

Book Chapter in: Jose Burgos and Emilio Ribes (Eds.). (2004). *Theory, basic and applied research, and technological applications in behavior science*. Guadalajara, Mexico: Universidad de Guadalajara.

UNDERSTANDING AND IMPROVING THE WORK OF COMMUNITY HEALTH AND DEVELOPMENT

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"You do not have to be mean-spirited to ignore societal problems, you only have to believe that nothing can be done about them."

--WILLIAM RASBERRY

Globally and locally, people work together to better understand and improve the health and development of those in their communities. For example, consistent with objectives of the World Health Organization, regional and local projects take action to reduce the incidence and prevalence of alcohol and drug abuse, HIV/AIDS, and chronic diseases such as diabetes (LEE Jong-wook, 2003). Similarly, aligned with the United Nations' Millennium Development goals, local development work attempts to reduce violence, assure adequate income and shelter, and improve education for all (Annan, 2000).

The common aim of such efforts is to create conditions in which health and development can occur (Institute of Medicine, 2003; World Bank, 2001; World Health Organization, 1986). In this collaborative work, people who share a common place, such as a city or barrio, or interest, such as in promoting child health or reducing

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poverty, plan and take action together. People and organizations from different parts of the community work together to create environments that support widespread behavior change, such as caring engagements or health-promoting behaviors, and improvement in population-level outcomes such as levels of childhood immunization or educational achievement (Fawcett, Francisco, Hyra, et al., 2000).

The essence of the behavioral-community paradigm is that problems and goals of individuals, communities and societies are represented in the *behavior* of people and the *environmental conditions* they experience (Baer, Wolf, and Risley, 1968, 1987; Fawcett, 1991; Fawcett, Mathews, and Fletcher, 1980). Similarly, when public health experts McGinnis and Foege (1993) cited the "real, real causes" of death in the United States, they focused on key health-related behaviors, such as tobacco use and diet, and the environmental conditions, such as governmental policies, that affect them. By viewing societal problems as "mere behavior", we avoid the trap of seeing them as "intractable" or objects for description but not intervention. Analyses yield potentially modifiable features of the environment and broader conditions that may affect relevant behaviors of key actors in communities.

This report provides an overview of what we—and our colleagues—have been learning about how communities affect conditions related to health and development. First, we describe briefly the *context for learning* including our research and training program at the University of Kansas, the related disciplines that have influenced our work, and some principles and values that guide community research and action. Second, we present a conceptual *framework* or theory of action for community efforts to create conditions that promote health and development. Third, we describe *how we are learning*—outlining the participatory research methods, and key measures, used to examine the functioning of collaborative partnerships for community health and development. Fourth, we describe *what we are learning*—including seven factors affecting the rate of community change and the conditions under which environmental change may contribute to improvement in population-level outcomes. Finally, we describe how we are using Internet-based capabilities to aid in *translation of knowledge to practice*.

Context for Learning and Contributing to This Work

Our attempts to learn and contribute to community efforts to promote health and development are grounded in the supportive context of our research group, influences from several related disciplines, and guiding principles and values.

KU Work Group (WHO Collaborating Center) for Community Health and Development

Operating since 1975 at the University of Kansas (KU), the mission of our KU Work Group <http://ctb.ku.edu/wg/> is to promote community health and development through collaborative research, teaching, and service. Consistent with this purpose, our new World Health Organization Collaborating Center for Community Health and Development at KU has two primary objectives: a) To expand the evidence base for community efforts to create conditions for health and development and b) To build capacity for this work including through dissemination of promising methods using Internet-based technologies.

We are supported by our home academic unit, the Department of Human Development, with its emphasis on applied behavioral science; and the broader research unit of which we are a part, the Schiefelbusch Institute for Life Span Studies, with its commitment to translating knowledge to practice. Throughout its nearly 30-year history, our KU Work Group has attempted to integrate the core university functions of research, teaching, and public service in all its activities. As such, our discernment criteria for selecting among possible projects include: a) opportunities to learn and contribute through research, b) potential for impact on important outcomes, c) client commitment to building capacity, discovery, and co-learning, d) long-term relationships and commitment to this work, e) potential links and synergies among projects, and f) opportunities to collaborate with outstanding national and global partners.

Some Disciplinary Influences on Our Work

Our KU Work Group's efforts have been informed by several disciplines and traditions for research and practice. First, the field of *applied behavior analysis* focuses attention on socially important behaviors and outcomes, such as childhood immunizations or violence, of people in their actual communities (Baer, Wolf, and Risley, 1968; 1987; Fawcett, 1991). The field's analytic criterion promotes use of appropriate experimental designs and research methods to help identify evidence-based practices that produce effects of social significance. Its technological criterion encourages dissemination of these innovations to those who can create environments that support valued behaviors and outcomes.

Second, the field of *community psychology* (Jason, Keys, Suarez-Balcazar, et al., 2004; Rappaport, 1977; Tolan, Keys, Chertok, and Jason, 1990) offers an ecological perspective—the idea that multiple and interrelated factors, such as social support and access to resources, affect multiple and interrelated outcomes, such as school success or substance abuse. It highlights the process of collaboration (Himmelman, 1992): sharing risks, resources and responsibilities for the work among all those in a position to learn and contribute; including community people most affected, researchers and technical advisors, and those grantmakers who fund and support the work. It places a value on empowerment: the process by which people gain control over conditions and outcomes that matter to them (Fawcett, Paine-Andrews, Francisco, et al., 1995).

Third, the field of *public health* draws attention to “what we as a society do collectively to assure conditions in which people can be healthy” (Institute of Medicine, 1988: 1). Globally and locally, the vision of “healthy people in healthy communities” (DHHS, Healthy People 2010; World Health Organization, 1986) is made concrete in specific health objectives, such as reducing rates of HIV/AIDS and the associated risk behavior of unprotected sexual activity, and related environmental strategies such as making condoms more readily available and social consequences for their use more reinforcing. With its emphasis on population-level outcomes, such as the prevalence of diabetes in a particular group or place, public health emphasizes engagement of people from multiple sectors, such as education and non-governmental organizations, in changing community conditions that can affect widespread behavior change,

such as physical activity and diet, and related health outcomes for all (Institute of Medicine, 2003).

Some Principles, Assumptions, and Values Guiding the Work

Grounded in the above-noted traditions, Table 1 outlines some principles, assumptions, and values that guide the work of understanding and improving community health and development (Adapted from Fawcett, Francisco, Hyra, et al., 2000). For example, Value #1 reflects the public health goal of improving population-level outcomes. Value #2 directs attention to the behaviors and environmental conditions related to health and development goals. Value #4 acknowledges the importance of broader determinants of health and development (Tarlov and St. Peter, 2000)—especially social connectedness (Berkman and Syme, 1979; Kawachi, Kennedy, Lochner, and Prothrow-Stith, 1997), income inequality (Wilkinson, 1996), and efficacy or ability to influence one's environment (Marmot, Bosma, Hemingway, et al., 1997). Values #3 and 5 highlight the collaborative processes and ecological perspective of community psychology. We use the term *value* as Skinner (1972) used it; to refer to a statement of what is important, of what practices, if adhered to, might produce positive reinforcement from important audiences such as those engaged in this work of understanding and improving community health and development (Fawcett, 1991).

A Framework for Community Efforts to Promote Change and Improvement

In this section, we outline a conceptual framework for community efforts to create change and improvement related to health and development. Adapted from Fawcett, Francisco, and Hyra, et al. (2000), and grounded in the logic of health promotion (CDC, 2002; Green and Kreuter, 1991), this model was used by the Institute of Medicine to characterize collaborative public health action by communities in its report on the future of public health in the 21st century (Institute of Medicine, 2003: Chapter on "Community"). Figure 1 presents this five-component framework: a) Assessment

Table 1

Some Principles, Assumptions, and Values Guiding the Work of Understanding and Improving Community Health and Development

1. Improvement in community health and development involves the *population* as a whole, not merely individuals at risk for specific physical, mental, or social conditions.
2. Community health and development requires changes in both the *behaviors* of large numbers of individuals and the *environment and broader conditions* that affect health and development.
3. A healthy community is a local product with priority issues and strategies best *determined by people most affected* by the concern.
4. Achieving health and development for all requires attention to key *social determinants*—in particular; income disparities, social connectedness, and efficacy or the ability to influence one's environment.
5. Since health and development outcomes are caused by *multiple and interrelated factors*, single interventions are likely to be insufficient.
6. The conditions that affect a particular health or development outcome are often *interconnected* with those affecting other concerns.
7. Since the behaviors that affect health and development occur among a variety of people in an array of contexts, community improvement requires *engagement of diverse groups* bringing about change in *multiple sectors* of the community.
8. Community health and development involves interdependent relationships among multiple parties in which none can function fully without *collaboration* with others.
9. Collaborative partnerships, support organizations, and grantmakers work together as *catalysts for change*; they convene, broker relationships, and leverage resources for those doing the work of community change and improvement.
10. The aim of support organizations is to *build capacity* to address what matters to people over time and across concerns.

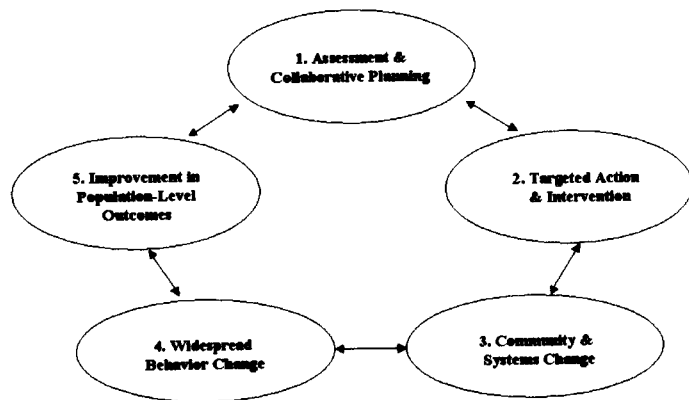


Figure 1. A framework for community efforts to promote change and improvement in population-level health and development.

and collaborative planning, b) Targeted action and intervention, c) Community and systems change, d) Widespread behavior change, and e) Improvement in population-level outcomes.

The model's components are *interactive*. For instance, assessment of community issues and concerns, such as levels of violence or safety, and developing plans to address them should inform targeted actions and interventions. Similarly, information about the unfolding of new programs and policies (community change), and associated changes in rates of behavior and population-level outcome, may prompt adjustments in action plans and interventions. The framework's components are also *iterative*, or part of a repeating cycle. For example, when the process yields improvement in targeted population-level outcomes, such as rates of childhood immunizations or adolescent pregnancy, this may be followed by a renewed cycle of collaborative planning and intervention for other issues, such as early childhood development, that matter to local communities. *Community capacity* may be reflected in the demonstrated ability of generations of people working together to effect change and improvement over time, and across issues (Fawcett, Paine-Andrews, Francisco, et al., 1995; Goodman, Speers, McLeroy, Fawcett, et al., 1998).

Assessment and Collaborative Planning

Community members and outside experts work together to gather and use quantitative data (Green and Kreuter, 1991; Institute

of Medicine, 1997) and information on community concerns (Fawcett, Seekins, et al., 1982; Paine, Francisco, and Fawcett, 1994) to target issues of importance, such as improved educational outcomes or caring engagements with children, that will be the focus of change efforts. In a multi-sectoral approach, representatives from different sectors of the community—such as schools, government, business, and faith communities—engage in the ongoing process of collaborative planning. The process should be inclusive; engaging those most affected by the issue, such as marginalized groups that traditionally lack power, as well as those in a position to effect needed changes such as elected officials and community leaders.

The products of strategic planning include a shared: a) Vision—the dream or what success would look like (e.g., “healthy children”, “safe streets”, “caring neighbors”), b) Mission—statement of what the group is going to do and why, c) Objectives—how much of what (e.g., increase/decrease in behavior or population-level outcome) will result by when, d) Strategies—how the effort will reach its objectives (e.g., providing information and enhancing skills, modifying access and opportunities, enhancing services and support, changing the consequences, modifying policies and broader systems), and e) Action plans—specific community changes to be sought and interventions to be implemented; including who will do what by when to bring them about (*Community Tool Box*, 2003).

Targeted Action and Intervention

Efforts often include targeted actions, such as personal contacts or group advocacy efforts, to bring about community and systems changes identified in action plans such as a new or modified program (e.g., after-school program for youth), policy (e.g., extended hours for access to service), or practice (e.g., more humane treatment of clients). They may also include implementation of evidence-based practices and interventions (e.g., Task Force on Community Preventive Services, 2000).

Community and Systems Change

Community and systems changes refer to new or modified programs, policies and practices facilitated by the effort and related to its mission (Francisco, Paine and Fawcett, 1993). For example, a community effort to reduce obesity and risk for diabetes might

include public information programs displaying modeling and social reinforcement from peers for engagement in physical activity, policies that assure availability of healthy school lunches, and prompts for healthy practices such as symbols for low-fat choices on restaurant menus and signs promoting use of stairs in public buildings. Community changes reflect the product of actions; an *intermediate outcome* between the process of collaborative planning and action and more distant changes in behaviors of group members and population-level outcomes (Fawcett, Francisco, Hyra, et al, 2000).

Widespread Behavior Change

The aim of targeted action and intervention—and resulting changes in communities and systems—is behavior change and improved health and development outcomes for the people in the defined community. For example, a citywide effort to reduce adolescent pregnancy would have behavioral objectives related to increased abstinence among unmarried teens and, for those who chose to be sexually active, increased use of appropriate contraceptives. Widespread change in targeted behaviors is more likely when community conditions address the array of relevant personal factors, such as knowledge and skill, and environmental factors, such as peer support and enhanced opportunities to respond. To affect behavior changes in the group, the specific components of a community intervention, such as the types of information or consequences, should reflect an analysis of the context and the environmental conditions that are associated with the behavioral problem or goal.

Improvement in Population-level Outcomes

Improvement in population-level outcomes is the ultimate goal of community efforts to create conditions that promote health and development. Such efforts may aim to reduce adverse outcomes, such as the prevalence of alcohol abuse or exposure to environmental toxins, or promote positive health and development such as increased rates of educational success or frequency of caring engagements with children. Often, a population-level outcome is the product of widespread change in multiple behaviors of those who share a place or group. For example, reduced prevalence of diabetes requires changes in engagement in physical activity and healthy diets

in all children and adults, including those with multiple risk markers for diabetes such as impaired glucose tolerance or a family history of diabetes.

How Are We Learning?—Using the Methodology of Community-Based Participatory Research to Document and Analyze the Contribution

This conceptual framework focuses our attention on: a) processes (assessment and collaborative planning), b) engagements (targeted action and intervention), c) intermediate outcomes (community and systems changes), and d) more distant outcomes (widespread behavior change and population-level outcomes). Since 1990, our research team has focused on two core questions: 1) What factors affect the rate of community and systems change (intermediate outcome)? and 2) Under what conditions are community changes associated with improvements (in population-level outcomes)? In this section, we describe how we are learning—the methodology of community-based participatory research—and the use of a common measurement system, multiple case studies, and interrupted time series designs to examine the two core questions.

Methodology of Community-Based Participatory Research

Our methodology for studying the functioning of community efforts to promote health and development is grounded in the traditions of behavioral measurement (Johnson and Pennypacker, 1980), participatory research (Green et al., 1995; Whyte, 1991), ethnography and action anthropology (e.g., Stull and Schensul, 1987), and empowerment evaluation (e.g., Fawcett, Paine-Andrews, Francisco, et al., 1996; Fetterman, Kaftarian, and Wandersman, 1996). A form of community-based participatory research (Fawcett, Schultz, Carson, et al., 2003; Minkler and Wallerstein, 2003), it builds on other efforts to evaluate comprehensive community initiatives (e.g., Connell, Kubish, Schorr, and Weiss, 1995; Fawcett, Paine-Andrews, Francisco, et al., 2001).

Figure 2 outlines our six-part framework for community-based participatory research (Fawcett, Boothroyd, Schultz, et al.,

