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HEALTH PROMOTION AS A PUBLIC HEALTH STRATEGY FOR THE 1990s[1]

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One image of health promotion views lean and lonely people grimly pursuing *health-directed* behavior to reduce their risks of premature death, disease, and even aging. Important behavior as such goal-oriented activity may be for that small minority of individuals, and much as public health can point with pride to its development in recent years, it is but a small piece of the more pervasive and problematic web of *health-related* behavior of individuals, as well as whole families, groups, communities, and organizations. This more pervasive behavior has to do with patterns and conditions of living, eating, playing, working, and just plain loafing, most of which lie outside the realm of the health sector and are not consciously health directed. Here lies the role of health promotion as a public health strategy for the 1990s.

HEALTH PROMOTION'S RECENT DEVELOPMENT

Health education in public health and medical care has adhered, as a matter of professional ethics and principles of learning, to approaches that involved people actively in the process of setting their own goals and priorities for behavior related to health (34, 35). This insistence on participation and voluntary change in behavior has achieved notable success with conscious health-directed behavior. Health education can be made to work effectively and humanely where people are clearly oriented to solve a discrete and

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immediate behavioral or health problem of importance to them. Patient education and self-care education (where people are motivated to cure or control a disease), immunization programs (where people wish to avoid an imminent threat), screening programs (where people seek a specific diagnosis or reassurance), smoking cessation programs (where people want to quit), family planning programs (where people want to prevent or delay a pregnancy), and other highly targeted programs have been advanced by the application of the educational approach to health behavior (9, 29, 34).

Attention shifted in 1979 with *The Surgeon General's Report on Health Promotion and Disease Prevention* (70), which challenged the American public health community to examine more critically the routine, usually unpremeditated, health-related behaviors accounting for over 50% of the leading causes of death, and the policies supporting such behavior. Among these, the most critical were substance misuse and addiction (including tobacco and alcohol), poor diet, sedentary behavior, and stress-related behaviors (including suicide, violence, and reckless behavior). Sexual behavior was considered important in relation to teenage pregnancy and sexually transmitted diseases, but took on much greater importance as a cause of death with the emergence of the AIDS epidemic.

The complexity of these proposed targets of health promotion policies was signaled by the language of the critiques and debates that greeted the *Surgeon General's Report:* phrases like "individual *vs* social responsibility for health: (2), "facilitating individual behavior change" vs "broader, institutional and social change approaches to health promotion" (64), "behavioral" vs "ecological strategies" (57) "healthy people" vs "healthy cities and healthy policies" (16, 63), "blaming the victim" versus blaming "the manufacturers of illness" (3, 44, 55).

The debates surrounding these phrases often center on the sympathetic or pejorative uses of the word "lifestyle." As a target for health promotion policy and programs, lifestyle refers, for some, to the consciously chosen, personal behavior of individuals as it may relate to health. Others interpret lifestyle as a composite expression of the social and cultural circumstances that condition and constrain behavior, in addition to the personal decisions the individual might make in choosing one behavior over another (45, 69, 109). Both uses of the term acknowledge that lifestyle is a more enduring (some would say habitual) *pattern* of behavior than is often connoted by the term behavior or action.

The persistence or maintenance of behavior became an increasingly important dimension of health behavior as the chronic and degenerative diseases displaced acute, communicable diseases as the leading causes of morbidity and mortality. Where once a single act such as getting an immunization could provide a lifetime of protection against an infectious disease, now a lifetime of simple, seemingly harmless acts such as eating fried foods, smoking a few

cigarettes each day, and going to work in heavy traffic without seatbelts accounts for most of society's disease, injury, disability, and premature death. The dominant issue in behavior change now became "relapse prevention" (58).

Health education had demonstrated its success in the public health campaigns to change single, health-directed acts. But many of the policy makers and health officials of the 1970s and 1980s were not so confident that health education could bring about changes in the new public health targets, the more complex, lifetime habits and social circumstances associated with the term *lifestyle* (29). With such private and elusive targets as addictive behaviors and socially imbedded lifestyles, public health education could be expected to have a public health impact only if it joined other sectors and brought to bear multiple social forces, some of which would go beyond the traditional voluntary definition and most policy-makers' understanding of health education.

There was also the question of equity and social justice (3, 47, 57, 63, 66, 70, 101). As James Mason, then Director of the Centers for Disease Control (CDC) (now Assistant Secretary for Health), said a few years later:

> It is my observation that, up until now, most of the behavior changes we have promoted have involved the better-educated, upper-, and middle-class segments of our society. If health promotion is a good thing, it should be good for the whole society, not just that portion which is favorably predisposed. Unless we are able to reach all segments of the population, we will never meet the goals we have set for a national consciousness for wellness in America (59).

Public health education thus was challenged to provide leadership for an expanded public health policy of lifestyle priorities and objectives under the mantle of health promotion (9, 33, 46). Health promotion can be defined as the combination of educational and environmental supports for actions and conditions of living conducive to health. The "actions" or behavior in question may be those of individuals, groups, or communities, of policy makers, employers, teachers, or others whose actions control or influence the determinants of health. The purpose of health promotion is to enable people to gain greater control over the determinants of their own health (71). This control ideally resides with the individual when the determinants are ones over which he or she can exert personal control. However, regarding some aspects of the complex lifestyle issues, especially those that affect the health of others such as drunk driving, the control that people exercise must be through community decisions and actions (37, 41).

Community as the Center of Gravity for Health Promotion

The early criticisms of health promotion centered on the charge that it seemed to put too much weight on the individual. It could hardly be seen as a public

health strategy if it was driven entirely by personal choice and responsibility. Coupled with that concern was the evidence that the people who suffered most from the so-called lifestyle illnesses and causes of death were the least likely, given their conditions of living, to be motivated, able, or rewarded to make significant changes in their behavior. The opposite extreme, proposed by some critics, called for a national program of environmental and social policy that controlled the manufacturing of foods, mass media advertising, and other forces influencing health-related behavior. Such a program of centralized planning was fraught with ethical, constitutional, and feasibility problems (19, 27, 35, 37, 44, 45, 63). If the "victim-blaming" implicit in policies focused on individual behavior is unfair, the "system-blaming" implicit in some of the more glib social reform proposals offered as alternatives is unacceptable to large segments of society. A unified middle ground must be found if health promotion is to be viable policy (56, 82). The value-laden, culturally and ethnically defined nature of many of the lifestyle issues such as diet make them impossible to dictate uniformly from a distant central government, especially in pluralistic, democratic societies (46). The private nature of many of these practices, such as sexual and sedentary behavior, make them inaccessible to effective surveillance and regulation. The constitutional and civil rights of citizens protect some of the behaviors, such as the right to bear arms in the United States, or the right to sexual practices among consenting adults, or freedom of speech protecting pornography and advertising of unhealthful products. The state or provincial dominion of large federation or commonwealth governments such as those of Australia, Canada, and the United States limit the powers of central government in favor of state or provincial rights to police power in matters of health, and most of these powers are ceded to local governments.

In the final analysis, we hold that the most effective and proper center of gravity for health promotion is the community. State and national governments can formulate policies, provide leadership, allocate funding, and generate data for health promotion. At the other extreme, individuals can govern their own behavior and control the determinants of their own health up to a point, and should be allowed to do so. But the decisions on priorities and strategies for *social* change affecting the more complicated lifestyle issues can best be made collectively as close to the homes and workplaces of those affected as possible. This principle assures greater relevance and appropriateness of the programs to the people affected, and it offers greater opportunity for people to be actively engaged in the planning process themselves. The overwhelming weight of evidence from research and experience on the value of participation in learning and behavior indicates that people will be more committed to initiating and upholding those changes that they helped design or adapt to their own purposes and circumstances (35).

Community may be the town or county in sparsely populated areas, the school, worksite, or neighborhood in more populous metropolitan areas. It is, ideally, a level of collective decision-making appropriate to the urgency and magnitude of the problem, the cost and technical complexity of the solutions required, the culture and traditions of shared decision-making, and the sensitivity and consequences of the actions required of people after the decision is made. Once national policy settled on objectives for health promotion in countries such as Australia, Canada, the Netherlands, and the United States, the necessity of adapting those policies to the state or provincial and community levels became inescapable.

Countries adopting health promotion as policy have directed it largely at primary prevention through modification of lifestyle factors that account for the largest numbers of deaths. These factors include patterns of food consumption, the misuse of potentially harmful substances, sedentary modes of work and recreation, and reckless, violent, or abusive interaction with others. In various combinations, these lifestyle patterns constitute the major risk factors for heart disease, cancer, and injury. These are the three leading causes of death and disability in most western countries, accounting for over 80% of all mortality, and they are emerging as major causes of death in developing countries (53).

In drafting the objectives for the year 2000, the public health role for health promotion has been extended beyond this focus on the leading causes of death (100). The criticisms of the focus on mortality of the 1990 objectives call into question the efficacy and desirability of extending life expectancy relative to the value of delaying the onset of morbidity and extending functional ability into old age (26, 39).

THE RENAISSANCE OF HEALTH PROMOTION

The "epidemiological revolution" of the Nineteenth Century is usually traced to the events surrounding the development of the germ theory of disease and its application in public health. But much of the actual reduction in morbidity and mortality during that century can be attributed more directly to massive changes in the lifestyles of the populations of Europe and North America (54, 76). These changes were brought about through the "poor laws" and social reforms in housing, food supply, and working conditions, as well as through the popularization of health through advice literature, voluntary societies, and classes on human physiology in schools (7, 20, 81, 104). The Sanitary Reforms of Chadwick in Great Britain and Shattuck in Massachusetts centered in large part on recommendations for the improvement of living and working conditions, not just changes in the "sanitation" of the physical environment (84). Many of these social reforms in behalf of the health of

populations were characteristic of today's initiatives to ban smoking in public places, to provide fitness facilities in workplaces, and to obtain nutrition labelling on packaged foods in thc name of health promotion (24, 75, 88, 89, 102).

This broad and encompassing concept of health promotion is hardly new (87, 96), though its latter-day resurgence is a departure from the drift of health policy over the decades since World War II (37). C. E. A. Winslow, in 1920, referred to "promoting health" as "organized community effort for the . . . education of the individual in personal health, and the development of the social machinery to assure everyone a standard of living adequate for the maintenance or improvement of health" (105). The social machinery for health was turned full bore toward medical care after World War II.

Three Eras Leading to Health Promotion Policy

THE ERA OF RESOURCE DEVELOPMENT The postwar years are sometimes referred to as the era of resource development. In Europe and Japan this was a period of reconstruction in all sectors, while in the United States its chief product was legislation to build three types of health resources: scientific knowledge, medical facilities, and health personnel. Knowledge was developed through the inauguration of the National Institutes of Health and massive investments in biomedical research. Facilities were developed through the Hill-Burton Act, mandating the building of hospitals and clinics in virtually every community. Personnel to staff these facilities came with the Health Manpower Act, renewed periodically to finance the professional training of physicians, nurses, dentists, veterinarians, and a modest number of public health and allied health personnel.

This momentous investment in "health" resources produced an infrastructure that was primarily biomedically rather than health oriented. Eventually the question arose: Are these vast resources for medical care equitably distributed?

THE ERA OF REDISTRIBUTION In the 1960s we entered an era of redistribution of resources with the New Frontier initiatives, the Great Society and War on Poverty of Presidents Kennedy and Johnson. The emphasis was on the equitable redistribution of resources, particularly with the development of neighborhood health centers and the introduction of Medicare and Medicaid in 1966. These new laws were designed to put health authority and medical purchasing power in the hands of consumers, especially the elderly and the poor.

Health education during this era was devoted largely to *increasing* the public's use of health services. Programs were designed with behavioral objectives and community organization strategies to reduce the delay in

seeking medical care in response to symptoms, to increase participation in mass screening and immunization programs, and to increase attendance at well-child and family planning clinics.

The initiatives of the 1960s achieved greater equity in the distribution and use of resources. The poor now had greater access to medical services, and their rates of use of those services increased almost to the levels of the affluent (1). But while the gap between the "haves" and the "have-nots" was significantly reduced in terms of access to medical services, morbidity and mortality indicators continued to reflect strong socioeconomic and racial disparities (25, 98). The nation now had to ask whether it was paying for unnecessary services rendered by physicians and hospitals eager to tap into the Medicare and Medicaid wellsprings, or services excessively consumed by patients who were uneducated to the newly accessible services.

THE ERA OF COST CONTAINMENT The question of overutilization arose as the cost of medical care was rising rapidly in many countries. Most countries were entering a period of austerity in the 1970s. In the United States, this took the form of cost-containment initiatives in government-sponsored programs, especially medical care programs. It also opened a new opportunity for health education and public health by placing disease prevention and health promotion back on the policy agenda after decades of national preoccupation with medical care resources and services.

The era of cost containment began with efforts to trim the pricing of medical care itself, but more basic solutions were sought on the demand side with the appointment of the President's Committee on Health Education (79). The Committee report proposed several possibilities for the organization of federal and private-sector initiatives to control costs. These included education of the public in self-care and appropriate use of health services (primarily to *reduce* utilization), and a fundamental strengthening of health education in schools, worksites, and communities.

The Health Maintenance Organization Act of 1973 provided incentives for the medical care system to practice preventive medicine to keep patients out of expensive hospital beds. It made health education services mandatory for those HMOs receiving federal certification (13, 66, 67). This requirement was subsequently removed, but HMOs continued to develop health education services such as smoking cessation and weight control programs.

The National Health Planning and Resource Development Act of 1974 specified public health education as one of the nation's health planning priorities and made it a requirement of state and regional plans. Self-care education initiatives in health services research and policy gained notable prominence during this period (38, 50).

From Cost Containment to Health Promotion

Cost containment gave some credence to health education as evidence accumulated on the effectiveness of self-care education programs in reducing unnecessary use of health services and on the effectiveness of patient education in reducing hospital stays following surgery (15, 43, 61, 65, 68, 77). These efforts to control costs by decreasing the need for health care provided an initial policy boost for renewed interest in disease prevention and health promotion. But a second "epidemiological revolution" was afoot, supporting the development of health promotion policy independent of the cost-containment rationale and the medical care system.

FROM INFECTIOUS TO CHRONIC DISEASES Around the middle of the twentieth century, chronic diseases had surpassed communicable diseases as the leading causes of death in developed countries. Interest in and support of public health had waned with the decline of communicable diseases and did not immediately increase with the emergence of the chronic diseases. From the 1950s through the 1960s, health education and public health were kept alive by occasional immunization campaigns, family planning programs, work on communicable disease control and family planning in the developing countries, and leadership in the citizen participation component of the health planning and neighborhood health center movements of the 1960s.

FROM SELF-HELP TO SELF-CONTROL Citizen participation was a cornerstone of the War on Poverty and health planning initiatives (6, 35). At the same time, the self-care initiatives had taken the shape of a significant social movement, variously referred to as self-help, self-reliance, or self-improvement (5, 42, 51, 52, 85). Health education and the budding health promotion movement became tools of the people seeking to take control of their own health and to control the determinants of their health, rather than tools of the establishment seeking to control their use of health services or to gain their cooperation in managing centrally planned health programs.

FROM PARTICIPATION TO RESPONSIBILITY It was a short and natural step for public health to shift its emphasis from institution-building and centrally planned programs to self-reliance, person-centered initiatives, and individual participation in health. The budgetary constraints on health agencies and institutions, combined with the need for behavioral change to control the emerging chronic diseases, made the desire of the public for more personal involvement and initiative in health a welcome relief for program budgets and a tempting opportunity to shift responsibility for health from professionals and government institutions to individuals and families (3, 11).

PRIVATE SECTOR INITIATIVES The rebirth of personal initiative in health was simultaneously an epidemiological necessity, a popular movement, and a budgetary convenience. In the 1970s it was embraced by governmental, professional, and commercial interests. Personal initiative produced consumer demand, which was followed by private sector initiative to supply commercial products and services. Self-help and dietary titles were at the top of the best seller book lists more than any other category of nonfiction. A business boom developed for vendors of health courses, self-help products, and packaged "wellness" programs for large employers. Private companies supported personal health initiatives with increased health insurance coverage and worksite health promotion programs for employees (74, 75, 89). In response to the recommendation of the President's Committee on Health Education for private and public sector focal points, in 1973 a National Center for Health Education was created in the private sector.

INDEPENDENT SECTOR INITIATIVES Coterminous with the public and private sector initiatives in health promotion have been innovations and demonstrations sponsored by voluntary health organizations and philanthropic foundations. The voluntary health associations had long maintained public health education programs and sought to influence school health curricula. The American Heart Association convened one of the first gatherings of behavioral scientists and health educators to review the state of applied social science in reducing cardiovascular risk (18).

The Rockefeller and Ford Foundations had a long history of supporting community development approaches to public health problems in developing countries. The Ford Foundation provided much of the funding for the Population Council's mass media and community approaches to family planning in developing countries in the 1960s that predated the community-based cardiovascular risk reduction projects in the United States, Finland, and Australia (40). In 1977, the W. K. Kellogg Foundation assembled a group of "the nation's experts on health education and health behavior change to look at possible strategies for Foundation funding in promoting healthier lifestyles for all Americans" (80). For over a decade the Foundation then funded a total of 81 demonstration projects covering health promotion services in worksites, schools, hospitals, universities, and communities.

In 1985, the Henry J. Kaiser Family Foundation funded another 10-year commitment to a national health promotion program. Organizing a cofunding partnership with eleven other foundations, the Kaiser Family Foundation had provided financial support and technical assistance to more than 100 community projects by the end of 1989 and had supported the development or maintenance of health promotion policy, advocacy, technical assistance, and mass media initiatives on a national scale (92). In 1989, the Robert Wood

Johnson Foundation made a $27 million commitment to community-based, comprehensive substance-abuse prevention programs.

FEDERAL INITIATIVES Canada's lead in developing federal initiatives was soom emulated in the United States. In 1974, a Bureau of Health Education (now expanded into two divisions within the Center for Chronic Disease Prevention and Health Promotion) was created in the Centers for Disease Control. In 1976, Public Law 94-317 established an Office of Health Information and Health Promotion (now the Office of Disease Prevention and Health Promotion) in the Office of the Assistant Secretary of Health, the highest level of the US Public Health Service in which health policy is made.

Concurrently, a considerable amount of new research was being sponsored by the National Institutes of Health and the National Center for Health Services Research on the effectiveness of health promotion (e.g. 49, 78, 86, 97). Data had accumulated showing that chronic diseases could be controlled through active involvement of people in their own health care, and that patient education, self-care groups, and community efforts through mass media and face-to-face communications could bring about significant changes in health behavior and reductions in risk factors (12, 60, 83, 90, 91, 103). Thus the pendulum had swung from institutional dominance of health resources to individual initiative and responsibility. Now there was a need for appraisal and adjustment of this balance in order to find the right mix of social and individual responsibility (62, 93).

In 1979, *Healthy People: the Surgeon General's Report on Health Promotion and Disease Prevention* (70), signalled US entry into a decade of new health policy (30–33), parallel to the Canadian initiative triggered by the 1974 LaLonde Report (48). The new era has been referred to by some as the era of health promotion or, more grandiosely, the second public health revolution. It built upon the scientific foundations of the second epidemiologic revolution (94, 95), in which the shift from communicable diseases to chronic diseases called for new paradigms, new methods, and even new definitions of health (4).

GLOBAL INITIATIVES The turn in federal health policy, mirrored in other countries (14, 28), has had a parallel in World Health Organization and UNICEF policies concerning health education and health promotion. These two international agencies met in Alma-Ata, USSR, in 1978 to deliberate the future of health and to formulate a global health strategy for primary health care. The Alma-Ata Declaration designated "education concerning prevailing health problems and the methods of preventing and controlling them" as the first of eight essential elements of primary health care (107). Community and

individual participation were featured as cornerstones of the planning strategy to be followed by each country (36). A report of the WHO Expert Committee on New Approaches to Health Education in Primary Health Care concludes:

> The WHO *Global Strategy for Health for All by the Year 2000* and the WHO Seventh General Programme of Work give to information and education for health a role more prominent that ever before. . . . Health science and technology have come to a point where their contribution to the further improvement of health standards can make a real impact *only* if the people themselves become full partners in health protection and promotion. . . . Too often in the past, "modern" health practices have been promoted without giving sufficient thought to their relevance to the social and cultural background of the communities concerned. An effort must be made to enable individuals and communities to play an active role in the planning and delivery of health care. To assume such a role, people need guidance and encouragement from the health care providers in ways of identifying their health problems and of finding solutions to them . . . to set targets and translate these into simple and realistic goals that can be monitored. Finally, they should realize the need to refer to the policies behind the public health programmes in setting priorities among the targets identified (108).

THE DIVISION OF RESPONSIBILITY

The evolution of health policy and programs for health education and health promotion just described gives the impression of a pendulum swinging from heavy reliance on government and institutions to heavy reliance on individuals and families, and back. Ideological and categorical attempts to throw the responsibility more exclusively to one side or the other have met with a seemingly inescapable and inexorable cycle or teeter-totter, at least in American history, of political swings from left to right, tilting the balance of responsibility from individuals to government and back. The reality of program planning and execution is that both sides must be engaged (72). The practicalities of health promotion planning require that the optimum mix of responsibility to be assumed by those involved—individuals, families, professionals, private or governmental organizations, local or national agencies—must be worked out on a case-by-case basis. For each health issue or project, a determination must be made as to its urgency, its causes, its variability, and the degree to which individuals want and can exercise control over the determinants of the health problem or goal. It is essential that those directly affected have a voice in negotiating this division of responsibility. Providing an opportunity for that voice to be heard applies the principle of participation, so central to learning theory and effective community organization. It also assures a link to the philosophical and ethical underpinning of the professional commitment to supporting voluntary change where possible.

CONCLUSION

The history and prospects for health promotion as a public health strategy, as we have recounted them here, seem to apply to the developed nations, particularly North America. Yet, the global initiatives reflected by WHO and UNICEF in the primary health care approach and the Ottawa Charter make the emerging concepts of health promotion just as relevant to the developing nations. The case-by-case diagnosis of needs and tailoring of strategies to local circumstances, finding the right balance between personal and societal responsibility, and providing for active participation of individuals and communities in the assessment of needs and the division of responsibility all apply as much to the developing countries as to the so-called developed (106).

If the health promotion of the 1980s has shifted the locus of initiative for health, and control over its determinants, from institutions and professionals to individuals and families, the health promotion of the 1990s can justify this locus by providing for increased community and social support for the health initiatives of individuals and families. Worksite health promotion will expand with notable provisions for institutional supports for employee participation (8, 21, 22, 99). Schools will place increasing emphasis on social and organizational factors in programs for the modification or development of diet and prevention of substance abuse (10, 17, 23, 73, 88). In most communities, new emphasis will be placed on concerns with the environment and with housing and other conditions of living that shape the health-related lifestyle of the individuals and families in the community.

Literature Cited

1. Aday, L. A., Andersen, R., Fleming, G. V. 1980. *Health Care in the U.S.: Equitable for Whom?* Beverly Hills: Sage
2. Allegrante, J. P. 1986. Potential uses and misuses of education in health promotion and disease prevention. *The Eta Sigma Gamman* 18:2–8
3. Allegrante, J. P., Green, L. W. 1981. When health policy becomes victim blaming. *N. Engl. J. Med.* 305:1528–29
4. Andrews, F. M., Withey, S. B. 1976. *Social Indicators of Well-Being: Americans' Perceptions of Life Quality*. New York: Plenum
5. Berger, P. L., Neuhaus, R. J. 1977. *To Empower People: The Role of Mediating Structures in Public Policy*. Washington, DC: Am. Enterprise Inst. Public Policy Res.
6. Boyte, H. C. 1984. *Community is Possible: Repairing America's Roots*. New York: Harper & Row
7. Burnham, J. C. 1984. Change in the popularization of health in the United States. *Bull. Hist. Med.* 58:183–97
8. Cataldo, M. F., Coates, T. J., eds. 1986. *Health and Industry: A Behavioral Medicine Perspective*. New York: Wiley
9. Cleary, H. P., Kitchen, J. M., Ensor, P. G., eds. 1984. *Advancing Health Through Education: A Case Study Approach*, pp. 374–81. Palo Alto: Mayfield
10. Cohen, R. Y., Felix, M. R. J., Brownell, K. D. 1989. The role of parents and older peers in school-based cardiovascular prevention programs: Implications for program development. *Health Educ. Q.* 16:245–53
11. Crawford, R. 1977. You are dangerous to your health: The ideology and politics of victim blaming. *Int. J. Health Serv.* 7:663–80
12. Cullen, J., Fox, B., Isom, R., eds.

1976. *Cancer: The Behavioral Dimensions*. New York: Raven
13. Deeds, S. G., Mullen, P. D. 1982. Managing health education in HMOs: Part 2. *Health Educ. Q.* 9:3–95
14. Davidson, L., Chapman, S., Hull, C. 1979. *Health Promotion in Australia 1978–1979*. Canberra: Commonw. Aust.
15. Devine, E. C., Cook, T. D. 1983. A meta-analytic analysis of effects of psycho-educational interventions on length of postsurgical hospital stay. *Nurs. Res.* 32:267–74
16. Duhl, L. 1986. The healthy city: Its function and its future. *Health Promot.* 1:55–60
17. Ellison, R. C., Capper, A. L., Goldberg, R. J., et al. 1989. The environmental component: Changing school food service to promote cardiovascular health. *Health Educ. Q.* 16:285–97
18. Enelow, A. J., Henderson, J. B., eds. 1975. *Applying Behavioral Science to Cardiovascular Risk*. New York: Am. Heart Assoc.
19. Faden, R. R. 1987. Ethical issues in government-sponsored public health campaigns. *Health Educ. Q.* 14:27–38
20. Fellman, C., Fellman, M. 1981. *Making Sense of Self: Medical Advice Literature in Late Nineteenth-Century America*. Philadelphia: Univ. Pa. Press
21. Fielding, J. 1984. Health promotion and disease prevention at the worksite. *Annu. Rev. Public Health* 5:237–65
22. Fielding, J., Pescheria, P. 1989. *Am. J. Public Health* 79: In press
23. Flay, R. B. 1985. Psychosocial approaches to smoking prevention: A review of findings. *Health Psychol.* 4:449–88
24. Flora, J. A., Jackson, C., Maccoby, N. 1985. Indicators of societal action to promote physical health. In *Individual and Societal Actions for Health Promotion: Strategies and Indicators*, ed. S. Kar. Beverly Hills, Ca.: Springer
25. Freeman, H. P. 1989. Cancer in the economically disadvantaged. *Cancer* 64(Suppl.):324–34
26. Fries, J. F., Green, L. W., Levine, S. 1989. Health promotion and the compression of morbidity. *Lancet* ii:481–83
27. Goodman, L. E., Goodman, M. J. 1986. Prevention—How misuse of a concept can undercut its worth. *Hastings Cent. Rep.* 3:26–38
28. Great Britain Expenditures Committee. 1977. *First Report from the Expenditures Committee. Session 1976–1977: Preventive Medicine*. London: Her Majesty's Stationery Off.
29. Green, L. W. 1978. Determining the impact and effectiveness of health education as it relates to federal policy. *Health Educ. Monogr.* 6:28–66
30. Green, L. W. 1979. National policy in the promotion of health. *Int. J. Health Educ.* 22:161–68
31. Green, L. W. 1979. Toward national policy for health education. In *Alcohol, Youth and Social Policy*, ed. H. Blane, M. E. Chafetz, pp. 283–305. New York: Plenum
32. Green, L. W. 1980. Healthy people: The Surgeon General's report and the prospects. In *Working for a Healthier America*, ed. W. K. McNerney, pp. 95–110. Cambridge, Ma: Ballinger
33. Green, L. W. 1981. Emerging federal perspectives on health promotion. *Health Promotion Monographs, No. 1*, ed. J. P. Allegrante. New York: Cent. Health Promot., Teachers Coll., Columbia Univ.
34. Green, L. W. 1984. Modifying and developing health behavior. *Annu. Rev. Public Health* 5:215–36
35. Green, L. W. 1986. The theory of participation: a qualitative analysis of its expression in national and international health policies. *Adv. Health Educ. Promot.* 1 (Pt. A):211–36
36. Green, L. W. 1986. *New Policies for Health Education in Primary Health Care*. Geneva: World Health Organ.
37. Green, L. W. 1990. *Community Health*. St. Louis: Times Mirror/Mosby Coll. Publ. 6th ed.
38. Green, L. W., Goldstein, R. A., Parker, S. R., eds. 1983. Research on self-management of childhood asthma. *J. Allergy Clin. Immunol.* 72:519–629
39. Green L. W., Gottlieb, N. H. 1989. Health promotion for the aging population: approaches to extending active life expectancy. In *Health Care for an Aging Society*, ed. J. R. Hogness, pp. 139–54. New York: Churchill Livingstone
40. Green, L. W., McAlister, A. L. 1984. Macro-intervention to support health behavior: Some theoretical perspectives and practical reflections. *Health Educ. Q.* 11:323–39
41. Green, L. W., Raeburn, J. 1988. Health promotion: What is it? What will it become? *Health Promot.* 3:151–59
42. Green, L. W., Werlin, S., Schauffler, H., Avery, C. 1981. Research and demonstration issues in self-care: Measuring the decline of medicocentrism. In *The SOPHE Heritage Collection of Health Education Monographs*, Vol. 3, ed. J. G. Zapka, pp. 40–69. Oakland, Ca.: Third Party Publ.

43. Haynes, R. B., Taylor, D. W., Sackett, D. L., eds. 1979. *Compliance in Health Care*. Baltimore: Johns Hopkins Univ. Press
44. Holtzman, N. 1979. Prevention: Rhetoric or reality. *Int. J. Health Serv.* 9:25–39
45. Kickbush, I. 1986. Lifestyle and health. *Soc. Sci. Med.* 22:117–24
46. Kreuter, M. W. 1984. Health promotion: The public health role in the community of free exchange. *Health Promotion Monographs, No. 4*, ed. J. M. Dodds. New York: Cent. Health Promot., Teachers Coll., Columbia Univ.,
47. Kreuter, M. W. 1989. Activity, health, and the public. *Academy Papers*. Reston, Va: Acad. Phys. Educ., Alliance Health, Phys. Educ., Recreation Dance
48. LaLonde, M. A. 1974. *New Perspectives on the Health of Canadians*. Ottawa, Can.: Minist. Natl. Health Welfare
49. Landry, F., ed. 1983. *Health Risk Estimation, Risk Reduction and Health Promotion*. Ottawa: Can. Publ. Health Assoc.
50. Levin, L. S. 1982. Forces and issues in the revival of interest in self-care: Impetus for redirection in health. In *The SOPHE Heritage Collection of Health Education Monographs, Vol. 2: The Practice of Health Education*, ed. B. P. Mathews, pp. 268–73. Oakland: Third Party Assoc.
51. Levin, L. S. 1983. Lay health care: The hidden resource in health promotion. In *Health Promotion Monographs No. 3*, ed. K. A. Gordon. New York: Cent. Health Promot., Teachers Coll., Columbia Univ.
52. Levin, L. S., Katz, A., Holst, E. 1978. *Self-Care: Lay Initiatives in Health*. New York: Prodist
53. Litvak, J., Ruiz, L., McAlister, A. 1987. *The Growing Challenge of Noncommunicable Diseases*. Washington, DC: Pan Am. Health Organ.
54. McKeown, T. 1979. *The Role of Medicine: Dream, Mirage or Nemesis*. Princeton: Princeton Univ. Press
55. McKinley, J. B. 1975. A case for refocusing upstream—The political economy of illness. In *Applying Behavioral Science to Cardiovascular Risk*, ed. A. J. Enelow, J. B. Henderson. New York: Am. Heart Assoc.
56. McLeroy, K. R., Bibeau, D., Steckler, A., Glanz, K. 1988. An ecological perspective on health promotion programs. *Health Educ. Q.* 15:351–77
57. McLeroy, K. R., Steckler, A., Bibeau, D. L., eds. 1988. The social ecology of health promotion interventions. *Health Educ. Q.* 15:351–486
58. Marlatt, G. A., Gordon, J. R., eds. 1985. *Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviors*. New York: Guilford
59. Mason, J. O. 1984. Health promotion and disease prevention: The federal and state roles. *Focal Points* 1:1–2
60. Matarazzo, J. D., Miller, N. E., Weiss, S. M., Herd, J. A., Weiss, S. M., eds. 1984. *Behavioral Health: A Handbook of Health Enhancement and Disease Prevention*. New York: Wiley
61. Mazzuca, S. A. 1982. Does patient education in chronic disease have therapeutic value? *J. Chron. Dis.* 35:521–29
62. Michael, J. M. 1982. The second revolution in health: Health promotion and its environmental base. *Am. Psychol.* 37:936–41
63. Milio, N. 1981. *Promoting Health Through Public Policy*. Philadelphia: F. A. Davis
64. Minkler, M. 1989. Health education, health promotion and the open society: an historical perspective. *Health Educ. Q.* 16:17–30
65. Mullen, P. D., Green, L. W., Persinger, G. S. 1985. Clinical trials of patient education for chronic conditions: A comparative meta-analysis of intervention types. *Prev. Med.* 14:753–81
66. Mullen, P. D., Zapka, J. G. 1982. *Guidelines for Health Promotion and Education Services in HMOs*. Washington, DC: US Gov. Print. Off.
67. Mullen, P. D., Zapka, J. G. 1981. Health education and promotion in HMOs: The recent evidence. *Health Educ. Q.* 8:292–315
68. Mumford, E., Schlesinger, H. J., Glass, G. V. 1982. The effects of psychological intervention on recovery from surgery and heart attacks: An analysis of the literature. *Am. J. Public Health* 72:141–51
69. Nutbeam, D. 1985. *Health Promotion Glossary*. Copenhagen: World Health Organ. Reg. Off. Eur.
70. Office of Disease Prevention and Health Promotion. 1979. *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention*. Washington, DC: US Dep. Health, Educ. Welfare
71. Ottawa Charter for Health Promotion. 1986. *Health Prom.* 1:iii–v
72. Ottoson, J. M., Green, L. W. 1987. Reconciling concept and context: A theory of implementation. In *Advances in Health Education and Promotion*,

Vol. 2, ed. W. Ward, pp. 339–68. Greenwich, Conn.: JAI Press
73. Parcel, G. S., Simons-Morton, B., Kolbe, L. J. 1988. Health promotion: Integrating organizational change and student learning strategies. *Health Educ. Q.* 15:435–50
74. Parkinson, R. 1982. *Managing Health Promotion in the Workplace: Guidelines for Implementation and Evaluation*. Palo Alto: Mayfield
75. Pelletier, K. R. 1984. *Healthy People in Unhealthy Places. Stress and Fitness at Work*. New York: Delacorte
76. *Perspectives on Health Promotion and Disease Prevention in the United States*. 1978. Washington, DC: Inst. Med., Natl. Acad. Sci.
77. Posavac, E. J. 1980. Evaluations of patient education programs: A meta-analysis. *Eval. Health Prof.* 3:47–62
78. *Preventive Medicine USA*. 1976. New York: Prodist
79. President's Committee on Health Education. 1973. *Report of the President's Committee on Health Education*. New York: Public Affairs Inst.
80. *Promoting Health in America: Breakthroughs and Harbingers*. 1989. Battle Creek, Mich: W. K. Kellogg Found.
81. Riley, J. C. 1987. *The Eighteenth Century Campaign to Avoid Disease*. New York: St. Martin's Press
82. Roberts, M. C. 1987. Public health and health psychology: Two cats of Kilkenny? *Professional Psychology: Research and Practice* 18:145–49
83. Roccella, E. J., Ward, G. W. 1984. The national high blood pressure campaign: a description of its utility as a generic program model. *Health Educ. Q.* 11:225–42
84. Rosen, G. 1958. *A History of Public Health*. New York: MD Publ.
85. Schiller, P. L., Levin, L. S. 1983. Is self-care a social movement? *Soc. Sci. Med.* 17:1343–52
86. Schwartz, J. L., ed. 1978. *Progress in Smoking Cessation*. New York: Am. Cancer Soc.
87. Sigerist, H. E. 1946. *The University at the Crossroads: Addresses and Essays*. New York: Henry Schuman
88. Simons-Morton, B. G., Parcel, G. S., O'Hara, N. M. 1988. Implementing organizational changes to promote healthful diet and physical activity at school. *Health Educ. Q.* 15:115–30
89. Sloan, R. P., Gruman, J. C., Allegrante, J. P. 1987. *Investing in Employee Health. A Guide to Effective motion in the Workplace*. San Francisco: Jossey-Bass
90. Somers, A., ed. 1976. *Health Promotion and Consumer Health Education*. Greenbelt, Md: Aspen Syst.
91. Squyres, W., ed. 1980. *Patient Education: An Inquiry Into the State of the Art*. New York: Springer
92. Tarlov, A. R., Kehrer, B. H., Hall, D. P., Samuels, S. E., Felix, M. R. J. 1987. Foundation work: The health promotion program of The Henry J. Kaiser Family Foundation. *Am. J. Health Promot.* 2:74–80
93. Taylor, C. W. 1984. Promoting health and strengthening wellness through environmental variables. In *Behavioral Health: A Handbook of Health Enhancement and Disease Prevention*, ed. J. D. Matarazzo et al. New York: Wiley
94. Terris, M. 1976. The epidemiologic revolution, national health insurance and the role of health departments. *Am. J. Public Health* 66:1155–64
95. Terris, M. 1978. Public health in the United States: The next 100 years. *J. Public Health Policy* 93:602–8
96. Terris, M. 1986. What is health promotion? *J. Public Health Policy* 7:147–51
97. US Dept. Health, Educ., Welfare. 1977. *Consumer Self-Care in Health*. DHEW Publ. No. HRA 77-3181. Rockville, Md.: Natl. Cent. Health Serv. Res. Proc. Ser.
98. US Department of Health and Human Services. 1985. *Report of the Secretary's Task Force on Black and Minority Health*. Washington, DC: US Gov. Print. Off.
99. US Dept. Health Human Serv. 1987. *National Survey of Worksite Health Promotion Activities: A Summary*. Washington, DC: US DHHS, Public Health Serv., Off. Dis. Prev. Health Promot.
100. US Dept. Health Human Serv. 1989. *Promoting Health/Preventing Disease: Year 2000 Objectives for the Nation* (draft for public review and comment). Washington, DC: US DHHS, Public Health Serv.
101. Wallerstein, N., Bernstein, E. 1988. Empowerment education: Freire's ideas adapted to health education. *Health Educ. Q.* 15:379–94
102. Walsh, D. C., McDougall, V. 1988. Current policies regarding smoking in the workplace. *Am. J. Ind. Med.* 13: 181–90
103. Weiss, S., Herd, A., Fox, B., eds. 1981. *Perspectives on Behavioral Medicine*. New York: Academic
104. Whorton, J. C. 1982. *Crusaders for Fitness: The History of American Health Reformers*. Princeton, NJ: Princeton Univ. Press

105. Winslow, C. E. A. 1920. The untilled fields of public health. *Science* 51:23
106. World Health Assembly. 1985. *New Policies for Health Education in Primary Health Care: Technical Discussions of the 36th World Health Assembly*. Geneva: World Health Organ.
107. World Health Organization. 1978. *Alma-Ata 1978: Primary Health Care, "Health for All" Series No. 1*. Geneva: World Health Organ.
108. World Health Organization. 1983. *New Approaches to Health Education in Primary Health Care: Report of a WHO Expert Committee, Tech. Rep. Ser. 690*, pp. 40–41. Geneva: World Health Organ.
109. World Health Organization. 1984. *Health Promotion: A Discussion Document on the Concept and Principles*, ICP/HSR 602. Copenhagen: WHO Reg. Off. Eur. Reprinted 1986 in *Health Promot.* 1:73–76