SOCIAL DETERMINANTS OF HEALTH: PRESENT STATUS, UNANSWERED QUESTIONS, AND FUTURE DIRECTIONS

Dennis Raphael

This article reviews the current status of theory and research concerning the social determinants of health. It provides an overview of current conceptualizations and evidence on the impact of various social determinants of health. The contributions of different disciplines—epidemiology, sociology, political economy, and the human rights perspective—to the field are acknowledged, but profound gaps persist in our understanding of the forces that drive the quality of various social determinants of health and why research is too infrequently translated into action. Many of these gaps in knowledge concern the political, economic, and social forces that make implementation of public policy agendas focused on strengthening the social determinants of health problematic. The author identifies the areas of inquiry needed to help translate knowledge into action.

It has become commonplace among population health researchers to acknowledge that the health of individuals and populations is strongly influenced by various social determinants of health (1, 2). It is less common for health researchers to acknowledge that the quality of these social determinants of health is influenced by the organization of societies and how these societies distribute material resources among their members (3–5). And it is even less common for researchers to consider the political, economic, and social forces that shape the organizational and distributional practices of societies (6–9).

The belief that population health is influenced by nonmedical and nonbehavioral characteristics is shared—to varying degrees—by those working within the epidemiological, sociological, political economy, and human rights approaches to understanding and promoting health (10). The concept of the social

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determinants of health has become the current shorthand for describing health approaches that move beyond biomedical and behavioral risk factor approaches to health promotion (11).

The recent publication of two texts focused on social determinants of health (1, 2) and the establishment of a World Health Organization commission on the social determinants of health (12) should not disguise the fact that the idea that societal factors are important determinants of health is not new. During the 19th century, Rudolf Virchow and Friedrich Engels outlined the political, economic, and social forces that threaten health and well-being and spawn disease and early death (13, 14). And sociologists and social epidemiologists working in the historical materialist tradition have long attempted to illuminate how various modes of production, especially in capitalist societies, influence the distribution of economic, social, and political resources within the population, thereby influencing health (15–19). Despite this long-standing tradition, these analyses concerning the structural determinants of health—and their most recent expressions—remain outside the mainstream of current discourse on determinants of health among policymakers and health researchers in North America and in other nations such as Australia and New Zealand.

The past two decades have seen a resurgence of international interest in refocusing on the nonmedical and nonbehavioral precursors of health and illness (20). The approach is well-developed in many European nations and has frequently been integrated into the development and implementation of public policy (21, 22). In North America, and in other English-speaking nations such as Australia and New Zealand, the social determinants of health approach to public health, health research, and public policy development remains subordinate to traditional medical and behavioral health paradigms (23). In this article, I review the current state of social determinants of health theory and practice. After identifying the contributions to the field by those working within different analytical frameworks, I consider gaps in knowledge and ongoing barriers to the implementation of health-promoting public policies suggested by a social determinants framework.

WHAT ARE SOCIAL DETERMINANTS OF HEALTH?

The term "social determinants of health" grew out of the search by researchers to identify the specific mechanisms by which members of different socioeconomic groups come to experience varying degrees of health and illness. The publication of the *Black Report* and the follow-up *Health Divide* in the United Kingdom stimulated interest in how the material conditions of life serve to determine health status (20). Everywhere, individuals of different socioeconomic position show profoundly different levels of health and incidence of disease (24, 25).

Another stimulus to investigating social determinants of health was the finding of national differences in population health. For example, the health status of

Britons and Americans—on indicators such as life expectancy, infant mortality, and death by childhood injury rates—compares unfavorably with that of citizens in many industrialized nations (26, 27). In contrast, the health status of Scandinavians is generally superior to that seen in most nations (28, 29). The same factors that explain health differences among groups within nations may also explain many differences seen among national populations.

Approaches to the Social Determinants of Health

A variety of approaches to the social determinants of health exist, and all of these are concerned with the organization and distribution of economic and social resources. The 1986 *Ottawa Charter for Health Promotion* (30) identified the *prerequisites for health* as peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice, and equity. In 1992, Dahlgren and Whitehead (31) formulated their rainbow model of health determinants, in which the "living and working conditions" arch identified agriculture and food production, education, work environment, unemployment, water and sanitation, health care services, and housing as contributors to health.

The term "social determinants of health" appeared in Tarlov's 1996 analysis (32) of how inequalities in quality of housing, education, social acceptance, employment, and income became translated into disease-related processes. Tarlov saw both material conditions and the cognitive appraisal of these living conditions relative to others as influencing health. The issue of which of these processes is primary in mediating the relationship between the experience of various environments and health status is an area of very active debate among population health researchers concerned with the effects of income inequality—and by extension, the social determinants of health (33, 34).

The Canadian Institute of Advanced Research outlined various *determinants of health* (some of which are social determinants): income and social status, social support networks, education, employment and working conditions, physical and social environments, biology and genetic endowment, personal health practices and coping skills, healthy child development, and health services (35). A British working group charged with the specific task of identifying *social determinants of health* named the social (class health) gradient, stress, early life, social exclusion, work, unemployment, social support, addiction, food, and transport (36). The U.S. Centers for Disease Control (37) highlights socioeconomic status, transportation, housing, access to services, discrimination by social grouping (e.g., race, gender, or class), and social or environmental stressors.

A recent synthesis of these works identified 11 key *social determinants of health*: Aboriginal status, early life, education, employment and working conditions, food security, health care services, housing, income and its distribution, social safety net, social exclusion, and unemployment and employment security (2). This framework is important since the determinants are

specifically linked to policy areas common to governmental organization of ministries and departments (38).

Mid-Level Approach

What is common among these formulations is a focus on mid-level determinants of health. The approach is similar to what Merton called "theories of the middle range": "Theories intermediate to the minor working hypotheses evolved in abundance during the day-to-day routine of research, and the all-inclusive speculations concerning a master conceptual scheme" (39, p. 5). I argue that one shortcoming in the work on social determinants of health is the failure to consider "a master conceptual scheme" that illuminates the political, economic, and social processes by which the quality of social determinants of health is shaped. Hence, much of the work lacks what is usually termed a "critical social science" perspective (40).

Nevertheless, even this mid-level focus is a stark contrast to North America's—and other jurisdictions'—common public health preoccupations with individualized approaches to risk prevention and health promotion (41). Most public health practice in these jurisdictions remains limited to health education approaches to behavior change, with a grudging recognition—based on work in functional sociology and community psychology—that risk behaviors are themselves socially determined (42). This is especially so in North America, but elements of biomedical and lifestyle understandings of health remain dominant among the majority of health researchers and policymakers in Australia, New Zealand, and elsewhere. In the United Kingdom, a clear paradigm conflict is emerging among policymakers between structural and behavioral approaches to health inequalities (23).

A major failing of social determinants of health theory and research, then, is a neglect of the political, economic, and social forces that drive the quality of these health determinants. The recent Canadian volume on the social determinants of health (2) marks a major advance over the U.K. text (1) in raising and addressing these concerns. Whether the WHO Commission on the Social Determinants of Health will consider these larger forces remains unclear, a point cogently made by the People's Health Assembly in 2005 (43).

WHAT IS THE EVIDENCE ON THE SOCIAL DETERMINANTS OF HEALTH?

A robust body of evidence documents the importance of various social determinants of health. These determinants help account for (*a*) general improvement in health among citizens in developed nations over the past 100 years; (*b*) health differences observed among populations within nations; and (*c*) differences in population health among citizens in various developed nations.

In addition, there is a wealth of evidence that links each social determinant of health to a variety of specific health outcomes such as incidence of and mortality from cardiovascular disease, type 2 diabetes, arthritis, mental illness, and suicide, among others (1, 2). These social determinants of health have also been considered as determinants of degree and quality of social development and social welfare, a point made by numerous analyses of the social costs of poor living and working conditions within nations (44–46).

Primary Determinants of Improved Health Since 1900

Profound improvements in health status have occurred in industrialized nations since 1900. It has been hypothesized that access to improved medical care is responsible for such differences, but only 10 to 15 percent of increased longevity since 1900 is due to improved care (47, 48). Improvements in health behaviors (reductions in tobacco use, changes in food choices, etc.) have also been outlined as responsible for improved longevity, but most analysts conclude that improvements in health are due to the improving material conditions of everyday life related to early childhood, education, food processing and availability, health and social services, housing, and other social determinant of health (35, 48–50).

Primary Determinants of Health Inequalities among Citizens

Despite dramatic improvements in health in general, significant inequalities in health among citizens persist in developed nations (25, 51). These health differences result primarily from experiences of qualitatively different environments associated with the social determinants of health (11). Socioeconomic position, for example, is especially important as it serves as a marker of different experiences with many social determinants of health (52). Socioeconomic position is a determinant of income, quality of early life, education, employment and working conditions, and food security. Socioeconomic position is also a determinant of quality of housing, need for a social safety net, experience of social exclusion, and experience of unemployment and employment insecurity across the life span (11).

Socioeconomic position during early childhood, adolescence, and adulthood are all independent predictors of who develops and eventually succumbs to heart disease, diabetes, respiratory diseases, and some cancers (53). As just one illustration of the importance of socioeconomic position and related factors, Statistics Canada examined the predictors of life expectancy, disability-free life expectancy, and the presence of fair or poor health among residents of 136 regions across Canada (54). The health predictors included sociodemographic factors (percentage Aboriginal population, percentage visible minority population, unemployment rate, population size, percentage of population aged 65 or over, average income, and average number of years of schooling). Other health

predictors were rates of daily smoking, obesity, infrequent exercise, heavy drinking, high stress, and depression. Behavioral factors were weak predictors of health status as compared with sociodemographic measures. While obesity rate predicted 1 percent of unique variation and smoking rate 8 percent of unique variation among communities in life expectancy, sociodemographic factors predicted 56 percent of variation in life expectancy. Concerning self-reports of fair or poor health, obesity predicted 10 percent and smoking rate predicted 4 percent of variation among communities. But sociodemographic factors predicted 25 percent of differences among communities.

Primary Determinants of Health Differences among Nations

Profound national differences exist among industrialized nations in life expectancy, infant mortality, incidence of numerous diseases, and death from injuries (27). Once a nation achieves a basic level of prosperity, differences in social determinants of health such as income and its distribution, quality of early childhood, and employment and working conditions explain differences in life expectancy and infant mortality rates among citizens (26). Poverty rate is an especially important indicator of how various social determinants of health combine to influence health (55). Nations identified as having Anglo-Saxon liberal economies (e.g., Canada, Ireland, United Kingdom, United States) do not fare well on measures of infant mortality and life expectancy compared with European nations identified as either social democratic or conservative (26, 56). Work by the Barcelona Group is identifying the components and features of these differing welfare states that support or threaten health (26).

EMERGING THEMES IN THE STUDY OF SOCIAL DETERMINANTS OF HEALTH

Four themes are emerging in social determinants of health research. These concern explanatory frameworks, life-course perspectives, the role of public policy, and barriers to implementation of health determinants–related public policy.

Social Determinants and Health: Dominant Frameworks

Recent theoretical thinking considers how social determinants of health “get under the skin” to influence health. The three dominant frameworks that have emerged to explain the role that income inequality may play in health are also relevant to understanding the influence of other social determinants of health. These are the materialist, neomaterialist, and psychosocial comparison approaches (11, 33, 48). It should be noted that well before the current debate gained eminence, a variety of materialist positions were available (18, 20, 57–60).

Materialist Approach: Conditions of Living as Determinants of Health. Individuals experience varying degrees of positive and negative exposures over their lives that accumulate to produce adult health outcomes (61). Overall wealth of nations is a strong indicator of population health (62). But within nations, socioeconomic position is a powerful predictor of health, as it serves as an indicator of material advantage or disadvantage over the life span (63–65). Material conditions—reflecting the impact of various social determinants of health—determine health by influencing the quality of individual development, family life and interaction, and community environments (66, 67). Material conditions predict likelihood of physical (infections, malnutrition, chronic disease and injuries), developmental (delayed or impaired cognitive, personality, and social development), educational (learning disabilities, poor learning, early school leaving), and social (socialization, preparation for work and family life) problems (68). Researchers Gordon, Davey Smith, Shaw, and Dorling, among others in the United Kingdom, are some of the strongest adherents to this position (25, 53, 61, 69).

Material conditions of life lead to differences in psychosocial stress (70, 71). The "fight or flight" reaction—chronically elicited in response to threats such as income, housing, and food insecurity, among others—weakens the immune system and leads to increased insulin resistance, greater incidence of lipid and clotting disorders, and other biomedical insults that are precursors to adult disease (71). Individuals of lower socioeconomic position experience a range of psychosocial states that threaten health (72).

Adoption of health-threatening behaviors is a response to material deprivation and stress (73). Environments determine whether individuals take up tobacco, use alcohol, have poor diets, and engage in physical activity (74). Tobacco and excessive alcohol use, and carbohydrate-dense diets, are means of coping with difficult circumstances (45). Materialist arguments outline the sources of health inequalities among individuals and nations and the role played by various social determinants of health.

Neomaterialist Approach: Conditions of Living and Social Infrastructure as Determinants of Health. Differences in health among nations, regions, and cities are related to how economic and other resources are distributed within the population (33). American states and cities with more unequal distribution of income—as well as poor quality of numerous social determinants of health—have more low-income people and greater income gaps between rich and poor (75). They invest less in public infrastructure that affects social determinants of health such as education, health and social services, supports for the unemployed and those with disabilities, and libraries. Such unequal jurisdictions have much poorer health profiles.

Canada, for example, has a smaller proportion of lower-income people and a smaller gap between rich and poor, and spends relatively more on public infrastructure than the United States (76). Not surprisingly, Canadians enjoy better

health than Americans as measured by infant mortality rates, life expectancy, and mortality from childhood injuries (77). Neither nation does as well as Sweden, where distribution of resources is much more egalitarian, low-income rates are very low, and health indicators are among the best in the world (78). Strongest proponents of the neomaterialist position are Lynch, Kaplan, Ross, Dunn, and Wolfson in North America (76, 79, 80).

The neomaterialist view directs attention to both the effects of living conditions on individuals' health and the societal factors that determine the quality of the social determinants of health. How a society decides to distribute resources among its citizens is an especially important contributor to the quality of various social determinants of health.

Psychosocial Comparison Approach: Hierarchy and Social Distance as Determinants of Health. Health inequalities in developed nations, it is argued, are strongly influenced by citizens' interpretations of their standing in the social hierarchy (81, 82). There are two mechanisms by which this occurs.

At the individual level, the perception and experience of personal status in unequal societies lead to stress and poor health. Comparing their status, possessions, and other life circumstances with those of others, individuals experience feelings of shame, worthlessness, and envy that have psychobiological effects on health. These comparisons lead to attempts to alleviate such feelings through overspending, taking on additional employment that threatens health, and adopting health-threatening coping behavior such as overeating and use of alcohol and tobacco.

At the communal level, widening and strengthening of hierarchy weakens social cohesion—a determinant of health. Individuals become more distrusting and suspicious of others, thereby weakening support for communal structures such as public education, health, and social programs. An exaggerated desire for tax reductions on the part of the public weakens public infrastructure. This approach directs attention to the psychosocial effects of public policies that weaken the social determinants of health. It also begs the question of to what extent material aspects of society—the focus of the materialist and neomaterialist approaches—are the prime determinants of these psychosocial processes. This position has been staked out by Wilkinson in the United Kingdom, and Kawachi and Kennedy in the United States (81, 82). Marmot, the chair of the WHO Commission on the Social Determinants of Health, adheres to a practical—though ambiguous—position between the materialist and psychosocial comparison schools (72).

There is an active debate concerning the relevance of each approach for understanding the health-related effects of various social determinants of health (79, 83, 84). The bulk of content of the two texts (1, 2) specifically focused on the social determinants of health takes a clear materialist position. A tremendous amount of empirical evidence has documented how social determinants of health

such as income, housing, food security, availability of health and social services, and quality of early childhood, among others, seem to act through material pathways to influence health (25, 79, 84–86). Evidence for the role of psychosocial comparison processes, however, is lacking (87). Thus the balance of evidence supports materialist and neomaterialist analyses of how social determinants influence health (79, 84).

An issue that remains largely hidden in these discussions of the social determinants of health is that of social class and its meaning within capitalist society (87–90). The literature usually refers to income, social status, or socioeconomic position as a primary social determinant of health, which serves to depoliticize much of the discussion about stratification within societies. Muntaner advocates the importance of explicitly considering social class as a mechanism by which conditions of life come to influence health status (87, 90, 91). Introducing class into the debate begs the question of how the organization of capitalist societies both creates and maintains inequalities in economic, social, and political power, thereby shaping both the determinants of population health and population health itself.

The Importance of a Life-Course Perspective

Traditional approaches to health and disease prevention have a contemporaneous emphasis on shifting biomedical risk indicators and changing unhealthy behaviors. In contrast, life-course approaches emphasize the accumulated effects on health of experiences across the life span (53, 92, 93). Exposures to adverse economic and social conditions—that is, various social determinants of health—have important cumulative effects on health. U.K. and Finnish research has provided much of the evidence supporting the life-course perspective (94).

Hertzman (95) outlines three health effects relevant to a life-course perspective. *Latent effects* are biological or developmental, early life experiences that influence health later in life. Low birth weight, for instance, is a reliable predictor of incidence of adult-onset diabetes and cardiovascular disease in later life. Nutritional deprivation during childhood has lasting health effects.

Pathway effects are experiences that set individuals onto trajectories that influence health, well-being, and competence over the life course. As one example, children who enter school with delayed vocabulary are set upon a path that leads to lower educational expectations, poor employment prospects, and greater likelihood of illness and disease across the life span. Deprivation associated with poor-quality neighborhoods, schools, and housing sets children off on paths leading to poor health status (52).

Cumulative effects represent the accumulation of advantage or disadvantage over time that manifests itself in poor health. These involve the combination of latent and pathway effects. Adopting a life-course perspective directs attention to how social determinants of health operate at every level of development—early

childhood, childhood, adolescence, and adulthood—both to immediately influence health and to provide the basis for health or illness later in life. Evidence of the effects of experience across the life span on health status in adulthood is compelling (53).

The Importance of Policy Environments

The quality of many social determinants of health is determined by approaches to public policy. The organization of health care is also a direct result of policy decisions made by governments. These key issues are related to the distribution of societal resources (9). Policy issues influence the provision of adequate income, family-friendly labor policies, active employment policies involving training and support, provision of social safety nets, and the degree to which health and social services and other resources are available to citizens (55, 96–105).

Public policy decisions made by governments are driven by a variety of political, economic, and social forces (27, 89, 106, 107). Interestingly, the role of public policy in the quality of various social determinants of health is neglected by many population health researchers (108). Much of the work addressing these issues has been published in this Journal, and the publication of two compilations of this work is raising the importance of public policy in the health sciences field (6, 8). The work carried out by the Barcelona Group on macrolevel variables shaping population health profiles among developed nations is also advancing this agenda (26).

Gaps between Knowledge and Action on the Social Determinants of Health

Given what we know about the social determinants of health and the role played by public policy in determining the quality of these determinants, we would expect government decision-making to show the influence of this knowledge. This is certainly not the case in North America (23, 109). In Canada and the United States, and probably elsewhere, there is little penetration of these concepts into either public health discourse or government policymaking. This has much to do with dominant public health strategies whose individualist approach, based in biomedical and epidemiological traditions, conflicts with a structural approach to understanding health and its determinants. The individualist approach to health is consistent with neoliberal governance approaches in Canada and the United States and other developed nations. There, the emphasis on the market as the arbiter of societal functioning conflicts with a social determinants of health approach that requires commitment to equitable income distribution, support of public social infrastructure that provides adequate housing, food security, and strong public health and social services (9).

KEY FINDINGS AND ISSUES IDENTIFIED BY DIFFERENT PERSPECTIVES

Epidemiological Perspectives—Providing the "Hard" Evidence

Epidemiologists are concerned with identifying the determinants of individual and population health. Many of the associations between social determinants of health and indicators of health and illness have been identified by epidemiologists who have cast their gaze beyond traditional epidemiological questions.

Traditional questions have focused on identifying individual biomedical and behavioral risk factors associated with disease, such as cholesterol and glucose levels, weight, tobacco and alcohol use, diet, and sedentary behavior (110, 111). Individual-oriented approaches focus on characteristics of individuals such as income, educational level, occupational classification, individual control and empowerment, or attitudes and values and how these come to be related to health.

The greatest contributions to understanding the role of social determinants of health have been made by social epidemiologists who have expanded their analysis to broader concerns with environments, social conditions, and, occasionally, the political context within which environments get created and sustained (17, 112–114). Within these frameworks the key issues are the nature of environmental structures that influence health and the pathways by which they do so. These structural approaches are concerned with how societal structures mediate the relationship between social determinants of health and health; they concern both horizontal and vertical structures (115).

Horizontal Structures That Influence Health. Horizontal structures are the more immediate factors that shape health and well-being. These include, for example, the quality of childhood and family environments, the nature of work and workplace conditions, the quality and availability of housing, and the availability of resources for food, recreation, and education. Similarly, a neighborhood with few economic resources may have low levels of integration, social capital, or community cohesion. These are the usual focus of researchers into social determinants of health (15).

Important horizontal structures that are too infrequently studied are those of class, gender, and race stratification (16, 17). These factors represent concrete models of hierarchy that shape access to economic resources, power, and influence (89). In North America especially, they shape access to a variety of social determinants of health, including income, housing, food, employment, and education (90). The extent to which these stratification variables both exist and influence exposure to varying quality of social determinants of health results from numerous vertical structures (18, 19). The work by Link and Phelen (120) on fundamental causes is an important contribution to elucidating these mechanisms for the health research and care community in North America and elsewhere.

Vertical Structures That Influence Health. Vertical structures are the more distant, macrolevel issues that influence health and well-being. They are the political, economic, and social forces that determine in large part the quality of the horizontal structures described above. These forces see their manifestation in a jurisdiction's approaches to employment, training, income, social welfare, and tax policies. There are clear national, regional, and municipal differences in how these policy issues are addressed. Such issues are much less considered by population health researchers but are in themselves rather large areas of inquiry (4, 56, 121–123).

These forces are manifested in hierarchies associated with class, gender, and race (89). As one recent illustration, striking class, race, and gender differences in health outcomes were apparent in the aftermath of hurricanes Katrina and Rita in the United States. These events are only the most obvious—and media-attention-catching—manifestations of ongoing health outcomes associated with both horizontal and vertical structures of society.

Pathways and Mechanisms. How do social determinants of health get "under the skin" to influence health? How do differences in conditions of living come about in the first place? These are questions about the pathways between environmental conditions and health. To what extent are health researchers in the epidemiological tradition focused on answering these questions?

A recent study of how Canadian researchers conceptualize a prime social determinant of health—income and its distribution—and its relationship to health found that much of the research failed to take account of perspectives concerned with horizontal and vertical social structures (115). Among 241 Canadian studies concerned with income and health, only 16 percent focused on horizontal structures and 10 percent on vertical structures. An additional 14 percent focused on both kinds of structures, leaving 60 percent of studies neglecting these issues.

Concerning pathways linking income to health, 29 percent of studies simply noted that social class or education-related group memberships were related to income and health and 28 percent were focused on behavioral risk factors. Only 33 percent were concerned with materialist or neomaterialist interpretations of the relationship between income and health, and only 22 percent were concerned with political-economic pathways. Why do most epidemiologists limit themselves to these narrow analyses?

Social epidemiologists themselves have considered these questions (110, 111, 124). They conclude there are long-standing epistemological and research traditions that limit epidemiological focus to the concrete and observable rather than the theoretical and conceptual. Even when the focus is expanded to include societal structures, there is a reluctance to consider the political and economic forces that drive the creation and maintenance of these structures (25–27). This reluctance to consider the political as well as the ideological in how knowledge is constructed and reality is understood is the subject of Tesh's volume *Hidden*

Arguments (28) and work by Seedhouse (29). Much of this has to do with the philosophical assumptions of positivism, the epistemology on which epidemiology is based (15, 130, 131). The result is a research tradition that eschews examination of complex factors such as the forces that drive the quality of social determinants of health.

Sociological Perspectives—Understanding the Gap between Knowledge and Action

Many medical sociologists, especially in the United States, have chosen to focus on psychological issues of stress and its health-related effects rather than considering structural issues related to the organization and distribution of resources (see the *Journal of Health and Social Behavior*). Indeed, these sociologists seem to be even more resistant to engaging in political analyses than many social epidemiologists (109). However, other health sociologists have been sensitive to issues of how knowledge is constructed and research issues specified and examined (132–136). Their insights help provide answers to questions such as, Considering what we know about the social determinants of health, why is there so little action on these issues in many nations?

Psychological Constructs and Issues. The view that reality is socially constructed—that is, our understandings of the world are not given by nature but are chosen—is important for understanding how health and the determinants of health are conceptualized and, once so conceptualized, acted upon (137). Why is it that the social determinants of health are not the primary understandings held by the public, health workers, and government policymakers? 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 policymakers, though the evidence concerning the importance of these factors is contested (135). Outside a few isolated instances, little is known about professionals' construction of the social determinants of health (138).

Some sociologists have also written of how political, economic, and social forces shape the understandings we hold of the world (40). Living within a political economy that emphasizes individualism and the individualizing of risk makes discussion of society-based health determinants difficult for health workers, policymakers, and the public that understand these concepts (139). What are some of the political, economic, and social forces that shape our understandings of these issues? In societies where public policy is heavily influenced by those with wealth and power, a question to be asked is, Who benefits from the professional and public communities holding certain views about the determinants of health? (89).

Disciplinary Approaches—Professions. Professions differ profoundly in how they address issues of health, illness, and health care. Labonte (140) suggests that

health and health care can be viewed within three general frameworks: biomedical, lifestyle, and socioenvironmental. The biomedical approach emphasizes high-risk groups, screening of one sort or another, and health care delivery. The behavioral approach focuses on high-risk attitudes and behaviors and on developing programs that educate and support individuals to change behaviors. The socioenvironmental approach focuses on risk conditions and considers how individuals adjust to these conditions or move to change them.

Clearly, the dominant paradigm among health care workers and researchers is the biomedical. Public health is focused on the behavioral, and the socioenvironmental is underemphasized and the domain of only a handful of health researchers. The concept of the social determinants of health—and the political and economic determinants of these factors even more so—resides in the socioenvironmental category and continues to be subordinate. Why is this the case and what can be done to rectify this neglect?

Concepts from sociology, political economy, and human rights have had little penetration into traditional health sciences training (124). In addition, there are numerous barriers to addressing issues such as social inequalities and social determinants of health in professional training. Muntaner (124) suggests that the prevailing biomedical paradigms, with their emphases on individualist approaches to health, combine with the class biases of both health instructors and their middle- or upper-class students to make focus on the political and economic factors driving health inequalities problematic.

Institutional Mandates and Political Issues. Why do health care and public health organizations downplay the social determinants of health? Is it because these agencies are funded by governments that are responsible for policy decisions that either strengthen or weaken social determinants of health? Given this relationship, how can public health act objectively on the broader determinants of health (42)? Some public health units in Canada and the United States have taken a broader approach toward maintaining and promoting the health of citizens (141, 142). At this time, however, we know very little of how these units have been able to provide such exceptions to the rule.

Political Economy Perspectives—Identifying the Political and Economic Context

While sociological approaches direct attention to broader political and economic structures that influence health, it is the field of political economy that is devoted to exploring these issues (143). This is an underdeveloped area with relatively few active health researchers (19, 144). Particularly important issues are power relationships, government ideology and public policy, and welfare state typologies. Also of increasing interest is the role played by economic globalization and trade agreements (145–147).

Power Relationships. Hofrichter's recent volume (89) contains an excellent overview of how issues of class, gender, and race influence health in developed nations. In his analyses, class, gender, and race are not simply indicators of individuals' characteristics but markers of the power these individuals have within society. It has also been pointed out that power relationships within a society are more equalized when labor unions and the "left" have more influence (26, 56, 148). In developed nations, those who are members of unions have higher incomes, a crucial determinant of health (102). Union density is also an important determinant of public policies that support population health. One way in which power is more equally distributed is through adoption of proportional representation in elections (122). Nations in which this is established show greater commitment to income distribution and provision of public services to their citizens (3, 4, 149).

Government Ideology and Public Policy. Coburn has pointed out how social determinants of health such as income and income inequality, as well as housing, food security, and health and social services, are heavily influenced by the ideology of the government of the day (144, 150, 151). He considers how neoliberalism, through its emphasis on the market as the arbiter of societal values and resource allocations, serves to support regressive political and economic forces. Implementing neoliberal economic policies fosters income and wealth inequalities, weakens social infrastructure, dissipates social cohesion, and threatens civil society. These issues have been the focus of Navarro and colleagues (6–8).

Elsewhere I have noted how one aspect of neoliberal ideology—the emphasis on reducing taxes—directly benefits the wealthy and translates into increasing income inequality and weakening of communal institutions that support citizens (152). This raises questions such as, What are the best means of shaping health policy? Should we focus on presenting research evidence to effect policy change or should we focus on political activity to create more progressive public policy (9, 153, 154)?

Welfare States and Their Variants. Esping-Andersen (3, 4) has identified what he calls the "three worlds of welfare capitalism": social democratic, conservative, and liberal. The social democratic welfare states (Finland, Sweden, Denmark, and Norway) emphasize universal welfare rights and provide generous benefit entitlements. The conservative welfare states (France, Germany, Spain, and Italy) also offer generous benefits but provide these based on employment status, with emphasis on male primary bread-winners. The liberal Anglo-Saxon economies (United Kingdom, United States, Canada, and Ireland) provide only modest benefits and step in only when the market fails to provide adequate supports. These liberal states depend on means-tested benefits targeted to the least well-off. There are many differences in public policy among these types.

Little consideration, then, is given in the population health literature to the forces that drive public policy (108). A beginning was made in the Canadian volume on social determinants of health, in which employment insecurity, working conditions, and early childhood education were placed within a welfare state analysis (100, 102, 105). Political economy approaches that focus on how the market and economics, political ideology, and other dynamics are integrally related and affect the nature of public policy offer a fruitful path. Government approaches to public policy are not preordained or natural processes, but are socially determined by politics and the power of groups that strive to influence decisions by governments to achieve policy objectives.

Spending on health and social spending can be politically contentious, yet in the end determine the health and well-being of citizens (155). Moreover, political economy approaches can identify interests that benefit from low social spending and how these interests operate through the political system to affect public decision-making on these issues. Political ideology profoundly influences income redistribution and the policies that affect income, social, and health inequalities (26, 56, 122, 156).

Health Effects of Globalization and Trade Agreements. Teeple (146) sees increasing income and wealth inequalities and the weakening of infrastructure in Canada and elsewhere as resulting from the ascendance of concentrated monopoly capitalism and corporate globalization. Transnational corporations apply their increasing power to oppose aspects of the welfare state so as to reduce labor costs. With such a power shift, business has less need to develop political compromises with labor and governments. Important questions raised by this perspective include, To what extent is the weakening of the welfare state inevitable? And what is the role of trade agreements in the weakening of the welfare state?

Human Rights Perspectives—Providing the Legal and Moral Justifications for Action

Canada and other developed nations are signatories to many international covenants that guarantee the provision of citizen supports that show commonalities with the social determinants of health (157). The *Universal Declaration on Human Rights* (158), for instance, outlines an adequate standard of living, including food, clothing, housing, and medical care and necessary social services, and basic security when adversity strikes, as basic human rights. The 1995 *Commitments of the U.N. World Summit for Social Development* (159) identifies similar commitments. Nongovermental organizations consistently report that many developed nations do not live up to their commitments to these international agreements (160). Indeed, conditions either continue to deteriorate or stagnate in many nations, yet governments do little in response to these negative reports.

Issues of health equity and the role played by social determinants of health that lead to such inequity are rooted in concepts of social justice (161). The term "health inequities" implies something is unfair or wrong when profound health differences exist among citizens. Such explicit statements introduce the idea that social justice is important in considering the roots of differences in health. First, social justice raises issues of equitable distribution of collective goods, institutional resources (such as social wealth), and life opportunities. Second, social justice calls for the empowerment of citizens and the establishment of transparent democratic structures to promote social goals (89).

The focus on justice and fairness in discussions of health, illness, and health care is an important contribution of the human rights approach. What role can moral, legal, and human rights arguments play in promoting the quality of the social determinants of health? How useful can these arguments be in provoking the public to advocate for more public policies that support health (157, 162)?

WHAT AREAS OF INQUIRY ARE NEEDED?

In addition to the questions raised in the sections above, there are some key areas that could benefit from inquiry that uses a social determinants of health framework.

Recovery from illness and rehabilitation. While it is well established that social determinants of health are excellent predictors of illness and diseases, we know little about how these same health determinants lead to recovery from illness.

Concept representation and the media. There has been virtually no penetration into the media of the social determinants of health (163). The overwhelming proportion of coverage in the print media, radio, and television around the planet is on biomedical research and behavioral risk factors (164, 165). We need to understand why the press is so limited in its health-related coverage. What barriers prevent reporters' understanding of, and reporting on, the social determinants of health?

Public understanding and action. Given the media's coverage of health, we should not be surprised to find that the public has little understanding of the social determinants of health (166). A study in 2001 asked 601 residents of Hamilton, Ontario, to identify up to seven causes of heart disease (167). In response to this open-ended question, only one respondent of 601—and only one of more than 4,200 potential responses—identified poverty as a cause of heart disease. A more recent Canadian report found little public awareness of the importance of income, early childhood development, and social environments in influencing health (168). Yet, polls consistently show that many if not most citizens in Canada and the United Kingdom, for example, favor reductions in poverty and income inequality, reductions in homelessness and food bank use, and increased program spending to improve people's quality of life (61, 169). Nevertheless, governments act in the opposite manner—reducing spending and reducing taxes (170, 171). How can citizens' values be applied to influence government policy-making?

Links between evidence and policy (in)action. Lavis (172) concludes that social determinants of health continue to be a marginalized approach to developing public policy in Canada. Recent analyses indicate that the concept of social determinants of health is absolutely marginalized in the United States (41). While there is some policymaker awareness of its importance, governments do not institute health-promoting social policies. Is the creation of healthy public policy primarily about health? Or is healthy public policy primarily about politics?

CONCLUSION

The social determinants of health approach offers a window into the microlevel processes by which social structures lead to individual health or illness, and offers the opportunity to consider the macrolevel processes by which power relationships and political ideology shape the quality of these social structures. I have organized our understandings—and our knowledge gaps—within the framework of disciplinary approaches and, in the case of human rights as an ethical problem, to the study of health and illness. The epidemiological approach directs attention to the pathways that link social structures to health and illness. Some social epidemiologists have looked at social structures and the political, economic, and social forces that shape these structures. Yet much remains to be done.

The sociological tradition directs attention to how explanations of and actions to address the causes and treatment of disease and illness come about. The political economy perspective asks questions about power and politics and how economics shapes the organization of society and the distribution of wealth and other resources. Finally, the human rights approach asks about the values that determine the type of society we live in and its commitments to providing citizens with the resources necessary to realize health, well-being, and full human potential. The social determinants of health approach is a rich area for inquiry. It also offers questions from which answers can be used to support political and social action to improve health, health care services, and society in general.

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Direct reprint requests to:

Dr. Dennis Raphael
School of Health Policy and Management
York University
4700 Keele Street
Toronto, Ontario M3J 1P3

e-mail: draphael@yorku.ca