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Using Participatory Action Research to Build Healthy Communities

SYNOPSIS

The author contends that community-based Participatory Action Research (PAR) is ideally suited for use in Healthy Communities projects. The article begins by defining PAR and its principles and characteristics, then discusses the philosophical and methodological compatibility of PAR and Healthy Communities. After highlighting the challenges of expanding the Healthy Communities accent on participation to include PAR, the article describes the experiences of two Healthy Communities projects in the US that have successfully used PAR.

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Almost 40 years before the birth of the Healthy Communities movement, social psychologist Kurt Lewin became frustrated by the limitations of traditional social science research methods for understanding and addressing complex human problems.[1] The school of action research that he developed stressed the active involvement of those affected by the problem in the research through a cyclical process of fact finding, action, and reflection, leading to further inquiry and action for change.

By the 1970s, more revolutionary alternative approaches to research were emerging—often independently of one another—from work with oppressed groups in Third World nations.[1-4] The dialogical method of Brazilian educator Paulo Freire, with its accent on co-learning and action based on critical reflection, provided some of the critical philosophical grounding for such participatory research efforts.[5,6] Similarly, the principles of mutual inquiry for social change developed in Africa and Asia[3] and the

seminal work of Fals-Borda[4] in applying and refining participatory research methods in Latin America, made critical contributions to the theoretical underpinnings and practice principles of this tradition.

In disciplines ranging from anthropology and community psychology to public health, increasing numbers of researchers have turned to these alternative strategies for mutual inquiry and social change. Disillusioned by what they perceived as the often "colonizing" nature of more traditional "us/them" research efforts and the frequently disappointing nature of the community interventions they helped spawn, these scholars evolved approaches variously termed "participatory research," "mutual inquiry," "community-based action research," "participatory action research," and most recently, "empowerment evaluation."[7–12] As Wallerstein has noted, although these traditions differ in some of their goals and change theories, they share a series of core principles and values that have led many scholars to use the terms interchangeably.[7] Although a specific approach in its own right,[4] the term *participatory action research*, or *PAR*, has increasingly been used as an overarching name for orientations to research practice that place the researcher in the position of co-learner and put a heavy accent on community participation and the translation of research findings into action for education and change.[7,10]

PAR: PRINCIPLES, DEFINITIONS, AND CHARACTERISTICS

PAR is a "systematic investigation, with the collaboration of those affected by the issue being studied, for the purposes of education and taking action or effecting social change."[9] The research "centers on community strengths and issues" and "explicitly engages those who live in the community in the research process."[13] What is distinctive about PAR is not the methods employed, which may be either quantitative or qualitative, but the active involvement of the people whose lives are affected by the issue under study in every phase of the process.[14] What is different in PAR is "the attitudes of researchers, which in turn determine how, by, and for whom research is conceptualized and conducted" and the corresponding location of power at every stage of the research process."[14] Central to PAR approaches is their shared commitment to consciously blurring the lines between the researcher and the researched "through processes that accent the wealth of assets that community members bring to the process of knowing and creating knowledge and acting on that knowledge to bring about change."[6,7,9]

A number of scholars have attempted to elucidate the principles and distinguishing characteristics of PAR

approaches; Fawcett's[15] thoughtful and detailed look at the values and guiding commitments for community-based research and action more generally has considerable relevance for PAR. In brief, as Israel et al. note,[9] PAR is:

• participatory;

• cooperative, engaging community members and researchers in a joint process in which both contribute equally;

• a co-learning process for researchers and community members;

• a method for systems development and local community capacity building;

• an empowering process through which participants can increase control over their lives by nurturing community strengths and problem-solving abilities; and

• a way to balance research and action.[9]

PARALLELS BETWEEN PAR AND HEALTHY COMMUNITIES

A number of striking parallels exist between community-based research on the PAR model and efforts to create healthy cities and healthy communities:

• Both are ground up rather than top down approaches that grew in part out of a recognition of the limitations of expert knowledge and narrow single discipline approaches to complex human problems.

• Both accent the use of "democratic participatory processes and social learning"[16] about the meaning of health and other concerns in order to promote change.

• Both emphasize the strengths of people and communities, including, importantly, their capacity for problem solving.

• Both tend to be driven by community priorities, rather than those of outside experts.

• Neither can be done by following a cookbook or recipe, either for "doing" community-based PAR or "creating" a Healthy City.

In the latter regard, as Duhl notes, "No Healthy City prototype exists" but rather a set of "values and processes" that provide guidelines for communities that would engage in this kind of inquiring, systematic, and continuously learning and changing endeavor.[16] Similarly, PAR is not a particular research method but rather a research orientation that is community-driven, systematic, participatory, and oriented toward community and social change.

Critics of PAR have questioned whether the reality of participatory research has approximated the ideal.[7] For example, the language of participation in health promotion research, and the "inattention to gender" (as in the use of universal terms like "the oppressed") and to gender differences in participation in research processes do not always comport with the inclusionary values of PAR.[7, 17–19] Further, as Roe and her colleagues have noted, while participatory approaches can stimulate capacity building and community development, they can also bring "unequal players to an uneven table to participate in difficult, predetermined decision making."[20]

PAR IN PRACTICE

Vancouver, Washington, and Pasadena, California, are just two of more than 100 communities in the US that have engaged in efforts to develop and employ healthy community indicators.[21] These efforts often have involved a multi-sector, community-wide planning process to articulate a collective vision of a healthy community and suggest benchmarks to monitor progress.[21]

In Vancouver's Clark County Community Choices 2010, teen mothers, members of a Russian church group, and participants in a local seniors organization were among a wide variety of community members participating in a year-long visioning process.[22] Through focus groups, they addressed such questions as "What do you like most about your community?" "What are your hopes for your community's children 20 years from now?" and "Where would you put your energy to make the community a better place?" (Personal communication, Bonnie J. Kostelecky, June 1999). In Pasadena, some 150 residents participated in a day-long forum in which they decided on 10 areas of concern, including housing, local employment, and alcohol and drugs and

then worked together in small groups to determine the "critical issues" within each of these 10 areas for which indicators should be developed. (Personal communication, Deborah Silver, June 1999).

Although Vancouver's, Pasadena's, and similar efforts represent a major departure from traditional expert-driven community planning approaches, the involvement of Healthy Community residents in the research process has tended to be limited to particular aspects of the inquiry process, for example, developing visions for the future and helping in the implementation stage. The actual development of neighborhood indicators, once community input has been sought, and data collection and analysis have tended to be left to "the experts" in health and other sectors.

In contrast, the Healthy Communities projects in West Contra Costa County, California, and Tillery, North Carolina, have employed a PAR process in which local residents have been involved in every stage of the research.

West Contra Costa County, California. The urban neighborhoods of California's West Contra Costa County are beset by a host of problems, including high rates of unemployment, violence, toxic waste, and HIV/AIDS. Yet these multi-ethnic neighborhoods also have a vast array of resources and strengths, which were drawn upon by the county health department in the mid-1990s when it catalyzed the Healthy Neighborhoods Project (HNP).[23]

HNP reflected the health department's realization that categorically funded, single-sector programs couldn't begin to address the real concerns—or build sufficiently on the real strengths—of community members. Using a community organizing approach, the project forged an "authentic partnership" between local residents, community-based organizations, and the local health department, and frequently has engaged other partners as well (for example, the housing, crime and safety, business, and transportation sectors).[17] In the words of former project director Sheryl Walton, HNP "builds on the assets of specific neighborhoods that cultivate long-term mechanisms for community development" (Personal communication, June 1999).

> Researchers are co-learners rather than teachers, grappling as equal partners with ethical challenges and the need for research approaches that reflect both scientific and popular perspectives.

Using PAR. At the heart of HNP are eight trained resident community organizers, a lead organizer, and close to 80 Neighborhood Health Advocates who make up Neighborhood Action Teams in each of the participating neighborhoods. Conducting door-to-door interviews, plotting resources on a local map, and holding community forums, the organizers and their action teams work with their neighbors to study their communities and develop community capacity inventories. Neighborhood action plans, reflecting the priorities of residents, are then developed and implemented with the help of HNP staff, who provide training and technical assistance, help garner additional resources, and engage residents in participatory evaluations.

As part of their training, community organizers and Neighborhood Health Advocates examined and critiqued a template of community assessment items, and changed them to meet their own neighborhoods' needs. Action team members then not only conducted the surveys themselves in some 500 homes, but also took the lead in sorting and analyzing responses received to questions such as "What do you like best about living in this neighborhood?" and "What would you most like to see changed?" Members of the health department's Community Wellness and Prevention Data and Analysis Team have noted that some of the categorizations made by the residents in sorting through the responses at first seemed to make little sense from an epidemiological perspective. Yet, as residents described the logic behind their sorting, it soon became clear that their analyses were based on a sophisticated knowledge of the communities in which they lived.

The results. Based on the findings of their participatory research, and building on their expanded capacity to make change, the Neighborhood Action Teams worked with local residents to undertake a variety of action steps. The results have been impressive:

•   As a result of resident advocacy, evening and night bus service was restored in North Richmond, improving access to education and employment in this isolated neighborhood.

•   In the El Pueblo Housing Development, residents worked with the local housing authority, the police, the mass media, the health department, and other partners to successfully advocate for speed bumps, improved lighting, youth activities to reduce safety risks, and the removal of a billboard tobacco advertisement. Funds for subsequent neighborhood action

plan priorities (for example, job training and computer skills classes) were secured by the resident organization through three successful grant applications, two of which were written by the residents themselves.

•   A group of West Contra County residents formed a "bucket brigade," participating in air quality sampling and working to call attention to the problems of air pollution caused by the many oil refineries that dot the landscape in their community.

•   After a neighborhood shooting, the Healthy Neighborhoods team in West Boulevard convened youth and adult residents, police, and other city officials to reduce community tensions and plan long-term prevention strategies.

•   Residents of Parchester Village established a neighborhood watch program, community clean-ups, more frequent garbage collection, improved lighting, and more police patrols.

•   Residents in each neighborhood have become involved in city and regional decision-making. Several are active members of an environmental health advisory board and a regional Partners for Health initiative, while others are participating in county planning on welfare reform and transportation issues and in one case even running for public office.

•   Residents have remained actively involved in project evaluation, discussing with the outside evaluator what types of changes they'd hoped to see and working collaboratively in developing indicators that would capture community concerns. The organizers have also participated in training on program planning and evaluation, and are working individually with health department staff to create work plans, complete with evaluation measures and time lines, that reflect the interests and assets of each neighborhood.

In sum, the Healthy Neighborhoods Project provides a striking example of a Healthy Communities process, committed to PAR principles, that has engaged local residents in a sustained way, not only in effective community building but in combined research, education, and action for change, and in documenting their story.

Tillery, North Carolina. The small community of Tillery, in Halifax County, North Carolina, has been

called "a textbook lesson in how to grow a healthier community from the ground up."[24] Located in the "Black Belt" where most of the nation's rural African Americans reside, Tillery is part of a region that has been heavily affected by poverty and environmental racism (the practice of relegating to marginalized communities of color the most unhealthy or undesireable environmental conditions). Yet the approximately 300 families of Tillery have articulated and acted on a vision of a healthy community that includes: an environment safe from local industrial pollutants; land ownership; a farmers' cooperative; and improved housing stock, education, transportation, and health care access.[24]

Tillery had several decades of experience with local self improvement efforts (including a farmers' cooperative, the region's first NAACP chapter, and a citizen's action group), when a new group, Concerned Citizens of Tillery, formed in 1978 to protest the predominantly white school board's decision to close the town's only school, also its only meeting place. Victory on this issue was several years in the making, but it led to CCT's becoming a nonprofit organization and an effective vehicle for organizing around other issues.[24,25]

Key among these were the health and environmental problems posed by the rapid growth of intensive hog factories, which store huge quantities of waste in open lagoons prior to it being spread on fields. Local community members were convinced that the rapid escalation in intensive hog factories (which grew 85% from 1985 to 1992)[25] was polluting their local water supplies and causing the rash of sore throats, "itchy eyes," and other health symptoms in the local population.

Using PAR. Members of CCT began, on their own, to study this situation, conducting a survey in which they charted the dates of well construction, their depth, and their location in relation to hog cesspools and using their findings to promote policy change (Personal communication, Gary Grant, May 1999). They also reached out to neighboring communities and helped found an environmental justice coalition, the Hog Roundtable, which later expanded to include such predominately white environmental groups as the Coastal Federation and the Sierra Club.[25]

Impressed with CCT's efforts, a journalist helped connect Executive Director Gary Grant with epidemiology professor Steve Wing, PhD, at the University of North Carolina, and a true PAR project got underway. Grant and Wing approached a third partner—the county health department—and co-wrote a successful, four-year federal environmental justice grant proposal, which

allowed for a more systematic look at the health impacts of the intensive hog production industry and other forms of environmental racism. The coalition born of this project, known as the Southeast Halifax Environmental Reawakening, or SHER, conducted its PAR projects using "barefoot epidemiology" and other methods consistent with what has been described as the "new public health."[26] In Grant's words, "We don't empower people— we reawaken the power people already have."

Community workshops are held on how scientific studies are conducted, what constitutes valid data, and how studies can be designed using multiple methods that address the concerns of both community members and outside researchers (for example, community case studies and various quantitative approaches). Consistent with the principles of PAR, the outside researchers come to these workshops as co-learners rather than teachers, grappling as equal partners with the ethical challenges of such inquiry and creating approaches that reflect both scientific and popular perspectives.[25]

The results. Several examples of the use of PAR in Tillery and the surrounding area well demonstrate the effectiveness of this approach.

- In one instance, a public health graduate student worked with residents to design questions for a door-to-door survey aimed at learning more about residents' water sources, sewage problems, and related issues. CCT members conducted the interviews themselves and discovered that more than 90% of the houses surveyed had such problems as pooled wastewater in backyards and driveways and sewer pipes backed up into the home.[27] Combining their findings with water sampling data that revealed extraordinarily high bacterial counts, they testified before county commissions, and won, for the affected town, an Environmental Protection Agency (EPA) hardship grant to install the needed sewage line.

- In another instance, a door-to-door survey to better document the health and environmental problems experienced by residents was developed by epidemiologist Wing, with extensive resident input into how issues were defined, how the survey would be conducted, and how the results subsequently would be shared with the larger community. After discussions with community members and the state health department, the group decided that the university-based researchers should conduct the actual interviews in order to reduce recall bias and other poten-

tial problems. But members of three eastern North Carolina community-based organizations accompanied the researchers to the homes and made introductions—a fact that Wing credits for the very high (80%) participation rate achieved (Personal communication, June 1999).

• Documentation, through PAR, of the threats of the hog production industry to air quality and safe drinking water and the residents' subsequent filing of petitions and presentation of testimony at public hearings resulted in the health department's decision to require that intensive livestock operations undergo a permitting process.[24]

Part of the research conducted in these communities was, of necessity, conducted primarily by Wing and others with advanced training in epidemiologic methods and computer modeling. Wing's analysis of more than 2,500 hog factories in more than 4,000 census tracts revealed that communities with the highest minority populations had about six times as many of these operations as the "whitest" areas, even when he controlled for population density.[28] Yet, even these studies were conducted in collaboration with the local communities, whose members in turn were helped to use the resulting data and the media attention generated to further their action agendas.

Community-based research and organizing in Southeast Halifax County has been given much of the credit for a number of policy changes that have occurred in the area. CCT's early work played a major role in securing the 1992 passage of the first ordinance in the state to stop the runaway growth of corporate hog factories. Based on this and other successful efforts to effect change, CCT received a 1993 Healthy Communities Award from the Health Care Forum and Marion Merrell Dow, Inc.[24]

Such victories have not come without struggles, some of which were captured in a 1996 segment entitled "Pork

Power" on the popular television program *60 Minutes*. For CCT and its partners in the university, the state and local health departments, the environmental movement, and other sectors, however, the end results have been more than worth the difficulties faced. Their work, which has helped bring national attention to the problem of environmental racism, stands as a powerful example of PAR in practice and its potential for application by other Healthy Cities and Healthy Communities.

C O N C L U S I O N

As Wing has argued, "To transform society in support of more fundamental health promotion, a more democratic and ecological approach to scientific study is necessary," one in which "education between scientists and the public must take place in both directions."[29] Such an approach is time consuming and filled with challenges as local communities and their outside research collaborators from a variety of sectors attempt to navigate difficult ethical and practical terrain, addressing issues of power and trust, research rigor, and the often conflicting agendas of "scientist and citizen."[30]

Through focus groups, community forums, visioning exercises, and similar activities, many Healthy Communities and Healthy Cities have effectively incorporated high-level community participation into different aspects of the research process. There is much untapped potential, however, for a greater breadth and depth of community involvement in the research arena. PAR offers a promising approach for realizing this potential and in the process furthering the vision and reality of the Healthy Cities movement.

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