Integrating Social Theory Into Public Health Practice

The innovative practice that resulted from the Ottawa Charter challenges public health knowledge about programming and evaluation. Specifically, there is a need to formulate program theory that embraces social determinants of health and local actors' mobilization for social change. Likewise, it is imperative to develop a theory of evaluation that fosters reflexive understanding of public health programs engaged in social change.

We believe advances in contemporary social theory that are founded on a critique of modernity and that articulate a coherent theory of practice should be considered when addressing these critical challenges. (*Am J Public Health.* 2005; 95:591–595. doi:10.2105/AJPH.2004.048017)

Louise Potvin, PhD, Sylvie Gendron, PhD, Angèle Bilodeau, PhD, and Patrick Chabot, PhD

DURING THE LAST DECADE, there has been an acute need for theoretical innovation in the fields of population and public health. Although the crucial question about the social determinants of health have led to significant theoretical contributions,[1] the innovative public health practices prompted by the Ottawa Charter for Health Promotion are still undertheorized, because they cannot be appraised through the traditional scientific bases of public health.[2] For example, if we accept that health is a resource at the core of everyday life,[3] we need conceptual tools that allow us to have an in-depth understanding of everyday life.

Subsequently, public health action has evolved from a biomedical orientation to a social orientation that assumes the involvement of multiple actors. Public health practice is largely supported by progressive policy, and it has shifted toward the development of alliances with an increasingly broad range of social actors. This is seen in the growing number of reports about overlapping actions and integrative programs.[4]

Because the theoretical foundations of public health have been based, since the beginning of the 20th century, largely on behavioral psychology, biomedical science, and public administration,[5] our capacity to understand and form theories about the complex interactions involved in these programs is limited. This, in turn, constrains our ability to further direct innovation and transform practice. We argue for a renewal of the knowledge base that drives public health practice so that developments in contemporary social theory can be integrated into public health practice.

INCOMPLETE KNOWLEDGE BASE FOR PUBLIC HEALTH POLICY AND PRACTICE

The Ottawa Charter has called for and promoted new forms of intervention that are guided by values of empowerment and community participation and that imply health is produced into the core of social life—how people live and organize their lives because of their social conditions.[6,7] Unfortunately, these values are all too often juxtaposed on expert models within which standardized activities are prescribed as a set of bodily or behavioral practices that reduce the prevalence of individual risk factors among the population. This leaves practitioners with very few relevant instruments and models for implementing the basic principles of the Ottawa Charter[8] and the evolving policy discourse. In fact, there is little theory for invoking, and reflecting upon, the social and relational dimensions of public health practice.

Innovative public health practice is increasingly understood to be the permeation of health issues into the social realm, where a growing number of situations traditionally regarded as social problems are reinterpreted within a health framework. Illicit drug use is an example where, in many jurisdictions, policy is shifting from a socio-judicial approach to a harm-reduction model that includes access to psychosocial rehabilitation services and low-threshold drug substitution treatments in supervised injection sites. Another example is the intense support intervention through front-line health services involvement in integrative social-development actions that responds to the needs of vulnerable young children and their adolescent parents. In our opinion, this "healthification" of social issues,[9] which justifies the overlapping actions for social change repeatedly called for by current public health policy, is an important way of incorporating contemporary social theory into the theoretical foundations of public health practice.

We defined contemporary social theory by referring to 2 large bodies of social sciences work undertaken since the 1960s that reflect on and critique the conditions of modernity. The theories in the first body of work reject both the determinism of a purely structuralist perspective and the idealism of a entirely voluntaryist conception of human action. Contemporary social theorists such as Pierre Bourdieu and Anthony Giddens believe human subjects are actors whose agency—or capacity to act deliberately or to exercise willful power—is constrained by—yet reproduces and transforms—the social structure through a dialectical relationship. The second body of work includes theories that explore and critique the role of reason and rationality in the regulation of human practice and

in contemporary society, such as the work of Jurgen Habermas, Michel Foucault, Ulrich Beck, Anthony Giddens, Michel Callon, Bruno Latour, and others.

Therefore, our underlying assumptions are (1) there is a conflict between the innovative practices emerging in public health and public health's scientific base, and (2) we must integrate relevant social theory into the theoretical foundations that inform—and potentially transform—contemporary public health practice. We present 2 challenges to this integration of social theory that refer to the interrelated—and fundamental—processes of public health programming and evaluation. We also present some proposals taken from advances in contemporary social theory that set the stage for a reconsideration of both the nature of public health practice and the epistemological position from which to evaluate and further develop public health practice.

TWO CURRENT CHALLENGES FOR PUBLIC HEALTH

Public health interventions are often grouped into a limited number of core functions. In many jurisdictions, these functions are related to health protection; mortality, morbidity, and risk factor surveillance; disease prevention; and health promotion. Cutting across these functions are the 2 fundamental and interrelated processes of programming and evaluation. They are the prism through which we have identified 2 crucial challenges for contemporary public health theory and practice: (1) formulating program theory that takes into account the social determinants of health and the mobilization of diverse actors for social change, and (2) developing evaluation theory that fosters a reflexive understanding of the integrative public health programs engaged in social change. Although these challenges have been independently addressed by other researchers,[10,11] it is our contention that they are closely interrelated and that, taken together, they critically call into question the bureaucratic/structural model upon which public health practice has been traditionally based.

The bureaucratic/structural model is a decontextualized interpretation of scientific knowledge by experts, e.g., pharmaceutical drug development models,[12] and a bureaucratic, vertical, top-down approach to programming and evaluation.[13] We maintain that this approach does not provide adequate conceptual instruments to reflect upon and reproduce the innovative practices that are being implemented by the most innovative public health practitioners when addressing the social determinants of health. We need programs that build on broad partnerships in which various types of knowledge are brought together to illuminate an issue, i.e., relevant actors must be mobilized to create local solutions. A prerequisite for such programs is horizontal relationships between the various partners through a democratic participatory process.

Formulating a Program Theory

The first challenge is to formulate program theory that takes into account the social determinants of health and the mobilization of diverse actors for social change. Social epidemiology studies have shown that health and diseases are affected not only by the conditions in which individuals live but also by societal organization.[14] These forms of organization, which are reflected in the different social strata that shape our societies, mold our connection with the world and have an effect on health. Socioeconomic factors,[15,16] race/ethnicity,[17] gender,[18] and stages of life[19] reflect our social stratification. This stratification is associated with the social determinants of health that, according to Link and Pheelan,[20] represent fundamental causes of population health. Social organization, as defined by relationships created among and between various strata, thus forms the framework upon which health and disease phenomena develop.

Numerous studies have shown the existence of spatial configurations in the distribution of health and disease, which suggests that living environments vary according to the degree they facilitate or impede population health.[21] However, the abundance of results that establish an empirical link between health and place is not reflected on a conceptual level.[10] Although we agree with Macintyre's call to better conceptualize the social aspects of health, we further argue that such theoretical knowledge must be linked with, and even emerge from, the various social change programs that are experimented with by numerous organizations when attempting to address health inequalities. It is this form of public health programming, in which health penetrates the social realm, that requires strong theories to support further innovative public health practice.

There is increasing support for social-change programs at all levels of the health system's decisionmaking bodies, when a discourse promoting practice that fosters integrative approaches on the basis of partnerships among all relevant actors is articulated. For example, the World Health Organization has made intersectoral action a key intervention strategy.[22] In a recent document, Health Canada stated that an integrated health promotion and prevention strategy should employ a "setting approach" on the basis of intersectoral partnerships that bring together a multiplicity of actors from both social institutions and civil society.[23] Similarly, Sweden's "Health on Equal Terms" policy is the result of an exercise that involved all sectors of society.[24]

In response to these and other repeated recommendations for developing and implementing social-change programs on the basis of broad reciprocal partnerships, many examples of innovative practices are appearing in the literature. In essence, practitioners develop alliances and share resources with concerned groups and create local solutions. Such practices are not just a matter of bringing individuals together under the umbrella of a program planned and implemented by public health professionals. The purpose is to establish enduring partnerships with all actors in a community who are concerned with issues that affect health.[25] Moreover, these projects cover a vast spectrum of the social and life sciences and promote the exchange of relevant knowledge between both professional and lay individuals. Such broad dialogues, carried out in a nonhierarchical mode, can create knowledge essential in which readily available solutions cannot be implemented.[26] These interventions developed with—

rather than applied to—communities call for a change in program planning paradigms. A generalized paradigm shift would help move planning and partnership practices from the mere creation of consultative processes to coappropriation of programs by, and empowerment of, mobilized actors from the community.

Numerous innovative interventions reported in the literature have illustrated how the evolution of practice opens up new directions for theoretical work that we think ought to be grounded in emergent practices. Unfortunately, current thinking about public health program development, as exemplified by models such as PRECEDE/PROCEED, fosters a rationality that gives priority to the identification of public health priorities through objective means. In the case of PRECEDE/PROCEED [27] those objective means are a sequence of social, epidemiological, and educational diagnostics established at the beginning of the planning process. Thus, the first challenge facing public health is to organize and integrate knowledge about social determinants of health and innovative partnership practices to support the development of theory that is suitable for social-change programs in public health.

Developing a Theory About Evaluation

The second challenge is to develop a theory about evaluation that fosters reflexive understanding of public health programs engaged in social change. There is a lively debate about what constitutes appropriate approaches and methodologies for evaluating and drawing valid scientific knowledge from the innovative public health practices already described.[28,29] We are very familiar with the abundant literature on evidence-based practices and the numerous attempts to adapt this discourse to the evaluation of new public health practices.[30] However, we believe that the parameters defining opposite opinions in this debate do not allow for the proposal of proper conceptual and methodological tools.

The 2 extreme positions in this debate illustrate the age-old opposition that has existed between positive science and relativist approaches to knowledge. The former provides generalizable and context-free results that, in principle, allow the elaboration of evidence-based programs to solve objectively defined problems; the latter proposes a contextualized interpretation on the basis of a consensus that brings together the points of view of all relevant actors and thus bears strong potential to improve local practices. We believe that presenting the dilemma around these 2 paradigms only serves to create an impasse.[31] In our view, consensus is not possible or desirable, because it masks power struggles and it restricts the development of innovative solutions through informed dialogue and compromise. Moreover, professionals and practitioners who try to implement social-change programs rarely find conceptual tools pertinent to their practice in the evidence-based discourse.[32] They rightly argue that generalizable estimates of effects constitute only 1 of many indicators that reflect on their practice. These indicators are not very useful because they are synthetic, distal, and do not provide information on the dynamics of change. Additionally, when used at the exclusion of other types of indicators, they may be blind to some of the other, and possibly more effective, mechanisms triggered by the program. As we will show, theoretical propositions of contemporary social theory justify this unease. The problem is not that practitioners have understandably become somewhat reluctant to participate in evaluation; rather, it is that the perceived relevance of such an exercise is low. Thus, the current challenge is to develop a relevant framework that will foster a systematic reflection of practices involved in social-change programs so that the programs can be replicated and refined. To do this, we must go beyond the parameters of the "paradigmatic" discourse.

THEORETICAL MARKERS FOR ADVANCING PUBLIC HEALTH PRACTICE

Our examination of the post–Ottawa Charter public health practice challenges mirrors 3 theoretical bodies of work by contemporary social theorists that reflect on the conditions of modernity: (1) the unintended consequences inherent to human activity in complex systems, (2) the critique of the bureaucratic/structural planning model, and (3) a reflexive epistemology to overcome the objectivist/subjectivist dilemma.

The first marker stems from the work of German sociologist Ulrich Beck, who hypothesized that risk is a by-product of techno-scientific activity that has been directing developments in most fields of human action. Beck argues that because risk is situated in the future and in the realm of the possible, rather than that of the empirical, positive sciences are blind to their existence. Consequently, techno-scientific solutions are bound to induce unforeseeable consequences that institutional science is incapable of anticipating, thus laying the foundations for more complex problems to materialize in the future.[33]

More than 30 years ago, Illich[34] identified varied iatrogenic unintended effects inherent to techno-scientific medical activity. In the field of public health, improving population health indicators goes together with the undesirable effect of increasing health inequalities. In Western societies, significant efforts to construct and consolidate modern health systems, including public health, during the last decades are associated with spectacular gains for a wide range of health indicators.[35] A growing number of studies, however, show that these gains have not benefited everyone equally, which suggests that an increase in health inequalities is an unintended consequence of such improvements. For example, today the number of smokers is 4 times higher among individuals who have not completed high school than among university graduates[36]; infectious diseases that were thought to be under control, such as tuberculosis, have a higher incidence among poor neighborhoods in large North American cities[37]; and, studies have shown that even in systems where universal access is guaranteed, health service utilization[38] and survival rates among individuals from more privileged socioeconomic classes are higher than among persons from disadvantaged groups.[39] The differences observed in the results of health interventions according to social class suggest that our interventions might contribute to widening the gap in morbidity

and mortality between the rich and the poor.[40,41]

The second marker is the critique of the bureaucratic/structural model at the root of vertical programs designed in top-down systems, which is founded on the administrative systems described by Max Weber.[42] These systems can be recognized by the preponderance of institutionalized rules and procedures that map out courses of action. They leave little room for contextual elements and concerns or any contribution of noninstitutional actors. Their structure is such that power and decisions are based on expertise and authority. In this model, program development is presented as a strict sequence of hierarchical steps that proceed from planning to implementation to evaluation and, eventually, to sustainability/institutionalization on the basis of results from the previous steps.[27] The decision to proceed to the next step is conceived as a discrete event that is justified by evidence-based data.

Recent publications have shed light on a number of shortcomings to this model. Empirical observations have shown that several events that characterize program implementation and sustainability occur concurrently.[43] A literature review of program longevity shows that although evaluation results contribute to decisions about the future of programs, the processes that lead to these decisions begin well before evaluation results are available and are based on much more comprehensive information.[13] Several programs can readily be conceptualized as representative of another model. In opposition to an essentially rules-and-procedures model, this other model implies dynamic configurations that are founded on strategic objectives defined by all relevant actors, whose goals and purposes also depend on context, knowledge, and interactions with other systems of action.[8]

The third marker is derived from the theoretical work of Pierre Bourdieu, who hypothesized that a theory of practice can only be suitably developed by transcending the opposition between subjective and objective knowledge and by situating practice itself as the very subject of research. According to Bourdieu, an objective stance assumes that the nature of the social world is given and predetermined and, therefore, the representations that shape our practices can only be elaborated at the expense of a rupture between rationality and experiential knowledge.[44] Otherwise, a subjective stance prevents the consideration of the objective relational systems that shape our practices. To get beyond the inevitable character of such a dichotomy between subjective and objective approaches to knowledge of practices, Bourdieu suggests a reflexive approach, where the object of knowledge is not limited to a system of objective relationships between events, which is the case in program logic models that are based on scientific knowledge.

For Bourdieu, knowledge of practice, or practical knowledge, can only be reflexive and dialogic. This means that practical knowledge can only result from the confrontation between the objective systems of relationships that structure practice and the subjective experience of social actors whose practices reproduce and transform the structure. The results of this confrontation are then introduced into the knowledge-production process itself. Thus, the reflexive knowledge that is required for planning, implementing, and evaluating social-change programs also includes a dialectical relationship between these 3 elements: an objective representation of the social world, a subjective system of knowledge, and the structural conditions in which they take place and that tend to reproduce them.[44,45] A reflexive approach to knowledge requires a double movement of objectification of the social world and integration of objective knowledge into the structuration of the subjective experience. Therefore, a reflexive action is always an action that is perpetually moving to position itself in space and time so that no point of view is completely internal (subjectivist approach) or external (objectivist approach). Hence, any reflexive practice is situated within a space that transforms itself continually with social interactions. Such dynamic processes of program implementation and evaluation have been described in relationship with participatory approaches to interventions that are derived from broad partnerships.[8]

CONCLUSION

The challenges of elaborating program and evaluation theory that takes social change into account highlight the limits of practice models that are based on dissemination of expert knowledge to practitioners. Because these models leave little room for local actors' knowledge in the face of standardized expert solutions, they do not explain the mechanisms through which programs are adapted and transformed and then alter the local environment. To resolve the challenges associated with emergent and innovative practice, public health must renew its own theoretical foundations. In fact, because it presents programs as objects that are more or less independent of their contexts, and because it overshadows the network of actors who uphold them, the scientific basis that underlies public health ignores a substantial part of the dynamic and social nature of public health programs, i.e., their capacity to adapt, innovate, and propose pertinent, effective, and transformative actions in response to local dilemmas.

We maintain that the knowledge base that should enable the reproduction and transformation of practice in alignment with the principles of the Ottawa Charter and the emerging progressive policy is the result of translating a dialectical link between these innovative programs and their evaluation. Public health programs cannot be reduced to a hierarchical sequence of procedures; rather, they function as systems of action designed to transform social reality. As such, we believe that the knowledge base of public health should be situated more coherently within a theoretical perspective that seeks to understand and guide our contemporary world. It is time to consider social theory as a way of reconciling public health practitioners, decisionmakers, and researchers. ■

About the Authors

Louise Potvin, Sylvie Gendron, and Angèle Bilodeau are with the Lea-Roback Centre for Research on Social Health Inequalities of Montreal, Quebec. Louise Potvin and Angèle Bilodeau also are with the Department of Social and Preventive Medicine, University of Montreal. Angèle Bilodeau is also with the Public Health Directorate, Montreal Agency for Health and Social Services. Sylvie Gendron is also with the

School of Nursing, University of Montreal. Patrick Chabot is with the Groupe de Recherché sur les Aspects Sociaux de la Prévention, University of Montreal.

Requests for reprints should be sent to Louise Potvin, PhD, Social and Preventive Medicine, University of Montreal, PO Box 6128, Station Centre-ville, Montréal, QC H3C 3J7 Canada (e-mail: louise.potvin@umontreal.ca).

This article was accepted November 13, 2004.

Contributors

L. Potvin originated the content and wrote the article. S. Gendron and A. Bilodeau contributed to the development of the content, provided public health practice insight, and assisted with rewriting the final draft. S. Gendron also was responsible for final language editing. P. Chabot contributed to the original development of the bureaucratic model of programming critique.

Acknowledgments

Louise Potvin holds the Chair on Community Approaches and Health Inequalities funded by the Canadian Health Services Research Foundation and the Canadian Institute for Health Research (CHSRF-CIHR #CPI-022605). Sylvie Gendron was funded by a joint Canadian Institute for Health Research, Social Sciences and Humanities Research Council, and National Health Research and Development Program postdoctoral fellowship award (CIHR/SSHRC/NHRDP #765-2000-0092).

Human Participant Protection

No protocol approval was needed for this study.

References

1. Syme SL, Frohlich KL. The contribution of social epidemiology: ten new books. *Epidemiol.* 2001;13:110–112.

2. Nutbeam D. Getting evidence into policy and practice to address health inequalities. *Health Promot Int.* 2004;19:137–140.

3. Breslow L. From disease prevention to health promotion. *JAMA.* 1999;281:1030–1033.

4. Minkler M. Personal responsibility for health? A review of the arguments and evidence at the century's end. *Health Educ Behav.* 1999;26:121–140.

5. Porter D. *Health, Civilization and the State. A History of Public Health form Ancient to Modern Times.* London, UK: Routledge; 1999.

6. Rootman I, Goodstadt M, Potvin L, Springett J. A framework for health promotion evaluation. In: Rootman I, Goodstadt M, Hyndman B et al., eds. *Evaluation in Health Promotion. Principles and Perspectives.* Copenhague, Denmark: WHO regional publications, European series No. 92; 2001:7–38.

7. Kickbusch I. Introduction: Tell me a story. In: Pederson A, O'Neill M, Rootman I, eds. *Health Promotion in Canada. Provincial, National, and International Perspectives* Toronto, Ontario, Canada: WB Saunders; 1994:8–17.

8. Potvin L, Cargo M, McComber A, Delormier T, Macaulay AC. Implementing participatory intervention and research in communities: lessons from the Kahnawake Schools Diabetes Prevention Project. *Soc Sci Med.* 2003;56:1295–1305.

9. Lupton D. *The Imperative of Health. Public Health and the Regulated Body.* London, UK: Sage; 1995.

10. Macintyre S, Ellaway A, Cummins S. Place effects on health: how can we conceptualise, operationalise and measure them. *Soc Sci Med.* 2002;55:125–139.

11. McQueen DV. Strengthening the evidence base for health promotion. *Health Promot Int.* 2001;11:261–268.

12. Flay BR. Efficacy and effectiveness trials (and other phases of research) in the development of health promotion programs. *Prev Med.* 1986;15:451–474.

13. Pluye P, Potvin L, Denis J-L. Making public health programs last: conceptualizing sustainability. *Eval Program Plann.* 2004:27;121–133.

14. Berkman LF, Kawachi I. *Social Epidemiology.* New York, NY: Oxford University Press; 2000.

15. Wilkinson RG. *Unhealthy Society. The Afflictions of Inequality.* London, UK: Routledge; 1996.

16. Lynch J, Kaplan G. Socioeconomic position. In: Berkman LF, Kawachi I, eds. *Social Epidemiology.* New York, NY: Oxford University Press; 2000:13–35.

17. Krieger N. Discrimination and health. In: Berkman LF, Kawachi I, eds. *Social Epidemiology.* New York, NY: Oxford University Press; 2000:36–75.

18. Krieger N, Rowley D, Hermann AA, Avery B, Phillips MT. Racism, sexism, and social class: implications for studies of health, disease, and well being. *Am J Prev Med.* 1993; 9 (suppl 6):82–122.

19. Hertzman C, Frank J, Evans RG. Heterogeneities in health status and the determinants of population health. In: Evans RG, Barer ML, Marmor TR, eds. *Why Are Some People Healthy and Others Not. The Determinants of Health in Populations.* New York, NY: Aldine de Gruyter; 1993:67–92.

20. Link B, Phelan J. Social conditions as fundamental causes of disease. *J Health Soc Behav.* 1995;(extra issue):80–94.

21. Frohlich KL, Potvin L. Health promotion through the lense of population health: toward a salutogenic setting. *Crit Public Health.* 1999;9:211–222.

22. Kreisel W, von Schirnding Y. Intersectoral action for health: a cornerstone for health for all in the 21st century. *World Health Statistics Q.* 1998;51:75–78.

23. Health Canada. The population health template: Key elements and actions that define the population health approach. Available at: http://www.phac-aspc.gc.ca/ph-sp/phdd/pdf/discussion_paper.pdf. Accessed November 21, 2004.

24. Swedish National Committee for Public Health. Health on equal terms—national goals for public health. *Scand J Public Health.* 2001;57(suppl):1–68.

25. Roussos ST, Fawcett SB. A review of collaborative partnerships as a strategy for improving community health. *Annu Rev Public Health.* 2000;21:369–402.

26. Callon M, Lascoumes P, Barthe Y. *Agir dans un Monde Incertain. Essai sur la Démocratie Technique.* Paris, France: Seuil; 2001.

27. Green LW, Kreuter M. *Health Promotion Planning: An Educational and Ecological Approach.* Mountain View, Calif: Mayfield; 1999.

28. McQueen DV. Strengthening the evidence base for health promotion. *Health Promot Int.* 2001;11:261–268.

29. McQueen DV. The evidence debate. *J Epidemiol Community Health.* 2002;56:83–84.

30. Macintyre S, Chalmers I, Horton R, Smith R. Using evidence to inform health policy: a case study. *BMJ.* 2001;322:222–225.

31. Gendron S. Transformative alliance between qualitative and quantitative approaches in health promotion. In: Rootman I, Goodstadt M, Hyndman B et al., eds. *Evaluation in Health Promotion. Principles and perspectives.* Copenhague, Denmark: WHO regional publications. European series, No. 92; 2001:107–121.

32. Chamberland C, Bilodeau A. Identité et légitimité de la promotion de la santé: la nécessaire conjugaison des paradigmes de recherché. *Rupture, revue transdisciplinaire en santé.* 2000;7:138–149.

33. Beck U. *Risk Society: Towards a New Modernity.* London, UK: Sage; 1992.

34. Illich I. *Limits to Medicine: Medical Nemesis, the Expropriation of Health.* London, UK: McClelland and Stewart; 1975.

35. Detels R, Breslow L. Current scope and concerns in public health. In: Detels R, McEwen J, Beaglehole R, Tanaka H, eds. *Oxford Textbook of Public Health.* 4th ed, vol 1. *The Scope of Public Health.* Oxford, UK: Oxford University Press; 2002:3–20.

36. Choinière R, Lafontaine P, Edwards AC. Distribution of cardiovascular disease risk factors by socioeconomic status among Canadian adults. *Can Med Assoc J.* 2001;162 (suppl. 9):S13–S24.

37. Heymann D. Infectious agents. In: Detels R, McEwen J, Beaglehole R, Tanaka H, eds. *Oxford Textbook of Public Health.* 4th ed, vol 1. *The Scope of Public Health.* Oxford, UK: Oxford University Press; 2002:171–194.

38. Gray RE, Goel V, Fitch MI, et al. Utilization of professional supportive care services by women with breast cancer. *Breast Cancer Res Treatment.* 2000;64:253–258.

39. Goel, V. Socioeconomic status and cancer incidence and survival. *Cancer Prev Control.* 1998;2:211–212.

40. Kaplan GA, Everson SA, Lynch JW. The contribution of social and behavioral research to an understanding of the distribution of disease: a multilevel approach. In: Smedley BD, Syme SL, eds. *Promoting Health. Intervention Strategies from Social and Behavioral Research.* Washington, DC: Institute of Medicine; 2000:37–80.

41. Kaplan GA. Economic policy is health policy: findings from the study of income, socioeconomic status and health. In: Auerbach BK, Krimgold JA, eds. *Income, Socioeconomic Status, and Health: Exploring the Relationships.* Washington, DC: National Policy Association; 2001:137–149.

42. Weber, M. *Economy and Society: An Outline of Interpretive Sociology.* Los Angeles, Calif: University of California Press; 1978.

43. Pluye P, Potvin L, Denis J-L, Pelletier J, Mannoni C. Program sustainability begins with the first events. *Health Promot Int.* 2004 ;19 :489–500.

44. Bourdieu P. *Outline of a Theory of Practice.* Cambridge, UK: Cambridge University Press; 1977.

45. Bourdieu P. *Science of Science and Reflexivity.* Chicago, Ill: University of Chicago Press; 2004.