

Evaluating community initiatives for health and development

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Introduction

Throughout the world, local people and organizations come together to address issues that matter to them. For example, community partnerships have formed to reduce substance abuse and violence (1,2), to lower the risks of adolescent pregnancy, HIV/AIDS and cardiovascular diseases (3–5) and to prevent child abuse and neglect, domestic violence and injury (6–8). Local collaborative efforts to promote health and development may be part of global trends in building democracy and decentralization (9).

Community initiatives, such as those to reduce adolescent substance abuse or promote the wellbeing of older adults, attempt to improve health and development outcomes for all people who share a common place or experience (10,11). Prevention efforts often use both universal approaches – for all those potentially affected – and targeted approaches – for those with multiple markers that put them at higher risk (12,13). They aim to change the behaviour of large numbers of people, such as drug use or physical inactivity, and the conditions in which the behaviour occurs, such as the availability of drugs or lack of safe recreational areas (14).

Community health promotion is a process of development: it “enables people to increase control over, and improve, their health” (15,16). It uses multiple

³ This chapter is based on work supported by grants to the Work Group on Health Promotion and Community Development at the University of Kansas from the Kansas Health Foundation (9407003D, 9206032B and 9206038B), the Ewing Kauffman Foundation (95-410), the Greater Kansas City Community Foundation, the Robert Wood Johnson Foundation and the John D. and Catherine T. MacArthur Foundation. We appreciate the support of Rachel Wydeven, of the Work Group on Health Promotion and Community Development at the University of Kansas, United States, in preparing this manuscript, and offer special thanks to colleagues from communities who continue to teach us about how better to understand and strengthen community initiatives for health and development.

strategies, such as providing information and modifying access, and operates at multiple levels, including families and organizations, and through a variety of community sectors, such as schools, businesses and religious organizations. It aims to make small but widespread changes in health by transforming the environments in which health-related behaviour occurs (17). The goal is to promote healthy behaviour by making it easier to adopt and more likely to be reinforced. Models for promoting community health and development include the Healthy Cities/Healthy Communities model, the PRECEDE/PROCEED model, the Planned Approach to Community Health (PATCH) and others (12,18–20). Community-based efforts to prevent cardiovascular diseases, for example, engage local people in changing the environment in which they make choices about diet, tobacco use and physical activity (5). Although evidence of effectiveness is somewhat limited, these and other community approaches aim to increase opportunities for local people to work together to improve health and development outcomes and the quality of life.

The process of community development requires the fullest possible reliance on indigenous resources to identify and address local concerns (21–24). In the Declaration of Alma-Ata, WHO embraced a community development approach to health promotion (15,16). Such efforts support local participation in health promotion (25). Although community-oriented approaches to public health are usually implemented in neighbourhoods, towns and cities, they may be encouraged and coordinated at the broader levels of provinces, regions or countries.

Community-based funding promotes community, not researcher, control of interventions (12); funds are awarded to communities to address local concerns and often to researchers to support local efforts and help discover what is working. Information on the effectiveness of community-based initiatives is modest, however, since evaluation practice has yet fully to catch up with this innovation in community practice. Although models are available for studying community health efforts at the organizational and community levels (26–28), the research methods used are often borrowed from clinical trials and other researcher-controlled models of inquiry (12).

Several models and traditions inform the practice of community evaluation (see chapters 2, 4, 10 and 15). Action anthropology (29) refers to the use of research to facilitate empowerment in local communities. Qualitative research (30) highlights the value of the experience of those studied in understanding the meaning of the effort. Participatory action research (31,32) uses dialogue to produce knowledge and to inform action to help a group or community. Similarly, empowerment evaluation (33,34) aims to assess the merit of the effort while enhancing community capacity and self-determination. These and other varieties of action research (35) and action science (36) engage local people in designing and conducting the inquiry, and in interpreting the meaning of the results. The various approaches to community evaluation highlight different balances between the potentially competing ends of understanding and empowerment. They underscore the tension between experi-

menter and community control in the methods of community intervention and inquiry

Evaluation can strengthen efforts to promote health and development at the community level (33,37) First, descriptive data about process and outcome can contribute to the understanding of how community initiatives develop over time. Second, providing continuous feedback on progress can improve implementation and encourage adjustments in this open and adaptive system (38,39) Third, engaging local people in the evaluation process may strengthen the capacity of marginalized groups to understand and improve local efforts Finally, better documentation of community initiatives can help ensure the accountability of implementers to communities and funding agencies and of funding agencies to the communities that they serve. As communities receive more responsibility for addressing their health and development concerns, the demand for community evaluation increases.

This chapter presents models, methods and applications of community evaluation in understanding and improving community initiatives for health and development. We outline some challenges in evaluating community initiatives, describe a model of the community initiative as a catalyst for change, and discuss some principles, assumptions and values that guide community evaluation. Then we outline a logic model for system of community evaluation that we use in the Work Group for Health Promotion and Community Development at the University of Kansas. describe an example that draws on our field experience in the United States, outline key questions related to philosophical, conceptual, methodological, practical, political and ethical issues and offer specific recommendations on how practitioners and policy-makers can address these issues. Finally, the closing discussion examines broad issues and opportunities in evaluating health and development initiatives at the community level.

Challenges to community evaluation

Despite the potential benefits, evaluating community initiatives for health and development poses 12 serious challenges.

1. The determinants of many societal and public health problems, such as substance abuse or violence, are poorly understood, making it difficult to identify appropriate interventions and indicators of success.
2. Key constructs, such as community capacity or quality of life (see Chapter 6), are ambiguous, making the detection of changes in important processes and outcomes a formidable task (33,40)
3. The complexity of community initiatives makes it daunting to describe the intervention in sufficient detail to the permit replication of effects (33,41)
4. The lack of reliable and valid community-level measures of outcome for community concerns such as child abuse or domestic violence makes it difficult to assess the effects of an initiative (42)

- 5 The ultimate outcomes of community efforts, such as those to reduce risk for cardiovascular diseases or HIV/AIDS, may be delayed for a decade or more, necessitating the identification of measures of intermediate outcome, such as changes in the community or system (12,38,40).
- 6 Estimating the intensity of community-driven interventions may be impossible without more precise information on the type of component implemented, who was exposed to it and for how long
- 7 Data aggregated for individuals may not permit analysis of impact at the community level (43).
- 8 The absence of suitable experimental designs or appropriate comparisons may make it difficult to attribute observed effects to the community initiative, and not to some other variables (44,45).
- 9 The evolving and adaptive nature of community initiatives, with resulting implications for the fidelity of implementation, may make it difficult to assess the general applicability of effects (41,46,47).
10. Participatory evaluation must guard against potential confusion resulting from conflicting interpretations from multiple sources (46,48,49).
- 11 Broader goals for the evaluation – contributing to both understanding and empowerment, and related increased responsibilities – may make it difficult to meet standards for feasibility (33,50).
12. It may be difficult to reconcile the competing goals of evaluation – such as assessing merit and enhancing community control – in the same endeavour (33 37.49).

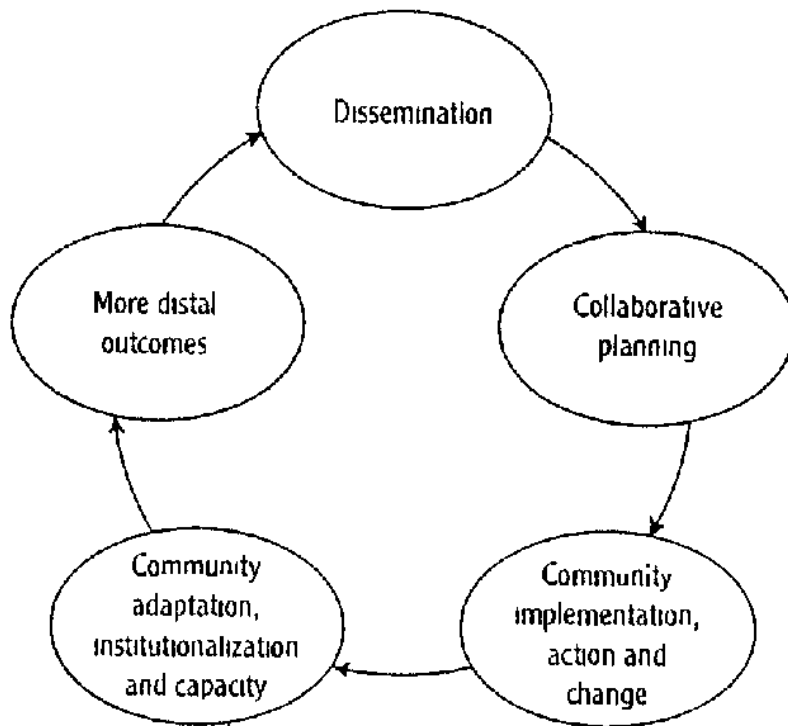
Despite the challenges, some models and principles may help guide the practice of community evaluation

The community initiative as a catalyst for change

Although the missions and specific interventions may vary, many community initiatives for health and development use a common model or framework: that of the initiative as a catalyst for change (40). Such initiatives attempt to transform relevant sectors of the community: changing programmes, policies and practices to make healthy behaviour more likely for large numbers of people. Fig. 11.1 displays the several nonlinear and interrelated elements of this catalyst model, adapted from earlier models (12,19) and based on theories of empowerment (40)

This model is nonlinear in that community partnerships engage in multiple and interrelated activities simultaneously. A new initiative to reduce the risk of violence in young people, for example, may refine its plans for action while pursuing highly visible and relatively easily achieved changes, such as posting billboards that describe the negative consequences of gang-related activity or arranging alternative activities that promote connections between young people and caring adults.

Fig. 11.1. The community initiative as a catalyst for change



Source: adapted from Fawcett et al (26)

The five components of the model are interrelated. Collaborative planning should identify specific model components and community changes to be sought, thereby guiding community action and change. Key components may be adapted to fit local conditions and sustained through policy change, publicly supported programmes or other means of institutionalization (51). A pattern of successful change should increase the community's capacity to create additional changes related to the mission, which may in turn affect more distal health outcomes. Successful initiatives or components may be disseminated for adoption and adaptation by other communities addressing similar concerns (47).

The goals and expectations of community initiatives vary. A community may attempt to address a single mission, such as increasing physical activity or improving diets, or multiple ends, such as reducing child abuse and domestic violence, that may share common risk and protective factors. Some communities have a relatively free hand in selecting locally appropriate interventions. Funding agencies may require other partnerships to replicate tried and true strategies or interventions based on research and development efforts (52). Hybrid approaches may combine model replication and catalyst roles by implementing core components, such as sexuality education and peer support for preventing adolescent pregnancy, as well as developing new community or systems changes related to desired outcomes, such as increasing access to contraceptives (53).

Components of community interventions should be expected to evolve and be reinvented by their users (47). To deliver an intervention component of

supervised alternative activities for adolescents, for example, communities may use a variety of different programme elements, such as recreational opportunities, summer jobs or community gardens. Locally controlled adaptation may facilitate community ownership, help ensure that components are institutionalized and build capacity for self-determined change

Consistent with the principles of social marketing (54) and diffusion (47), key components of successful community programmes or the entire innovation may be disseminated in the later stages. For example, comprehensive interventions for reducing the risk of cardiovascular diseases or specific components, such as increasing access to low-fat foods, might be actively disseminated. Potential adopters need to know what works, what does not and what are the best conditions for implementation. This helps connect local efforts to the lessons learned from other community-based projects and the best or most promising practices suggested by experience and research

Principles, assumptions and values of community evaluation

Some principles, assumptions and values underpin the process of evaluating community initiatives for health and development. They reflect the challenges of addressing seemingly contradictory aims in the same endeavour: contributing to the understanding and effectiveness of community initiatives while fostering community self-determination and capacity to address locally important concerns (33,41). The following ten principles, assumptions and values help guide the work of community evaluation.

- 1 Community initiatives often function as catalysts for change in which local people and organizations work together to transform the environment for a common purpose (40)
- 2 They are complex and evolving phenomena that must be analysed at multiple levels (19)
- 3 They help launch multiple interventions that citizens plan and implement.
- 4 Community evaluation must understand and reflect the health or development issue addressed, and the context of the community and the initiative (55).
- 5 Because local initiatives should be planned and implemented with maximum involvement of community members (10,25), community evaluation is a participatory process involving collaboration and negotiation among multiple parties (31,33,56,57).
- 6 Evaluation activities and resulting data should be linked to questions of importance to key stakeholders, such as community members and funding agencies (10,58)
- 7 Community evaluation should strengthen local capacities for understanding, improved practice and self-determination

- 8 Evaluation should begin early in the development process, offering continuing information and feedback to enhance understanding, improvement and self-determination (12,33,59,60).
- 9 Evaluation results should help sustain the community initiative by enhancing its ability to secure resources, maintain efforts and celebrate accomplishments (51,55). If the initiative has demonstrated promising outcomes, community evaluation data can be used to promote widespread adoption of the initiative or its components (47).
- 10 Evaluation should be coupled with technical assistance to provide an integrated support system for increasing the effectiveness of the initiative (40). The enabling activities of a support and evaluation team can assist a community initiative throughout its life-span

Logic model

Fig. 11.2 depicts the logic model for the Work Group's community evaluation system (33,61). Grounded in the catalyst model described earlier, this framework reflects an attempt to fulfil the ideals of community evaluation. Each phase has products and each product leads to the next

Initiative phases and evaluation activities

Evaluation and support activities and related products are based on the five-stage, iterative model of the community initiative as a catalyst for change (Fig. 11.1)

Collaborative planning

Agenda setting, determining what issues and options are worthy of consideration, is a particularly powerful aspect of planning in democracies (62). In community initiatives, agendas shape the choice of which issues should be addressed and which related strategies implemented. Assessment tools can be used to gather information about community concerns (63) and epidemiological information on health problems (19). Media advocacy (64) may assist agenda-building efforts, enabling local people to articulate the health and development issues that matter to them.

Involving a diverse group of local people in collaborative planning is a hallmark of the community development process (12,23). Key support activities include helping the initiative clarify its mission, objectives and strategies. A particularly critical factor in promoting change is developing action plans that identify the specific changes to be sought (and later documented) in all relevant sectors of the community (65). Identifying local assets and resources (66) for addressing concerns complements the problem- or deficit-oriented planning activities.

Community implementation, action and change

Evaluation documents the implementation of key elements of community initiatives. It monitors local efforts and accomplishments, documenting changes

in programmes, policies and practices (community or systems changes) (38). Evaluators provide feedback on process (how components of the intervention were implemented) and intermediate outcome (the number and distribution of community changes) They may also conduct intervention research (52) to examine more systematically the effects of particularly promising interventions, such as modifying school lunches to reduce fat and retain energy or providing school-based clinics to increase access to contraceptives.

Community adaptation, institutionalization and capacity

Community evaluators assess the adaptation or reinvention of key initiative components, examining whether adjustments to fit local conditions increase or preserve effectiveness They also assess the effects of efforts to promote institutionalization through policy change, the adoption of key components by established agencies and other approaches (51) Finally, evaluators help document community capacity: the ability of communities to facilitate important changes and outcomes over time and across concerns

More distal outcomes

An ultimate goal of most community initiatives is to improve community-level indicators of health and development, such as the incidence of injuries or HIV/AIDS To detect measurable outcome, community evaluators use quantitative methods such as behavioural surveys (of abstinence or unprotected sexual activity, for example) and records of outcomes (estimated rates of adolescent pregnancy, for example) They also use qualitative methods, such as interviews with key informants or participants, to better their understanding of the meaning and value of the work When integrated, quantitative and qualitative information contributes to a critical understanding of the initiative's efforts (67).

Community-level outcomes are often too delayed to be useful in fostering the continuous improvement of initiatives. Evaluation should document intermediate outcomes, such as community or systems change. Measuring such change helps detect and amplify information about new programmes, policies and practices that reflect the creation of a healthier environment (38). Future research may help clarify the conditions under which patterns of community change are associated with more distal outcomes (65)

Dissemination

Evaluators help community-based initiatives disseminate information about their effectiveness to relevant audiences, such as community boards and funding agencies. They provide data and interpretative reports about successes and failures, and the factors that may affect the wider adoption of initiatives (11,47) Dissemination activities may include presentations, professional articles, workshops and training, handbooks and communications in the mass media (68).

Products of evaluation, support and development activities

Evaluation and support activities enable local initiatives to produce products, such as community-identified concerns or community change, related to the phases in the process. According to the logic model of community evaluation (see Fig 11 2), identified community-defined concerns may facilitate (and be influenced by) the development of locally determined strategies and tactics. These, in turn, may guide community implementation, action and change. Key components may be adapted and important community or systems changes may be institutionalized. This may enhance the community's capacity to intervene and to evaluate local efforts, and may result in measurable outcomes and critical understanding of the initiative. This may help promote the widespread adoption of the initiative or its more effective components. The products of evaluation activities may influence each other, as well as the future agenda of community-defined concerns.

Example: evaluating community health initiatives in Kansas

This section outlines a composite case study, drawing on several community health initiatives in the state of Kansas for which we in the Work Group had evaluation and support responsibilities. Their missions included preventing adolescent pregnancy and substance abuse, reducing risks of cardiovascular diseases and some cancers, and promoting health (as determined locally) in rural communities. All the initiatives aimed at building local capacity to address community health concerns.

Background

A variety of communities participated in these initiatives with grant support from the Kansas Health Foundation, a philanthropic organization working to improve health in the state. The communities included cities (such as Wichita, population: 350 000), communities with military bases (such as Geary County, population: 29 638) and prisons (such as Leavenworth County, population: 69 323) and rural communities (such as Dighton, population: 1342).

In one initiative, three Kansas communities responded to a request for proposals to use a model to prevent adolescent pregnancies: the school/community sexual risk reduction model, first used in South Carolina (3,69). Three other communities received grants to establish community coalitions to reduce the risk of adolescent substance use and abuse, using the Project Freedom coalition model (65,70). Another initiative attempted to reduce the risk of cardiovascular diseases and some cancers through a state-wide partnership (71,72) and related school-linked initiatives in several rural communities (73). In a rural health initiative, eight sparsely populated and relatively agrarian Kansas counties received grants to identify and address their health concerns. Each initiative attempted to serve as a catalyst for change by involving local

people in dialogue about how best to change community programmes, policies and practices to address locally identified concerns (26). Related task forces or action committees refined and implemented the action plan for each objective by specifying and pursuing the community changes to be sought.

Participants and stakeholders

The participants in these initiatives were community members, leaders and service providers. They included people affected by the programmes' concerns and the leaders of organizations able to facilitate change, various targets of change, such as young people or elected officials whose action or inaction contributed to the problem; and agents of change, such as religious leaders or peers, who could contribute to the solution. Other major stakeholders included members of the steering committees, directors and staff of the community health initiatives, programme officers representing the funding agency and evaluation and support staff of our Work Group at the University of Kansas.

Stakeholder interests in the evaluation included understanding whether the efforts were having an effect and using this information to improve the functioning of the initiative and its specific projects (see Chapter 9). Major stakeholders posed several key questions to be addressed by the community evaluation.

- Is the initiative making a difference?
- Is the initiative serving as a catalyst for change?
- How is the initiative distributing its efforts?
- What factors influence the functioning of the initiative?

The evaluation system used a variety of measurement instruments, such as a documentation or monitoring system, and community-level indicators to address these and other questions (12,26,33,38,61).

Implementation of the model

The remainder of this section describes the application of the catalyst-for-change and community-evaluation logic models (see Fig 11.1 and 11.2) to community health initiatives in Kansas.

Collaborative planning

Community initiatives often use technical assistance from public agencies or university-based centres to help them identify concerns, and gather and interpret epidemiological data. For example, in the rural health initiative, our Work Group used several means to gather information about local concerns. First, the concerns survey (63,74) enabled community members to rate the importance of various health issues and their satisfaction with how each of these issues was being addressed in their community. Data were summarized according to major strengths – issues of high importance and relatively high satisfaction – and relative problems – issues of high importance and relatively

low satisfaction. Locally determined rural health issues varied, including such concerns as promoting the health of older adults and preventing substance abuse and adolescent pregnancy.

Second, the Work Group helped local residents conduct informal listening sessions in which members of the community came together to define issues, identify barriers, articulate assets and resources, and brainstorm solutions. Third, we obtained epidemiological data to determine whether the archival records of public health and other relevant agencies substantiated perceived community problems.

Agenda setting involves artistry: local people achieving consensus on a modest set of goals in the face of multiple and diverse community issues and unavailable, inaccurate or insensitive community-level or epidemiological data. Conflicts may arise when the available hard data do not substantiate the importance of issues to the community. For example, although epidemiological data on causes of death may suggest the public health importance of addressing cardiovascular diseases, the legitimacy of other community concerns, such as child abuse or domestic violence, may be contested if supporting data are unavailable. These tensions test the commitment of funding agencies and evaluators to assessing merit and promoting accountability while nurturing community self-determination and capacity.

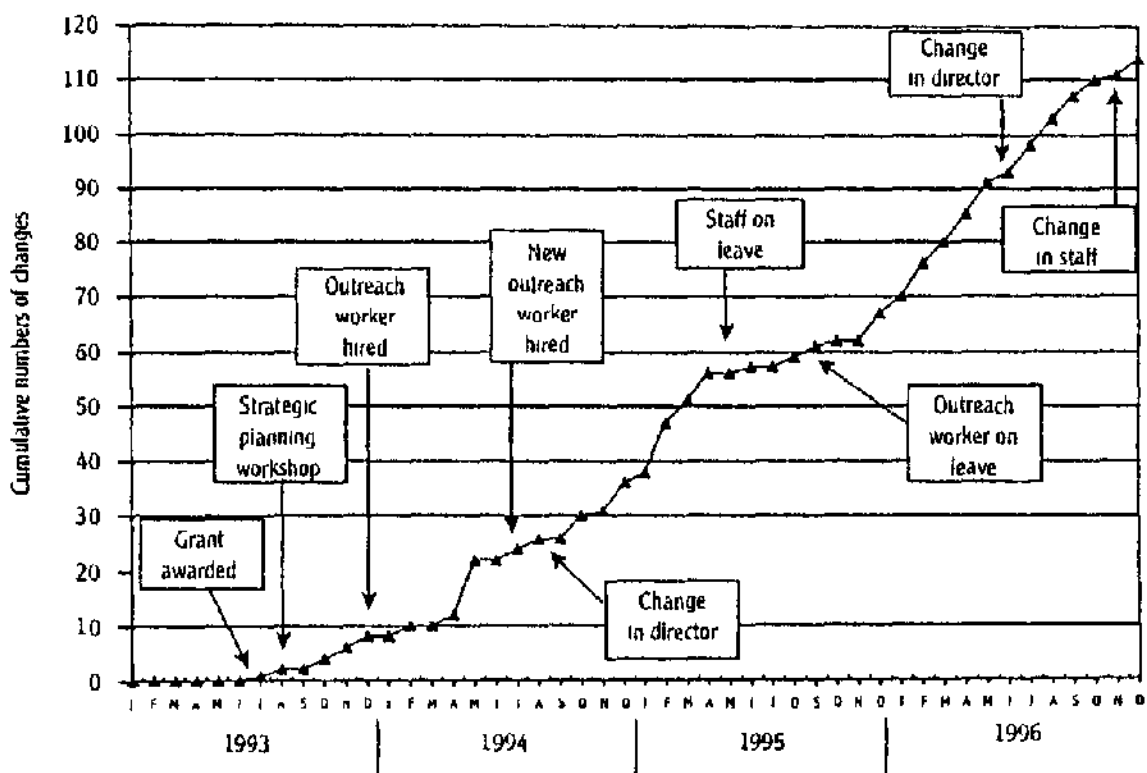
The Work Group supported action planning in communities. Staff helped each community initiative to form a vision, create a mission, set objectives and develop strategies and action plans. Local people and key leaders in each community sector, such as schools or religious organizations, were encouraged to participate so that a variety of important and feasible changes could be facilitated across all relevant sectors of the community. The Work Group developed practical guides to support action planning for a variety of community health issues, including substance abuse, pregnancy and violence in young people, chronic disease, child abuse and neglect, and health promotion for older adults (75–80). Technical assistance from us enabled each community partnership to identify action plans specific, locally determined changes in programmes, policies and practices consistent with its vision and mission.

Community implementation, action and change

We worked with programme staff and leaders to document the community changes (new or modified programmes, policies and practices) facilitated by each community partnership. Fig. 11.3 illustrates one key measure of intermediate outcome, the cumulative number of community changes, for a local partnership to prevent adolescent pregnancy. In a cumulative record, each new event (such as a new peer support group or policy change in schools to provide sexuality education) is added to all previous events; a flat line depicts no activity, and a steeper slope shows increased activity or accomplishment over time. Illustrative community changes represented by discrete data points for this initiative included each new programme (such as a mentoring programme), policy (such as increased hours of operation for a school-linked clinic) and

practice (such as teachers attending graduate level training on sexuality) facilitated by the initiative and related to its mission of preventing adolescent pregnancy. Ratings by community members and outside experts helped inform programme leaders and the funding agency about the importance of such changes. Graphs and regular reports of accomplishments were used to inform stakeholders about the pattern of progress in this intermediate outcome. The Work Group created prototypes for communicating information about the initiative's accomplishments to relevant audiences and provided information on how to incorporate such information in status reports and grant applications to potential funding sources.

Fig. 11.3. Community changes (intermediate outcomes) from work to prevent adolescent pregnancy in Geary County, Kansas, 1993–1996



We also documented the implementation of initiatives. For example, we tracked the implementation of sexuality education (for preventing adolescent pregnancy) through teachers' reports and records (53). The Group also collaborated with initiatives in conducting intervention research studies to determine if the changes caused by the initiatives were having the intended effects. For example, in intervention studies, Lewis et al. (81) found that citizen surveillance and feedback reduced sales of alcohol and tobacco to minors only when the intervention was fully implemented, and Harris et al. (82) found that changes to the school environment led to reduced fat content in school lunches and better eating habits and more physical activity in students.

Community adaptation, institutionalization and capacity

The Work Group used technical assistance and consultation to facilitate necessary adjustments in key components in the school/community model used by Kansas communities to prevent adolescent pregnancy (53). To provide peer support and education, communities implemented a variety of different programme elements, including male-to-male support groups, abstinence clubs and social events for young people. The Work Group examined institutionalization by asking whether new programmes, policies and practices were still in place some months after their initial implementation. We studied community capacity by ascertaining the pattern of community change over time and, where possible, whether high rates of community change were generated for newly emerging health and development concerns.

More distal outcomes

The Work Group obtained data from behavioural surveys and archives to help assess whether changes in the environment were associated with corresponding changes in reported behaviour and community-level indicators. For example, the local initiatives for preventing adolescent substance abuse used school surveys to assess young people's reported use of alcohol, tobacco and drugs. The Work Group gathered data on community-level outcomes, such as rates of adolescent pregnancy, or single nighttime vehicle crashes for initiatives to prevent substance abuse. We examined possible relationships between rates of community change and changes in community-level indicators to help draw inferences about whether the initiative made a difference on more distal outcomes (26,40,65).

Dissemination

The Work Group used local and national presentations, journal articles and book chapters to communicate the results of the work. We also prepared handbooks, such as those for guiding action planning (40) and community evaluation (26,61). Staff conducted workshops and training sessions and collaborated with lay opinion leaders (5) to help disseminate core elements of the model for community evaluation and support. Finally, our team helped develop a free, Internet-based system, the Community Tool Box (<http://ctb.lsu.ukans.edu>, accessed 17 May 2000), to disseminate information about promising practices for bringing about community change. The Tool Box provides practical information on strategic planning, advocacy, community evaluation and other methods used by community initiatives for health and development.

Key issues of community evaluation

This section identifies a number of salient issues in evaluating community initiatives for health and development. Our experience and understanding of the literature lead us to organize them under three broad categories (philosophical

and conceptual, methodological and practical, and political and ethical) and to frame them as questions categorized according to the ten principles, assumptions and values of community evaluation. In addition, we have linked the questions to the recommendations that follow

Philosophical and conceptual issues

The process of community health and development raises philosophical issues, such as the proper relationship between researchers and communities and the kinds of knowledge that can and should be obtained and by whom. Similarly, conceptual issues, such as how to define *community* and what theories of change to use, influence the process of understanding and improving community initiatives.

Catalysts for change

What is the theory of change (implicit or explicit) that guides the initiative, and is the evaluation consistent with it (see recommendations 1, 2, 4, 5, 16 and 19–21)?

Complex and evolving phenomena requiring analysis at multiple levels

Are targeted health and development concerns significant to the community? Are they clearly defined, and is the community aware of their level (see recommendations 1, 3 and 24)?

How well does current knowledge explain the determinants of the community issue(s)? What causes do community members and other stakeholders assign? What assumptions and values are implicit in the analysis of the problem, and does the evaluation acknowledge and reflect current knowledge about them (see recommendations 1–3)?

What does current knowledge suggest about how the intervention should balance universal with targeted interventions (see recommendations 1, 4 and 20)?

Multiple interventions planned and implemented by citizens

What is the role of local people as agents for or champions of change in facilitating community or systems change (see recommendations 4 and 10)?

Does the evaluation help document the type and intensity of the community intervention (see recommendations 5, 6, 10, 12 and 16)?

If an intervention model is being replicated, how faithful is the replica to the original? What intervention components are modified and how? Are monitoring systems in place to detect effectiveness over time, especially after adaptation (see recommendations 7, 8 and 16)?

Reflecting the issue and the context

How is *community* defined? How are differences within communities (within neighbourhoods or quadrants of neighbourhoods, for example) reflected in the data and their interpretation? In particular, how are differences among more

and less powerful members of the community addressed (see recommendations 1, 3, 15 and 18)?

How is the experience of community members valued alongside the expert knowledge of researchers? When differences in perspective or interpretation arise, how are they reconciled (see recommendations 1, 3, 7, 8, 15 and 18)?

What is the relationship between the community initiative and its larger cultural, historical and community context? How does one account for interactions among context, methods, researchers and community members? How much of the context needs to be understood to design and conduct the intervention and evaluation, and to interpret the results (see recommendations 3, 4, 7, 8, 15 and 16)?

Collaborative and participatory process involving multiple parties

What are the interests and values of the stakeholders involved in the community evaluation? How are they involved in decision-making? What are the stakeholders' visions for the community and its health and development? How are differences in stakeholders' interests, values, purposes and visions reconciled (see recommendations 1, 3, 15, 16 and 18)?

What knowledge and resources (and limitations and barriers) do key stakeholders bring to the initiative (see recommendations 1, 3, 4, 10 and 16)?

What is the purpose of the evaluation, understanding, improvement, empowerment or accountability? Who decides what questions to address and how information will be collected and interpreted? By what process is the research agenda set? Who interprets the meaning of the findings (see recommendation 3)?

Methodological issues

The study of community initiatives for health and development lies at the applied end of the research continuum (83). Basic research and clinical trials use powerful experimental designs (and extensive researcher control) to identify personal and environmental factors that either promote or limit health and development. Traditional methods of selecting participants, such as using random assignment and tight control of the intervention, cannot be used in community-controlled initiatives (see chapters 10 and 14). As collaborative partners, researchers assist in designing new interventions proposed by community members, advise on which interventions or practices to implement and assist in adapting, implementing and evaluating chosen interventions. When building community capacity to address issues of local importance is an aim of such partnerships, maximum researcher control is inapplicable and undesirable (see Chapter 4). The evaluation of community initiatives raises a number of methodological issues.

Complex and evolving phenomena requiring analysis at multiple levels

Do the evaluation measures reflect both personal and environmental contributors to the community concerns? Do evaluation measures reflect the behaviour

of actors who are both upstream (such as elected officials) and downstream (such as people affected by the problem) of the causes of the concern (see recommendations 2, 4, 6, 11 and 14)?

What designs will be used to increase confidence in the reliability and generalizability of conclusions? What degree of experimental and researcher control does the design require? How and with whom is the experimental control negotiated (see recommendations 3, 5 and 14)?

Do the measures permit an evaluation at the community level of analysis? How are links established between measures of intermediate outcome (community changes) and of more distal community-level outcomes (see recommendations 6, 14 and 18)?

Multiple interventions planned and implemented by citizens

Does the evaluation help build understanding of the process of development? What aspects of continuity and change characterize the gradual unfolding of the community initiative (see recommendations 4, 8–12 and 16)?

How does the evaluation help determine the value added by the community initiative? Does it help determine what new things the initiative brings to the community? How does it assess the significance of the initiative's contribution to addressing community concerns (see recommendations 15 and 16)?

Information linked to questions important to stakeholders

Do the evaluation methods and resulting information correspond to the questions being asked, and to the interests of stakeholders (see recommendations 3, 5, 11, 15, 18 and 19)?

What quantitative and qualitative methods best address stakeholders' questions and interests? Are diverse evaluation methods used to address the variety of these questions and interests, and do they fit the culture and context? What measurement instruments provide more reliable and valid (accurate, consistent and sensitive) information (see recommendations 3, 4 and 16)?

Practical, political and ethical issues

Issues of practicality, politics and ethics circumscribe the process of promoting community health and development, and should be considered in the design and implementation of a community evaluation.

Collaborative and participatory process involving multiple parties

Who determines the criteria for success? Who sets the agenda for the evaluation? Who are the clients for the evaluation? Whose interests does it serve (see recommendations 1, 3 and 15)?

What is the evaluators' role in the initiative? To whom and for what are they accountable? Do evaluators work with, rather than on or for, communities (see recommendations 3, 5, 15 and 17)?

Information linked to questions important to stakeholders

What is the purpose of the evaluation: assessing the merit or worth of the initiative, contributing to its effectiveness, building capacity and/or promoting self-determination (see recommendations 1, 3 and 15)?

To whom and how often are the data reported? How, by whom and under what circumstances are they best communicated to ensure maximum impact (see recommendations 3, 11 and 18)?

Building local capacity

What decisions are to be informed by the evaluation (see recommendations 1, 3 and 15)?

How does the evaluation help assess and strengthen the community's readiness and ability to address its issues (see recommendations 5, 10, 11, 13 and 21)?

Who defines the problem or issue and acceptable solutions? Do evaluation methods contribute to shared responsibility within the community for defining the agenda and for selecting, adapting and sustaining interventions (see recommendations 1, 2, 4, 7–10, 13 and 20)?

Does the evaluation help make the initiative accountable to the community it is intended to serve (see recommendations 1, 5, 8 and 15)?

How does the evaluation contribute to and/or limit community control? How does it strengthen community capacity to understand and develop solutions for locally identified concerns? Does the evaluation help local people to solve problems and make decisions independently (see recommendations 1, 5 and 7–13)?

Continuing part of the development process

Does the evaluation start early enough to help the initiative improve and adapt, and last long enough to help people understand whether the initiative has more distal outcomes (see recommendations 14 and 18)?

Do the evaluators avoid doing harm (see recommendations 3 and 16)? For example, if the initiative addresses illegal or socially sanctioned behaviour (such as drug use or violence), what special considerations are taken to help ensure confidentiality?

Do the evaluators share relevant information with stakeholders often enough and at the right times to affect important decisions (see recommendation 3)?

Using positive results to promote initiatives

How does the evaluation contribute to the sustainability and institutionalization of the initiative and its core components (see recommendations 7, 10, 13 and 19)?

What criteria are used to decide whether the initiative merits continued support and whether the initiative or its components should be disseminated (see recommendations 1, 3 and 15–18)? Who should be involved in identifying the criteria? What happens if the results are not positive?

Integrated support system for community health and development

Is the evaluation useful? How well do its measures and feedback correspond to the initiative's desired results (see recommendations 3, 5 and 16)?

Is the evaluation feasible or a burden to the community initiative, reducing its capacity to affect identified concerns? Are the time, effort and monetary costs of the evaluation justified in light of the benefits (see recommendations 3, 5, 14 and 16)?

Recommendations for practitioners and policy-makers

We group the recommendations according to the five phases of the catalyst and logic models (see Fig 11.1 and 11.2), and address them to practitioners (especially community researchers and implementers) and policy-makers (including elected and appointed officials and funding agencies)

Supporting collaborative planning

- 1 Policy-makers should support and practitioners assist community members in
 - identifying community health and development concerns and collecting data that document locally defined problems and assets; and
 - strategic planning: identifying a vision, mission, objectives, strategies and action plans
2. Practitioners and policy-makers should create opportunities for community members to participate in developing an evaluation plan for the initiative that reflects the interests of key stakeholders
- 3 Practitioners should
 - develop and communicate information on risk and protective factors for community concerns and the most promising practices for addressing them,
 - help elicit local explanations and knowledge and assist in the critical analysis and interpretation of available data;
 - develop a reciprocal relationship with community initiatives, providing technical assistance and resources, as well as making requests for information and data; and
 - develop and regularly review research plans, schedules, expected outcomes and data with community members and other stakeholders.

Supporting community implementation, action and change

- 4 Practitioners and policy-makers should:
 - create opportunities for community members to select interventions and prioritize desired community changes that reflect local and expert

knowledge of what is important and feasible (for example, by using a survey of goals), and

- encourage community initiatives to be a catalyst for change, focusing their efforts on transforming modifiable features of the environment (programmes, policies and practices), rather than individual behaviour only.

5 Practitioners should.

- highlight the products of planning, such as forming committees or completing action plans or grant applications, rather than the process,
- provide technical support and feedback in identifying, developing and implementing promising interventions and best practices;
- evaluate the effects of interventions or initiative components of particular interest to the stakeholders to assess their actual impact on behaviour, risk factors and outcomes, and
- assess and feed back information for process measures that are of importance to the initiative (such as the units of media coverage, number of community members and organizations participating, resources generated and services provided)

6 Policy-makers should request and practitioners provide a measure of community or systems changes (new or modified programmes, policies or practices) facilitated by the initiative to indicate how the environment is changing to support health and development.

7. Policy-makers should allow and practitioners support the adaptation of community models and interventions to fit local conditions

8. Practitioners should collect data on process and outcome to determine whether locally implemented and adapted innovations are effective.

9 Policy-makers should encourage long-range planning for sustainability, and provide support (such as training and links to support networks) and gradually reduce long-term funding to promote the institutionalization of initiatives.

10 Practitioners should

- conduct periodic (annual) assessments of the proportion of community or systems changes that are sustained (incorporated into policy, programmes or the budget of government agencies) as an indication of institutionalization,
- collect data on rates of community change over time and across concerns to provide an indication of community capacity; and
- collect data on the engagement of citizen agents of community or systems change to provide a measure of community capacity and social capital

11. Policy-makers should request and practitioners should provide, regular (monthly or quarterly) feedback of process and outcome data to improve the functioning of the initiative.

12. Practitioners should provide feedback on the distribution of community change by risk factor, strategies used, goals sought and settings engaged to help understand and improve efforts to address community issues.
13. Policy-makers should provide funding that enhances the capacity of a diverse team of community leaders to implement the initiative (to provide training for requesting funding and to support community capacity to plan and carry out the mission, objectives and strategies)

Detecting and influencing more distal outcomes

14. Practitioners should.
 - collect data on reported behaviour related to risk and protective factors (such as reported tobacco use or physical inactivity) and validated physiological measures (such as measures of fitness);
 - use longitudinal environmental measures to assess the conduciveness of the environment to health and how it changes over time, which may include prospective case studies of rates of community or systems change and their relationship to changes in relevant community-level indicators of health and development, and
 - develop practical and standardized methods for collecting data on relevant risk and protective behaviour and community-level indicators over the same time frame and geographic area, covering communities in which the intervention is implemented and appropriate comparison communities
15. Policy-makers should encourage and practitioners support community members and outside experts in assessing the public health or social significance of initiative achievements (using an outcome survey to assess perceived importance to the mission, for example) to increase accountability to community members and other stakeholders.
16. Practitioners should use qualitative methods (such as interviews with key informants about critical events, barriers, resources and lessons learned) to increase critical understanding of the initiative's process and outcomes.
17. Policy-makers should provide funding mechanisms that help make outcome matter to communities. These could include annual renewal of multi-year grants based on evidence of high rates of community change, outcome dividends or bonuses for improvements in more distal outcomes
18. Practitioners should.
 - feed back data on health and development outcomes, behavioural risk and protective factors, and community change early and regularly to a broad cross-section of initiative participants, including staff, community members, board members and funding agencies; and
 - collaborate with initiative leaders to develop meaningful ways to present evaluation data to stakeholders

Supporting dissemination

19. Practitioners should present data, in collaboration with community members and initiative staff, at local, state, national and international venues to create a broader audience for local efforts.
20. Practitioners and policy-makers should spread information on programmes and components known to be effective, and encourage other communities to replicate them
21. Policy-makers and practitioners should use all communication media to disseminate information about successful interventions, promising practices and lessons learned in doing the work

Conclusion

Answering an overarching question may assess the merit of a community evaluation. How does the evaluation contribute to (or restrict).

- understanding of the community initiative; and
- the improvement of the community and its capacity to effect valued ends?

This perspective adds empowerment to the traditional purposes of assessing merit (33). The traditional evaluation paradigm asks how to configure community conditions, participants and interventions to get an answer to a research question. In contrast, the paradigm of community evaluation asks how to structure the evaluation to understand better and to improve what is important to the community.

In community evaluation, community members, funding agencies and evaluators collaborate to choose evaluation strategies to fit the local context. The factors determining the mix of strategies comprise the health and development outcomes to be addressed, the stakeholders' interests and needs, the resources available and the types of intervention methods chosen. For example, an injury prevention initiative might collaborate with the local clinic to track the incidence of deaths and injuries related to violence, road accidents or other locally important contributors. Although a child welfare initiative might find direct observation of parent-child interactions too expensive, it could use archives to collect data on the number of children living below the poverty line and other indicators.

A situation analysis of the community is a crucial step in planning for health and development at the local level (19). Community evaluation informs the development process in which a community gains knowledge about its situation and identifies locally important concerns. Optimally, community evaluation is an early and integral part of the support system, helping inform the choices of culturally sensitive goals and strategies, and later documenting the community's mobilization and progress with its identified concerns. Evaluation methods contribute to a knowledge base from which community leaders, researchers and funding agencies can better understand

the social and cultural conditions and processes that support or inhibit community change

Communities may have built-in mechanisms for change, such as financial resources or service networks, that enable them to accept responsibility for transforming local conditions (84). Community evaluation can help communities recognize and act on their own abilities to change. In this endeavour, the community has a collaborative relationship with the evaluation team, as both work together to understand and improve the initiative. Communities identify and mobilize existing resources to initiate and help document changes that relate to community health improvement. By documenting such changes, community evaluation can prompt community members and leaders to discover where change does (and should) occur.

When communities do not facilitate change, however, the role of the community evaluation team may shift to promoting accountability. When intermediate and main outcomes remain minimal over extended periods, for example, local trustees and funding agencies can use community evaluation data to encourage leaders to make adjustments. In extreme cases, community initiatives may be encouraged to seek change in local leadership. To help make outcome matter to local implementers, funding agencies may structure funding so that annual renewal depends on evidence of progress.

Detecting community capacity is a particularly important challenge for community evaluation, but community change, as illustrated in the Kansas initiatives, is a promising measure. For example, a community initiative for preventing substance abuse that displays a sustained pattern of relevant community changes over time and related improvements in more distal outcomes (such as reported drug use) might be said to demonstrate greater community capacity than a counterpart with no sustained change. Evidence that members of the same initiative later effect community changes related to a new mission or concern, such as preventing violence by young people, provides further conviction of increased capacity. Further research may help reveal a variety of sensitive and reliable measures of community capacity (85) and the related constructs of community competence (43) and social capital (86,87).

Successful community partnerships create, adopt and/or adapt the interventions and practices best suited to local conditions. How interventions are adapted and implemented becomes almost as important a research issue as what happened as a result (47). Future research may refine the art of supporting and documenting the process of reinvention. Such knowledge should enhance the capacity to support contextually appropriate efforts to promote health and development.

Relationships between scientists and communities appear to be evolving in the context of community partnerships for health and development. This may reflect a minor revolution in traditional modes of science and practice (88). In the late 1980s, community-based funding emerged as an innovation in funding practice, awarding grants to communities to address their concerns and not primarily to research scientists to design and implement interventions in or on

communities. Traditional methods emphasized control over communities; they could not achieve the multiple goals of community initiatives: to increase understanding, improvement, capacity and self-determination. Widespread discontent with the inadequacies of traditional models of research and evaluation, and challenges to basic assumptions about their purposes created the conditions in which new community-oriented approaches to intervention and evaluation emerged.

A new paradigm offers changes in models, methods and applications (88). For example, the community evaluation system described in this chapter outlines a conceptual framework for examining and improving community initiatives that act as catalysts for change. The methods include various support activities and instruments for documenting and feeding back information about process and intermediate and more distal outcomes (12,26,38,47,61). The variety of problems tackled through community initiatives in both urban and rural areas suggests the generalizability of this approach.

To be adopted, candidate approaches to supporting and evaluating community initiatives must show their advantage over others (47,88). New models and methods should solve problems not addressed well by others. For example, a community evaluation system might offer the capacity to collect and feed back information about community change, an intermediate outcome of community initiatives. The innovation must also preserve the strengths of earlier and competing methods, community evaluation approaches should draw from the strengths of models from public health (19), applied research methods from behavioural science (41), strategies from community development (23) and key constructs such as prevention (13,89) and empowerment (90,91).

Finally, a candidate approach to community evaluation should leave a variety of unresolved issues and questions to be addressed by scientists and practitioners drawn to the new or adapted paradigm. The many issues highlighted here and the related recommendations offer multiple niches for contribution. Perhaps this and other approaches will help unlock the secrets and power of community initiatives. Such efforts may contribute to the capacity of communities and support systems to address locally valued and evolving health and development concerns, now and in future generations.

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