that the term is limited to an emphasis on behavioural or lifestyle change. This has been less so in Canada, though a lifestyle emphasis continues to be the main focus of public health efforts (Raphael, 2000a). Another barrier to understanding is the complete paradigmatic dominance of epidemiology in public health

research and planning in many nations. This epidemiological lens is the subject of much of this critique.

The CIAR population health approach was first described in the *Social Science and Medicine* paper *Producing Health, Consuming Health Care* (Evans and Stoddart, 1990) and further elaborated in the volume *Why Are Some People Healthy and Others Not?: The Determinants of Health of Populations* (Evans *et al.*, 1994). The most recent volume from the CIAR group is *Developmental Health and the Wealth of Nations* (Keating and Hertzman, 1999), which considers how early childhood development influences population health.

In this paper, health promotion is defined as a values-based approach to promoting health that has its genesis in World Health Organization (WHO) concepts of health. A concise statement of these principles and health promotion actions is contained within the Ottawa Charter for Health Promotion (WHO, 1986). Health is seen as a resource for daily living and health promotion is the process of enabling people to increase control over, and to improve, their health. Health is promoted through building healthy public policy, creating supportive environments, strengthening community action, developing personal skills, and reorienting health services. Histories of the field are available (Pederson *et al.*, 1994; PAHO, 1998), as are recent overviews (Scriven and Orme, 1996; Jones and Sidell, 1997; Katz and Peberdy, 1997; Macdonald and Davies, 1998; Naidoo and Wills, 1998).

Population health, as defined by the CIAR, considers processes by which system-level variables influence the health of populations. It operates within the epidemiological tradition of illness prevention and identification of cause and effect relations under a claim of scientific objectivity. Research on how income inequality affects population health contains aspects of a population health approach (Kawachi *et al.*, 1999; Lynch *et al.*, 2000; Ross *et al.*, 2000), as does recent work on the impact of race on health status (Krieger, 1987; Krieger *et al.*, 1993; Krieger, 2000). These latter researchers think about system-level factors, however, in more complex ways than do many CIAR writers.

Population health as developed by the CIAR is challenging health promotion as the dominant approach to Canadian public health policy. Its increased influence is seen in the renaming of government branches and departments, the content of many federal and provincial health

documents, and the establishment of a national population health research institute that is well funded by the federal government (Robertson, 1998; Raphael and Bryant, 2000).

Why the CIAR version of population health has garnered such acceptance by Canadian governments at the expense of health promotion concepts remains unclear (Wong, 1997; Legowski and McKay, 2000). Canada was an acknowledged leader in health promotion, introducing its key ideas of reducing health inequities, empowering individuals and communities, and building healthy cities and communities through civic engagement and support of social infrastructure (Epp, 1986; Hancock and Duhal, 1986).

US policy makers are now examining the value of CIAR population health concepts. The National Committee on Vital and Health Statistics of the Centers for Disease Control is considering the relevance of CIAR concepts (National Centre for Health Statistics, 2000); the National Policy Association solicited a CIAR fellow for a contribution to a volume on income, socio-economic status and health (Hertzman, 2001); the State of Minnesota identified health determinants clearly drawn from the CIAR list (Minnesota Department of Health, 1998); and the Population Health Group at the University of Washington is drawing upon CIAR work to advance its agenda of identifying societal-level influences upon population health (International Health Program, 2001).

At first glance, population health's ascendance may be due to its raising of important issues. According to CIAR fellow John Frank (Frank, 1995) its tenets are: (i) the major determinants of human health status are cultural, social and economic; (ii) societies in which there is a high level and relatively equitable distribution of wealth enjoy the highest health status; (iii) one's immediate social environment and the way this environment interacts with one's psychological resources and coping skills has a strong relationship with health; (iv) the early developmental environment is important for health; (v) health policy should take a broad multi-sectoral view; and (vi) new insights into health are likely to come from interdisciplinary research collaborations. Frank argues:

A broad population health perspective requires us to examine with a critical eye, the conditions of life and work that damage the health of our communities, and in the view of this author, to work to change them [(Frank, 1995), p. 164].

This is a compelling vision that challenges the public health emphasis upon lifestyle choices. An illustration of the power of a population health approach toward understanding and working to influence health determinants can be seen in the reawakened interest in income and social status as a health determinant in the USA (Auerbach and Krimgold, 2001). But interest in income, class and health has a long history in the UK and elsewhere that existed well prior to the CIAR work (Townsend *et al.*, 1992; Davey Smith *et al.*, 2001).

HOW IS POPULATION HEALTH DIFFERENT FROM HEALTH PROMOTION?

Frank's views are consistent with health promotion theory and practice. It has been noted, however, that 'Frank has a very progressive viewpoint that may contrast with others in the population health camp' [(Wong, 1997), p. 13]. It is the viewpoints of these others—especially some of the most influential—in the CIAR population health camp with whom issue is taken.

Canadian documents such as *Population Health Promotion: An Integrated Model of Population Health and Health Promotion* (Hamilton and Bhatti, 1996) and *Taking Action on Population Health: A Position Paper for Health Promotion and Programs Branch Staff* (Health Canada, 1998) draw upon population health and health promotion concepts. To illustrate this, the Health Canada commissioned document *Population Health—Putting Concepts into Action* (Zollner and Lessof, 1998) briefly discusses, but dismisses, the differences between health promotion and population health. It then outlines a values-based health promotion approach based on European Health for All (HFA) documents. The emphasis upon values of equity, solidarity, participation, sustainability, ethics and accountability is interesting considering that statements of values are absent in CIAR discussions of health or its determinants, a theme returned to later.

The bulk of *Population Health—Putting Concepts into Action* is concerned with strategies to enhance population health. These include providing leadership, building partnerships, engaging the private sector, putting public health to work, looking for evidence and monitoring success, making population health attractive, and raising the stakes toward accountability. None of this is based upon CIAR population health work.

Indeed, these ideas are drawn from health promotion principles and practices developed by HFA committees. Why population health is entered into this discussion at all is puzzling.

The key aspect of the CIAR version of population health is that economic and social forces serve as determinants of health. The most explicit presentation of the CIAR population health programme is contained in their web site:

Since its inception, the program has systematically explored socio-economic status (SES) gradients and their relationship to health outcomes. It is now well-established that, on average, people with higher levels of income, education, and social position live longer and are healthier than those at lower levels. Moreover, societies with greater variations in income, education, or social position, tend to have higher levels of mortality. Program members are now furthering studies in this area by examining the SES gradient at the individual, neighbourhood, and community levels (CIAR, 2001).

CIAR has outlined 10 health determinants that have achieved an orthodoxy within Canadian government documents on population health. These are income and social status, social support networks, education, employment and working conditions, physical environments, social environments, biology and genetic endowment, personal health practices and coping skills, healthy child development and health services (Health Canada, 1998). Health Canada sees population health as a plan of action as well as a means of understanding health determinants:

Population health is an approach to health that aims to improve the health of the entire population and to reduce health inequities among population groups. In order to reach these objectives, it looks at and acts upon the broad range of factors and conditions that determine health. [(Health Canada, 1998), p. 1]

Health Canada's definition of population health is much more than the CIAR version. It is: (i) a conceptual framework for thinking about health; (ii) a method for making decisions based on evidence; (iii) a framework for taking action; and (iv) an approach requiring collaboration among sectors for effective action. It is also more than the CIAR version of population health as it sees health as a capacity and a resource for living, which is not the case for the CIAR (see below). Health Canada documents also support pluralism in data gathering by accepting the validity of both quantitative and qualitative methods in needs assessment and evaluation; an idea absent from CIAR thinking.

It is important to consider to what extent the Health Canada version of population health diverges from the CIAR version as contradictions that arise between these versions may need to be reconciled. Such reconciliations should consider what may be serious shortcomings in the CIAR approach as a model of a new public health.

Our main concern with CIAR vision is its embeddedness within epidemiological thought. ‘Epidemiology—particularly in its most modern forms—is a militantly quantitative, empiricist discipline’ [(Williams and Popay, 1997), p. 260]. CIAR also emphasizes scientific understanding over action. Finally, its lack of a critical perspective on the role of societal structures limits the likelihood that population health findings will effect significant policy change. Many of these issues were raised at the Roundtable on Population Health and Health Promotion held in 1996 and are still unresolved (Wong, 1997).

POPULATION HEALTH IS ROOTED IN EPIDEMIOLOGICAL THINKING

The CIAR version of population health is epidemiological in its orientation and incorporates the basic tenets of the biomedical approach to research. It emphasizes observables, specifies exposures to environmental stimuli, cause and effect relationships, and natural science methods involving quantitative data collection and experimental research designs. Not surprisingly, CIAR does not use the WHO definition of health as a resource for daily living: ‘Our work proceeds from a particular notion of ‘health’, about which it is important to be clear at the outset. For the most part we simply assume that health is the absence of illness’ [(Evans, 1994), p. 24]. Macdonald and Davies state the issue as follows:

There is a growing realization that traditional logical positivist approaches to health promotion research and evaluation no longer provide the right questions (or indeed answers) for many health promotion interventions. These approaches tend to be firmly rooted in the biomedical model and the origins of disease, which although the mainstay of many early health promotion research programs, are now giving way to more pluralist, post-modernist approaches, based on the origins of health [(Macdonald and Davies, 1998), p. 1].

Another criticism of epidemiological approaches is the lack of interest in, and inability to focus upon, the lived experience of people (Lincoln and Guba,

1985; Raphael, 2000b). To validly assess need and to identify causes of phenomenon requires recognition that individuals’ motivations involve complex patterns of interactions and situations that cannot easily be dealt with through traditional approaches (Blaxter, 1990; Lincoln, 1994; Raphael *et al.*, 2001b).

POPULATION HEALTH LACKS AN EXPLICIT VALUES BASE

Consistent with its positivist orientation, the CIAR version of population health eschews any statement of values. Tesh outlines how particular theories of illness causation are inextricably linked to values and political ideology (Tesh, 1990). Seedhouse concurs, stating that all health-related research and practice decisions involve aspects of values, opinions and prejudice (Seedhouse, 1997). This is not problematic. What is problematic is not making explicit the values base underlying these decisions (Collins, 1995). The CIAR values base is that of not having a values base. CIAR writings therefore ignore important community health issues of participation, equity, community, collaboration and social justice (Minkler, 1997).

One result of this emphasis is a reliance on expert knowledge dominated by the use of large-scale data collection approaches that ignore individuals and the community within which they live. In essence, the population is taken out of population health. The CIAR version is also remarkably non-reflexive, the importance of which is described by Tesh:

The reality that truth is only discoverable by human beings, in all their humaneness, does not mean that we must abandon the hope of finding it. We just have to hold facts lightly, continually testing them against experience and logic, recognizing their connections to the rules and contexts within which they appear, and more important, never ceasing to scrutinize the values that necessarily permeate them [(Tesh, 1990), p. 177].

POPULATION HEALTH NEGLECTS POLITICAL AND SOCIO-ECONOMIC FORCES

CIAR offers no theory of society (Coburn and Poland, 1997). Lack of a theory of society leads to a neglect of how the current state of health determinants come to be and the potent forces

that either support or oppose the status quo. Population health has a troubling blind spot (as does health promotion at times) to work in the political economy area that sheds lights on the forces that drive health determinants.

To illustrate this, the work of North American Vicent Navarro, one of the most important contributors to the political economy of health literature and an editor of the volume *The Political Economy of Social Inequalities: Consequences for Health and Quality of Life* (Navarro, 2001), is not mentioned in any CIAR work. Similarly, there is no place for consideration of the role neo-liberal ideology (Coburn, 2000) or changing tax structures plays in population health (Raphael, 2001), because CIAR thinking is firmly rooted within biomedical concepts of health. It lacks a critical perspective that could consider the role of structural forces, specifically power, in the organization of societies and the effects these structures have on health determinants.

British population health workers have long maintained a critical approach that allowed consideration of societal organization and how it influences health (Gordon *et al.*, 1999; Shaw *et al.*, 1999a; Shaw *et al.*, 1999b; Pantazis and Gordon, 2000). It should not be surprising then that UK researchers have contributed to thinking about social exclusion as a process by which health inequalities come about (Shaw *et al.*, 1999b; Percy-Smith, 2000). US researchers have also begun to evoke such a critical perspective in their population health work. Inquiries have been carried out into how racism (Krieger, 1987; Krieger *et al.*, 1993; Krieger, 2000), class relations (Mutaner and Lynch, 1999; Mutaner *et al.*, 1999), the market economy (Navarro, 1998; Navarro, 1999a; Navarro, 1999b; Navarro, 2000) and government ideology (Terris, 1999; Kaplan, 2001) affect the health of the US population. This work shows how even within the epidemiological tradition, developments from political economy can illuminate the factors that affect health. Notwithstanding the importance of a critical perspective in population health work, there are still some intrinsic aspects of population health research methodology that bear scrutiny.

POPULATION HEALTH LEADS TO CONTEXT STRIPPING

Context stripping refers to research approaches that consider the health of individuals removed

from the community and societal structures within which they live (Lincoln and Guba, 1985). It results from use of positivist models of understanding that seek to identify general laws of cause and effect, or in the case of health research, general risk and protective factors. Within the health field, context stripping manifests itself through large-scale studies that attempt to identify the general determinants of health for the entire population. Even though contextual variables can be introduced into study designs, these approaches are a pale version of the rich insights that can be gathered through ethnographic approaches.

In these approaches, the individual—his or her perceptions, behaviours and health status—becomes removed from the rich and complex environments, including communities, to which they are linked. The data that result from these studies cannot consider individuals' health in relation to local societal structures, nor do they consider the forces that influence how these societal structures are organized.

In the CIAR version of population health, analyses of how societal structures come to influence individuals' sense of control and well-being give way to study of personal coping devices and the biological mechanisms by which personal stressors become translated into illness and disease. Such individual-level analyses are important, but inquiry is directed away from critical analysis of societies toward studies focused on individual-level variables. Such context stripping within a population health framework is not inevitable, as shown by recent US and Canadian analyses of health determinants (Frankish *et al.*, 1999; Kaplan, 2001).

POPULATION HEALTH PROVIDES A MODEL OF RESEARCH, NOT OF CHANGE

The CIAR version of population health does not provide a model of change, and writings suggest that there is little interest among some CIAR adherents in instituting change. In *Why are Some People Healthy and Others Not*, Evans wrote 'We cannot offer a detailed prescription of what is to be done' [(Evans, 1994), p. 24], a sentiment he repeated 5 years later at a population health conference (Evans, 1999). Additionally, there is a disturbing tendency among CIAR writings to ignore the problem of poverty—its causes, consequences,

and solutions—a sentiment that, not surprisingly, was enthusiastically taken up by high-level government health bureaucrats who provided keynote addresses at this same population health conference. In *Why Are Some People Healthy and Others Not*, Evans, after discussing the health differences that occurred among British civil servants in the Whitehall studies, states:

Thus, a common interpretation of the correlation between socioeconomic status and health—that the poor are deprived of some of the material conditions of good health, and suffer from poor diet, bad housing, exposure to violence, environmental pollutants, crowding, and infection—cannot explain these observations. Indeed, a focus on poverty can block progress in understanding, because it can be dismissive of further questions [(Evans, 1994), p. 5].

Besides the problem of using research about people not living in poverty to state conclusions about those who are, Evans's sentiments—which he repeated at the population health conference—should be especially welcome to government officials faced with high levels of family and child poverty. From any vantage point, poverty is clearly one of the strongest determinants of health (Reutter, 1995; Lessard, 1997; CICH, 2000), but from the CIAR perspective, focus on poverty, and perhaps working to alleviate it, distracts us from asking 'further questions'. While pursuing further questions is a worthy goal, using research to improve the lives of the large number of citizens living in poverty should be one of the highest priorities among public health researchers.

POPULATION HEALTH HAS A TOP-DOWN EMPHASIS ON EXPERT KNOWLEDGE

The CIAR framework emphasizes identification of risk conditions and behaviours that influence illness. These studies are important and serve to illuminate how, for example, the structure of economic inequality influences the health status of the population. What is disturbing however is the CIAR denial of the validity of alternate forms of knowledge such as lay knowledge, the importance of community participation, and the value of enabling and empowering people. These shortcomings have been ignored in the rush to incorporate 'population health' principles into Canadian government health documents. It must not be forgotten that traditional biomedical

and epidemiological approaches to health research can potentially work against health. This argument against biomedical and epidemiological approaches to health research is best stated by Davies and Macdonald:

Its underlying ideology is expert-driven, authoritarian and disempowering; seeking evidence through narrow clinically based methods and short-term quantitative outcome measures [(Davies and Macdonald, 1998), p. 209].

One interesting illustration of this is an examination of the extent to which community members' perceptions of the determinants of health are consistent with those outlined by CIAR. The authors examined older persons' perceptions of the CIAR-identified determinants of health. In these projects, seniors did not find these concepts to be particularly meaningful, and nor were these determinants consistent with their experiences of what determines health (Raphael *et al.*, 2001a).

CIAR research projects involve large-scale quantitative data surveys that should certainly be part of any population health strategy. However, sole reliance on these methods can lead to context stripping, denigrating of lay knowledge, disempowering community members, and limiting focus and analysis to individual level processes.

AN ALTERNATE VISION: PUTTING THE POPULATION INTO POPULATION HEALTH

Problems associated with the CIAR version of population health have been outlined. Some considerations that should inform a new public health include the validity of lay knowledge, explicit statements of values, use of methods that identify the complexity of health determinants, acknowledging the political dimension in health research, and providing information for change. Many components of this vision are based on modern health promotion principles and practices.

IMPORTANCE OF LAY AND CRITICAL KNOWLEDGE

Park outlines three forms of knowledge (Park, 1993). *Instrumental knowledge* is also known as traditional, scientific, positivist, quantitative or experimental knowledge, and is the dominant

paradigm in health research and in the CIAR version of population health. *Lay or interactive knowledge* is derived from lived experience. Also known as constructivist, naturalistic, ethnographic or qualitative knowledge, its focus is on meanings and interpretations individuals provide to events. *Critical knowledge* is reflective knowledge and is concerned with the role that societal structures and power relations play in promoting inequalities and disabling people.

The increasing focus on lay and critical knowledge comes from three sources. The first is that lay and critical knowledge may more accurately reflect the kinds of information about health, health status and health determinants that are necessary to understand and improve health. The second source is a belief that to effect positive change, knowledge not only has to be derived from individuals, but should be done in a manner that respects them and supports their autonomy and empowerment. The third is that traditional approaches, by limiting health research focus to variables that can be isolated and measured, are incapable of providing useful models of health and its determinants.

If public health research is to develop more robust and holistic explanations for patterns of health and illness in contemporary society, and contribute to more appropriate and effective policies, then the key is to utilize and build on lay knowledge—the knowledge that lay people have about illness, health, risk, disability and death [(Williams and Popay, 1997), p. 267].

MAKING VALUES AND PRINCIPLES EXPLICIT

Tesh argues that adherence to a particular theory may be based more on values than the available objective evidence. The current health debates about the determinants of health are about the relative importance of genetic, personal lifestyle and structural factors in determining health. Health promotion research and action have been informed by principles of equity, collaboration, participation and capacity-building. These principles shape the forms and focus of health promotion research and action. The lack of an explicit set of principles by CIAR-oriented population health researchers does not mean that population health research does not have a set of principles, but rather that these principles are hidden. And, it has been argued, these

principles are not particularly oriented towards changing the status quo.

RECOGNIZING THE COMPLEXITY OF HEALTH DETERMINANTS

There is increasing focus upon political and social structures and how these influence health (Coburn, 2000). CIAR-inspired health research, however, remains focused on individuals as a means of assessing broad health determinants. There is need to recognize the role that community structures play in mediating the effects of system level factors on individual health and well-being (Raphael, 2000b). Williams and Popay describe this issue as follows (Williams and Popay, 1997):

Population health research in the future must reinstate a political dimension to intellectual enquiry, and develop more sensitive measures for exploring and understanding the context of people's lives. [(Williams and Popay, 1997), p. 262].

The most important and relevant work that has been done in identifying the contextual factors that support health has been carried out within the framework of the healthy cities movement (Ashton, 1992; Davies and Kelly, 1993). The healthy cities approach is based on principles of equity, justice, participation and support for institutions that enhance health.

MAKING EXPLICIT THE POLITICAL DIMENSION IN HEALTH RESEARCH

Biomedical approaches, despite their protestations of objectivity and detachment from politics actually reflect conservative values of preserving the status quo (Seedhouse, 1997). Similarly, Seedhouse sees community development approaches as representing values of egalitarianism and social democracy. That all health research decisions involve aspects of ideology is not in itself problematic. What is problematic is not making explicit the value base underlying health research decisions. Political ideology influences the focus of research and the recommended responses to the problems identified through the research. As argued by Williams and Popay:

The future of population health requires attention to the politics of public health issues, from the multiple

causes of inequalities in health to the complex issues of global economics involved in environmental pollution; and doing so through exploration of the many discourses which may have a contribution to make [(Williams and Popay, 1997), p. 273].

Part of working toward health is developing means of incorporating these ideas into a model of policy change. The public policy change process is informed by various conceptions of knowledge and how different groups in society use knowledge to influence policy outcomes (Bryant, 2001). The field of political science has developed models to explain the input of ideas and knowledge into the public policy process (Hall, 1993; Sabatier, 1993). Most of these models focus on the knowledge contributions of professional social and health scientists, and not on the contributions of lay political actors. To develop relevant and effective public health policy, it is necessary that contributions of lay actors, i.e. non-experts, be valued and solicited.

In the CIAR version of population health, knowledge creation resides solely in the realm of health and social scientists. Additionally, valid knowledge is restricted to forms that are positivist, quantitative and reductionist. In the past, there has always been room for the contributions of both groups of actors: scientists and lay people. The CIAR version of population health has room for the contribution of only one group: the professional scientist. Such a view will not, in the short or long-term, improve population health.

WHAT IS TO BE DONE?

The deficiencies of the CIAR vision are focused in two key areas: the lack of a critical perspective and the reliance on one form of knowledge. US and UK public health researchers have demonstrated that findings from well designed epidemiological studies can be understood within frameworks based on critical theory and political economy.

However, it is important to remember that the 'new public health' is as much about the values of participation, enablement and empowerment, equity and social justice (Minkler, 1997; Robertson, 1999). As attempts are made to address inequalities in health, such efforts must be rooted within the communities with which public health

workers are concerned. There is an emerging literature showing that such action will be most effective when the participation and understandings of citizens are incorporated into such actions (Williams and Popay, 1997).

Such ideas have seen application in community-based Canadian efforts such as the *Pathways to Building Healthy Communities in Eastern Nova Scotia* (PATH Project, 1997) and the *Community Quality of Life* projects in Toronto (Raphael *et al.*, 1999; Raphael *et al.*, 2001b). There, community members identify and act upon social determinants of health by drawing upon their experiences and developing critical understandings of how societies operate. Armed with these understandings, they identify policy issues that become the basis of efforts to influence government actions.

At the municipal, regional and national levels, public health workers can support citizens in examination and discussions of the importance of the social determinants of health. It is in these sorts of undertakings that the traditions of public health can combine with those of civic involvement and participation to create effective action to improve the health of the population. These lay perceptions of the determinants of health are remarkably similar to those identified in large-scale surveys. The difference is that in these approaches the complexity of determinants and their interactions are not only acknowledged but revealed as integrally related to local contexts, including municipal, regional, provincial and national policy decisions. Additionally, information is collected and considered in manners consistent with principles and values of participation and respect. Results are presented in a manner that is likely to lead to change.

We have argued that implementation of the CIAR version of population health will not by itself support a new public health. By lacking an explicit values base and a critical perspective on health it fails to provide an alternate vision of society. Unfortunately, in many nations, the status quo is one of consistent or increasing inequalities in health. Additionally, the current policy atmosphere is one of weakening communities by removing supports such as social safety nets. Health promotion points out these developments; CIAR population health does not. Policy makers should consider the benefits of both approaches as they develop means of improving population health.

Address for correspondence:

Dr Dennis Raphael
 School of Health Policy and Management
 Atkinson Faculty of Liberal and Professional Studies
 York University
 4700 Keele Street
 Toronto
 Ontario
 Canada M3J 1P3
 E-mail: draphael@yorku.ca

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