
Using Community-Based Participatory Research to Address Health Disparities

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Community-based participatory research (CBPR) has emerged in the past decades as an alternative research paradigm, which integrates education and social action to improve health and reduce health disparities. More than a set of research methods, CBPR is an orientation to research that focuses on relationships between academic and community partners, with principles of colearning, mutual benefit, and long-term commitment and incorporates community theories, participation, and practices into the research efforts. As CBPR matures, tensions have become recognized that challenge the mutuality of the research relationship, including issues of power, privilege, participation, community consent, racial and/or ethnic discrimination, and the role of research in social change. This article focuses on these challenges as a dynamic and ever-changing context of the researcher–community relationship, provides examples of these paradoxes from work in tribal communities, discusses the evidence that CBPR reduces disparities, and recommends transforming the culture of academia to strengthen collaborative research relationships.

Keywords: community-based participatory research; power and privilege; racial and ethnic health disparities

Community-based participatory research (CBPR) has quickly entered the discourse of research methodologies within the past decade, spawning Requests for Proposals from the Centers for Disease Control, Office of Minority Health, multiple institutes within the National Institutes of Health, and other state

or foundation sources that have attracted hundreds of applicants (Green, 2003). Defined as a

collaborative approach to research, [CBPR] equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health and eliminate health disparities. (Minkler & Wallerstein, 2003, p. 4)

Along with this definition, CBPR proposes a set of principles based on assumptions that: (a) genuine partnership means colearning (academic and community partners learning from each other), (b) research efforts include capacity building (in addition to conducting the research, there is a commitment to training community members in research), (c) findings and knowledge

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should benefit all partners, and (d) CBPR involves long-term commitments to effectively reduce disparities (Israel et al., 2003).

More pointedly, CBPR has been framed as an orientation to research that focuses on relationships between research partners and goals of societal transformation (Minkler & Wallerstein, 2003), rather than a specific set of research methods or techniques. CBPR, however, is not simply a community outreach strategy but represents a systematic effort to incorporate community participation and decision making, local theories of etiology and change, and community practices into the research effort. Although the majority of studies may still reflect a qualitative bias, CBPR processes have also and increasingly been incorporated into quantitative study designs (Farquhar & Wing, 2003). Two separate traditions have influenced the field (Wallerstein & Duran, 2003): the earlier northern action research tradition of Kurt Lewin's organizational change action and/or reflection cycle from the 40s and 50s (Lewin, 1948); and the southern 1970s participatory research tradition, with academics from Asia, Africa, and Latin America challenging their roles in the academy and their responsibility to transform inequitable conditions in society (Fals-Borda, 2001; Fals-Borda & Rahman, 1991).

Recognition of synthetic definitions and principles of CBPR has been increasing steadily through new books (Blumenthal & DiClemente, 2004; Israel, Eng, Schulz, & Parker, 2005; Minkler & Wallerstein, 2003; Viswanathan et al., 2004) special issues of academic journals, and the recent Institute of Medicine's (IOM; 2002b) call for CBPR to be taught as a core competency to all incoming health professional students. Despite the rapidly growing interest within the research community, this is also a paradoxical time for CBPR with the concurrent explosion of knowledge and priority funding in genomics and specific risk-factor trials. As it matures into an accepted research paradigm, CBPR

faces several challenges: research design and methodology questions of how to assess its effectiveness, ethical questions of how to expand Institutional Review Board (IRB) patient protection to a community protection model, and implementation questions of the researcher–community relationship, such as the role of participation, privilege, power, ethnic and/or racial disparities, community consent and protection, and research for social change.

This article focuses on the challenges and paradoxes of the researcher–community relationship within a dynamic and ever-changing context, provides examples of these paradoxes from work in tribal communities, discusses the evidence that CBPR contributes to reducing disparities, and ends with recommendations for transforming the culture of academia and for strengthening collaborative research relationships.

We write today from our own perspectives and positions of power, oppression, and privilege. In Nina's case, she writes as a White middle-class highly educated woman, not from most of the communities in which she works, yet also with some understanding of minority status as a Jew raised in a midwestern town. In her family, she had access to cultural, human, social, and financial capital, and became a university professor, which comes with the baggage—positive and negative—of the university, that is, the history of how other researchers have engaged with communities previously, University policies about sharing budgets or resources, and evidence or not of University commitment to community-based work. In Bonnie's case, she writes as a mixed race Coushatta/Opelousa Indian, raised in an urban poor background. As a university professor, she shares the privilege of the middle-class highly educated professional yet as a faculty of color also faces the realities of structural racism within the University and society, and the paradoxes of being from similar communities to those with whom she works, yet also not from them at the same time. She too comes with similar University baggage, positive and negative, as she engages in community research.

In essence, the multiple positions of the researcher should never be underestimated. We may imagine we are walking into a community representing our own backgrounds, our current realities, and our research projects. Yet we may also be viewed through the lenses of multiple contexts, including our own multiple histories and the University's history with any particular community, some of which we may know nothing about or do not expect.

► CBPR CHALLENGES AND PARADOXES

Several sets of challenges within the researcher–community relationship deserve further exploration:

issues of participation and community consent, issues of power and privilege, issues of racism and ethnic discrimination, and issues of research for social change.

Knowledge Interests

The first issue is the basic question of what is community participation. Who is participating? Who is not participating? What interests are being served or not served? If community members are participating, in which aspects are they participating and in which decisions is there little participation? How do we address the reality that different stakeholders may and do have different goals of participation and different knowledge needs, and may and do have different expertise to participate more actively at different stages? Knowledge is never created in a vacuum but rather responds to diverse cultural, social, and material needs of interest groups (Habermas, 1978). Researchers' interests in knowledge production are often different from the practical interest of communities in improving programs and services in community settings. These issues are important to negotiate throughout the research endeavor so that communities can directly benefit in shorter time cycles, even if final analysis and publication is a long-term process.

The challenge of participation in research can be seen through a continuum of control (Arnstein, 1969), from control being exercised completely by the research unit (university, institute, or health department) with minimal or manipulated participation; or on the other extreme, though this may be a rarer case, being exercised completely by the community. The expectation is that levels of participation vary by levels of ownership, with greatest participation by partners who have a stake and authority in the decision making of the partnership. Participation and control are never static, however, with the potential for a research project starting with a university-driven agenda, yet moving toward a mutual agenda or a community-driven agenda over time.

Shifting Involvement

One major challenge is the question of what is the level of participation throughout the study. Are community members involved minimally to satisfy a grant mandate, or are they involved throughout the extended and comprehensive process of designing the research questions, seeking funding, designing methodology, conducting the data collection, participating in the analysis, and dissemination?

An example from tribal communities illustrates these challenges. In our 3-year Centers for Disease Control

and Prevention (CDC) research grant on community capacity with two tribes, the starting place was primarily the University, though we had obtained tribal leadership support in the grant submission (Centers for Disease Control and Prevention [CDC], 1999). Within the first months of the grant, we formed local research advisory committees, yet it took almost the 3 years before the committees and the tribal leadership assumed ownership of the data and the process. In one community, in particular, we decided to track changes in our partnership, which we framed as dialogues between the tribal and University perspectives. In the 1st year, both sets of stakeholders were concerned that the grant's purpose was quite abstract. Defined as identifying ways to understand and measure tribal capacities and social capital, the grant still needed to ensure actual benefits to the community. The University team knew there had been some problematic previous relationships with other University faculty yet could only attempt to rectify these previous relationships by insisting that this new research process would be directed by the tribe. Despite concerns, the tribal leadership and advisory committee were intrigued by a "capacity" grant, versus a disease-oriented research program, and had some knowledge of the University research team for beginning trust.

From the beginning, the tribal committee was encouraged to think about the issues of community capacity and to specify more clearly the research questions that they wanted to ask their community. It took until the 2nd year, however, until the tribal committee members began to realize they were in the "driver's seat" as they saw that their earlier discussions and questions were transformed into the specific interview and focus group instruments. Yet they also expressed concern about the burden of extra time commitment and drain away from their other responsibilities, especially as they began to participate as interviewers in the data collection, along with the University research team. The University team was still concerned that the grant was abstract and, therefore, offered educational trainings in public health and interviewing. It was only in the 3rd year of the grant, as we began to undertake data analysis together and privilege the contextual knowledge from our tribal partners, that the advisory committee made a transition to become a genuine research partner, changing their name even to that of the local research team.

To prepare for the participatory data analysis, the University team took on the initial role of preparing the data: transcribing interviews, stripping the files of all identifiers, coding the data, and doing the initial thematic categorization (using ATLAS-ti software; <http://www.atlasti.com/>). Our monthly collaborative meetings became

the key to interpretation, which involved solidifying, challenging, or changing the thematic categories and writing the themes into community voices reports. The tribal research team appreciated that the data illustrated issues that the tribe was grappling with, and that the community voices reports written for the tribal leadership and programs created opportunities to present these issues and paradoxes (Wallerstein et al., 2003).

It is in this crucial stage of data analysis and the next steps of dissemination that community ownership is most strengthened. Even with good intentions, however, there are many difficulties in creating genuine participatory data analysis, including different levels of research knowledge, that is, the highly specialized knowledge of university researchers in computer qualitative or quantitative software and statistical analysis, and the sheer time involved in joint interpretation. On the other hand, use of the data may depend more on time commitment at this stage than the more easily undertaken research framing and data collection processes (Fisher & Ball, 2003, 2005).

Community Consent

The question of who represents the community always remains a challenge, as no community is homogeneous, and community organizations or leaders who invite universities into their community still may not represent the range of community interests (Minkler, 2005). Tribal communities with sovereign nation status illustrate this challenge. A recent National Institutes of Health (NIH) summary sheet, for example, gave a negative review when our community partners, a tribal government department, were clear about their role as officially representing the community, yet the reviewers felt the government did not represent “real” community involvement and asked for other indications of community consent. As all who work with tribes know, researchers need official authority (provided through leadership support letters or, more often, tribal council resolutions) to “enter” the community, yet the challenge remains to identify ways to broaden participation when official entry is approved. For communities with more amorphous leadership, the University and funders, paradoxically, may have more power to determine who represents the community or who constitutes the grassroots.

The issue of how to structure participation varies considerably depending on the history of collaboration (Wallerstein, Duran, Minkler, & Foley, 2005). Typically, CBPR projects have community advisory boards; however, these can be fairly new without a preexisting

community function, or, based on long-term connections with a historically active community-based organization or existing coalition. To encourage active participation, CBPR proponents encourage research partnerships to create and structure their own set of principles for each CBPR research endeavor that recognizes the specific local context and project. For tribes who have sovereign nation status, principles have expanded to include promotion of health through recognition of historic inequitable relationships, that is, the conditions of historical trauma (Center for Native American Health, University of New Mexico); and the recognition of tribal governments as directing the research (Turning Point, 2003). The Navajo Nation Institutional Review Board (NNIRB), for example, provides a striking example of a sophisticated body that approves (or disapproves) all research being conducted with Navajo participants (American Indian Law Center, 1999). All researchers on Navajo must seek resolutions of support from local Navajo Nation chapters, must provide plans for utilizing the data to benefit tribal members, must turn over data files to the Nation, and must submit all reports and articles to the NNIRB for approval before dissemination. Even communities that do not have such tight governmental structures may have mechanisms, such as historically active community-based organizations (CBOs) or coalition leadership, who can help broaden the awareness of informed consent and seek to provide community-level protection, rather than just on an individual level.

Culturally Bound Knowledge

The second challenge is to unpack the role of power and privilege in the research relationship. As stated, researchers often have the perceived power base of being experts with “scientific knowledge.” University researchers typically review the literature for the best evidence of intervention effectiveness, what is known as empirically supported interventions (ESIs; Hall, 2001). Although critical in advancing the science, reliance on ESIs may also inadvertently delegitimize knowledge that comes from the local community. ESIs often have been tested in the dominant culture or in a particular minority community and require translational research to assess the applicability to the new community of interest.

In addition to the importance of translational research, another source of knowledge has been increasingly recognized, that of culturally supported interventions (CSIs). CSIs, or the indigenous theories of etiology, practices, and programs that emerge from communities (Hall, 2001; Miller & Shinn, 2005) have often never been

formally evaluated or subject to research rigor, yet they are widespread, for example, cultural revitalization through popular art festivals or healing ceremonies to recover from trauma (Fisher & Ball, 2005; Moreno & Rhine, 1991; Pierce & Rhine, 1995). As a community theory of etiology, for example, historical trauma is the intergenerational wounding from historical events, such as broken treaties between the U.S. government and tribes, or the punishment of Spanish-speaking children in previous generations. Named in the 1960s by mental health professionals working with survivors of the Holocaust, historical trauma has recently emerged within Native American communities to explain many psychological, social, and medical problems (Braveheart & DeBruyn, 1998; Duran, Duran, & Yellow Horse Braveheart, 1998; Duran & Walters, 2004; Whitbeck, Adams, Hoyt, & Chen, 2004). Community healing ceremonies are taking place to address these traumas, independently from the university and from research, but very much a part of community life (Moreno & Rhine, 1991; Pierce & Rhine, 1995).

Indigenous research methodologies have also begun to appear in the literature to reformulate and reclaim research efforts toward self-determination and cultural restoration. In her book, *Decolonizing Methodologies Research and Indigenous Peoples*, Linda Tuhiwai Smith (1999), a Maori researcher, presented 25 indigenous projects as examples of culturally based methodologies. Integrating these methodologies and culturally supported interventions with ESIs and methodologies can challenge the existing dominance of a single scientific discourse (Macdonnell, 1986) and work to equalize power relations based on knowledge within CBPR partnerships (Miller & Shinn, 2005).

In addition to academic knowledge, university researchers often have the power of resources, including subcontracts for community organizational partners, jobs for community members, or in-kind technical support. Although critically important to share resources and resource decision making, we may inadvertently interest the community to participate because of the resources, rather than the research questions per se. One counterexample to attempt to redress the power imbalance of resources has been the Native American Research Centers for Health (NARCH) which began in 2001 (National Institutes of Health and Indian Health Service funded; Indian Health Service, 2004) and that require tribes or tribal entities to be the principal investigator of NARCH funds, who then subcontract to universities. The reality remains paradoxical, as the majority of research dollars often still go to the University, yet the tribal entities can receive substantial dollars to begin to develop their own research capacity.

Challenge of Race, Racism, Ethnic Discrimination

Power and privilege also work in specific ways when considering race, racism, and ethnic discrimination (Chavez, Duran, Baker, Avila, & Wallerstein, 2003). As predominantly White academics working in communities of color, we cannot avoid the consequences of historic and current racism, whether institutionalized (through institutionalized stereotyping, i.e., Indian mascots in sports teams for example); interpersonal (through our lack of mutual knowledge); or internalized (people's internal responses; Jones, 2000). As mentioned, people's assumption of academic research expertise or University agenda may unintentionally hide or silence others' voices, so that concerns are not directly raised. Hidden voices may threaten the research process by causing people to feel that they cannot contribute or cause them to consciously or unconsciously subvert the collaborative process to exert control, the result of which can be withdrawal and internalization of the lack of voice or the subversion and/or resistance of research implementation and results (Scott, 1990; Wallerstein, 1999).

Hidden voices, however, are also a source of strength and may be simply a reflection of separate worlds, which may always exist, hidden to the researcher (Scott, 1990). It is humbling to move in community circles where other languages are spoken and ideas may or may not be fully translated back to the outsiders. To us, it can be a sign of greater partnership if people feel at ease to communicate in their own language, as they engage in the research process. The idea of *cultural humility* is distinct from the more commonly used term, *cultural competence*, a competence that may never be truly achievable in another culture (Tervalon & Murray-Garcia, 1998). In contrast, *cultural humility* refers to "a lifelong commitment to self-evaluation and self-critique" to redress power imbalances and "develop and maintain mutually respectful and dynamic partnerships with communities" (Tervalon & Murray-Garcia, 1998, p. 118).

Cultural humility extends to many of us who are White or middle-class academics working in communities of color, who may be seeking to recognize our "unearned privilege." Just as affirmative action programs inordinately benefited White women who were most poised to take advantage of them, health disparities grants may inordinately and inadvertently privilege progressive White researchers as principal investigators because of their senior status, publication record, and experience in writing NIH grants. Minority junior researchers, who may have more qualifications in community-based research, may find they cannot assume

the role of principal investigator because of NIH and academic collusion as to what contributes to an excellent score for an application.

These contradictions are not lost on communities or on faculty of color and may affect the relationships between fellow faculty and between academics and communities. Subject positions within relationships, however, are complex, and not based on single roles. Because CBPR projects bring together diverse participants, it is important to recognize that each preexisting role (i.e., principal and coinvestigators, community leaders, project staff, community health workers, etc.) carries a set of power positions and privileges, which exist apart and before any relationships are built. These professional roles determine to large extent the boundaries of the initial interactions and may have structural impacts over time; yet White and minority researchers and community members can also resist the roles and boundaries. Each of us has roles and contexts that intersect, being in the dominant group in some domains (e.g., education, sexual orientation, class, and ability and/or disability) but not in others (e.g., gender or religion; Stewart & McDermott, 2004). It might be convenient to assume the central power resides in the University, which is often true when making technical research decisions. However, this is not always the case, especially during phases of the research that require permissions from community-based organizations to enter the community, or when data analysis depends on community interpretation.

In one tribe, for example, during the data analysis phase, the University research team kept asking how the advisory committee wanted the data to be analyzed for the tribal council's best use. After much discussion and analysis, the advisory committee requested that we solicit another outside researcher, like ourselves, who might not be so immersed in the data to provide unbiased recommendations. We could have immediately stereotyped our tribal partners believing that they suffered from internalized oppression, not believing sufficiently in their own knowledge. By resisting the stereotypes, however, we could view this request in multiple ways: that the local advisory team did not quite trust us, as the University team; that they did not feel sufficiently competent; or that they just had the confidence to solicit an outside perspective and the capacity to use this perspective when given. Through self-reflection and mutual dialogue, CBPR research processes offer participants a choice to challenge subject positions and identities so we can recognize their complexity and facilitate mutual growth over time.

When we have privilege (whether from education, race, or other difference), we need to seek strategies

that enable us to become an ally to our research and community colleagues (Bishop, 2002; Labonte, 2005; McIntosh, 1989). The first step is to self-reflect about historic or current positions of power, to engage in these reflections with our various partners, and to build relationships where each person and stakeholder group feels valued. Power (and privilege) is never monolithic, however, as Foucault (1980) wrote, operates in a web of relations that produces discourse, knowledge, and actions, including actions of resistance (Swazo, 2005; Tilley, 1990). For CBPR researchers interested in giving voice to people's lived experience (Macdonnel, 1986), much work has been done on reflecting on the role of everyday culture, the practices of resistance and the ability of community partners to define their agendas and identities (Ong, 1987). Yet, beyond giving voice, the role of the CBPR academic researcher may be to challenge our own academic framing of other people's words. As Spivak (1990) stated, by moving beyond "ventriloquism" or speaking for community members, we can create multiple spaces (i.e., in community presentations, videos, or newsletters, and academic journals) for the lived experience of all partners to be heard and valued.

CBPR as a Force for Social Change

Another challenge for us as CBPR researchers and community partners is our assumption that research can itself be a force for change in the world. Many of us have based our careers on participatory research and education, believing that these processes and outcomes can affect local, state, even national policy, and contribute to transforming conditions of inequity and health disparities. Yet we also know through the lessons of the Civil Rights Movement, the struggle against apartheid in South Africa, the history of the labor movement, and the struggle for environmental justice, among others, that change comes from organizing through concerted political action, rather than research data per se (Auerbach & Wallerstein, 2004). At critical times, participatory research and the knowledge acquired have played an important role—as an educational vehicle or context for analysis—but rarely as the structural framework for change.

The recent 6th International Health Promotion Conference in Bangkok in August 2005 reaffirmed in its Charter for Health Promotion the primacy of social determinants and the importance of community empowerment to address health disparities. Health promotion and community-based participatory research would do well to consider how to contribute to the important social movements of the time, including international

movements for health. In Brazil, for example, research with policy makers could study the potential impacts of the Brazilian Congress's action in 2005 that declared Kaletra, one of the AIDS cocktail lifesaving drugs, to be a public good (Constantino & Dias Leite, 2005). Through this action, they challenged Abbot Laboratories to reduce the price by almost one half, or Brazil would break the international patent and produce the medication in its own laboratories; (after 10 days, Abbot chose to reduce the price, thereby retaining its patent). This national victory in one health issue reminds us of the important role of partners for taking knowledge into the political change arena, when sometimes our own institutional positions may make that difficult (Labonte, 2005). Policy change, using the research data, at a community level may exactly depend on community-based organizations who can represent the community's vision, and who has the authority to take ownership of the problem and history of activism to make change happen.

► EVIDENCE THAT CBPR CAN CREATE IMPACTS ON HEALTH

CBPR intervention research is based on two primary assumptions for improving health outcomes and reducing disparities: one, that interventions can be strengthened if they benefit from community insight and incorporate community theories of etiology and change into the empirical science base; and two, that there is an added value to participation itself for enhancing health (Buchanan, Miller, & Wallerstein, 2006).

Participation in the community development literature has been well studied as to its purposes, that is, to reduce dependency on health professionals, to ensure cultural and local sensitivity, to facilitate sustainability, to enhance productivity of programs (Jewkes & Murcott, 1998; Rifkin, Muller, & Bichmann, 1988); and as to concerns about potential manipulation (Cooke & Kothari, 2001). The health impacts of participation, however, largely remain elusive. Research on the effectiveness of participatory strategies within the empowerment literature has identified a two-step pathway toward health: the processes by which empowerment outcomes (psychological, organizational and/or structural, and community and/or cultural) are generated as proximal or intermediate outcomes; and the effects of empowerment outcomes in improving health (Wallerstein, 2006).

The literature on participation is strongest in the evidence that participation contributes to program improvement through greater efficiency, sustainability, and more equitable distribution of services (Isham, Narayan, & Pritchett, 1995; Manikutty, 1997; Narayan, 1992), especially in water and sanitation projects. Only a few

published studies explicitly have tested and validated the hypothesis that community participation provides additional health benefits at the community level, using quasi-experimental designs. In Eng, Briscoe, and Cunningham's (1990) landmark study in Indonesia and Togo, villages where water was installed with active participation found that 25% to 30% more children were immunized, than in the conditions of no participation. The challenges of studying participation using comparison designs are significant within community settings, where local context matters, dynamic processes are assumed, and participatory feedback is used to change the intervention (Goodman, 2001; McQueen, 2001). Triangulation of multiple qualitative and quantitative methodologies following communities over time (in one community or cross-site comparison communities) may offer appropriate alternative research designs to study participation effects, yet much work still needs to be done to identify and validate measures for the proposed outcomes of participation.

There is evidence that empowerment strategies can improve health among different subpopulations in closely constructed, theoretically driven interventions, including patient and health care consumers; and those populations particularly at risk for social exclusion, that is, youth, people at risk for HIV/AIDS, and women. Youth interventions, for example, have produced multiple empowerment and health outcomes: strengthened self- and collective efficacy, group bonding, sustainable youth groups, participation in social actions, and policy changes, leading to improved mental health and school performance (Holden, Messeri, Evans, Crankshaw, & Ben-Davies, 2004; Lerner & Thompson, 2002). Coalitions and interorganizational partnerships, as well, have documented diverse health outcomes through enhanced participation, leading to environmental and policy changes (Butterfoss & Kegler, 2002; Minkler, 2005).

In addition to measuring outcomes of participation, several assessment tools have been developed to help CBPR partnerships identify the level of community engagement throughout the research process (Brown & Vega, 2003; Green et al. 2003), and to assist health departments to identify their capacity to engage community partners (Parker, Margolis, Eng, & Renriquez-Roldan, 2003).

Another participatory evaluation strategy proposes that local community groups and coalitions themselves identify potential outcomes or indicators of change (Fawcett et al., 1995; Maltrud, Polacsek, & Wallerstein, 1997; Norris, 1997; Pan American Health Organization [PAHO], 2004). Started within the World Health Organization's Healthy Cities and Communities movement, several tools have been developed that integrate the use

of participatory evaluation processes and the creation of indicator categories and constructs that then can be tracked over time. Rather than using existing municipal indicator lists, this participatory process instead proposes a set of domains so that localities can generate their own specific indicators. The New Mexico Healthy Community Workbook proposed identifying structural and/or system indicators and people and/or population health behavioral and knowledge indicators as intermediate outcomes leading to longer term health change (Maltrud et al., 1997). A recent resource from the PAHO (2004), a healthy municipality participatory evaluation resource handbook, identified intermediate outcomes of the five pillars of healthy cities (participation, intersectoral collaboration, healthy public policy, sustainability, and healthy structures and good governance) and potential changes in material conditions, social and/or cultural conditions, and individual conditions, which are linked to health outcomes.

The search for evidence of CBPR effects, that is, the added value of participation to the intervention and to the intervention's outcomes, remains a critically important question and deserves fuller exploration than possible within the scope of this article. Mechanisms may be direct and indirect and multilevel, that is, changes in material or program conditions, or psycho-social and neuropsychimmunologic resiliencies and protections as a result of participation. Yet the increasing widespread practice of CBPR points to an emerging evidence that participation makes a difference, and the science may need to adapt and expand to better uncover these differences.

Recommendations for Enhancing CBPR Practice in Academia, Students, and Communities

With recognition of the challenges outlined above, recommendations to disseminate CBPR fall in three areas: in student pipeline strategies, academic culture change strategies, and university–community partnership strategies. Advancing the methods of CBPR in these areas may reduce health disparities by increasing access to health care (minority providers reduce non-monetary barriers to care for the underserved) and increasing health research and dissemination in marginalized communities conducted by researchers from those communities.

Disparities reports consistently document the need for recruitment and retention of minority students into the health professions (Agency for Healthcare Research and Quality [AHRQ], 2005; IOM, 2002a; Sullivan Commission, 2004). One effort in New Mexico demonstrates

the approach of bringing programs to students, rather than just recruiting students into a central university location. With funding and support from the Indian Health Service (IHS), the University of New Mexico masters in public health (MPH) program launched a satellite program in the four corners area (of New Mexico, Arizona, Utah, and Colorado) in 2002 to better serve professional health development needs of the Navajo Nation. We enrolled 20 students, all working professionals from IHS and other agencies, 13 of whom were Native American. We created a structured multi-year curriculum that students have followed as a cohort to produce a MPH graduate degree specifically relevant to their work and population needs. This cohort has benefited from intensive academic and other support strategies that recognize students' multiple work, family, and traditional cultural responsibilities; most will graduate in spring 2006.

CBPR in minority communities also serves as a recruitment tool for recent college graduates and mid-career professionals working in communities, who have been enticed through their collaboration on advisory committees or as research participants. Involving minority graduate students as research assistants in CBPR projects can reinforce community recruitment as students are seen as role models. The students also receive important opportunities for reflection about working as an insider–outsider within their own communities.

Although universities may have policies and strategies in place to recruit minority students and/or faculty, transforming the academic culture so that the University is inviting and supportive for these students and faculty is challenging. For faculty, in particular, academic culture is dominated by instrumental meeting cultures and hierarchies that often allow less time than needed for development of interpersonal relationships. This may be anathema to many faculty of color (and others) who come from communities where meetings are centered on interpersonal welcomes, invocations, or other tributes to life beyond work. Structural issues also create additional burdens on faculty of color, such as mandates that administrative committees have diverse representation, which puts an undue burden on the comparatively few minority faculty.

For all faculty interested in CBPR, traditional tenure and promotion criteria can inhibit their commitment because of the long development time to create valid partnerships, to implement interventions collaboratively, and to publish jointly with community members. The basic question of who owns the data (in Native American communities it is assumed to be the tribal government) can raise challenges for a junior faculty to

publish in a timely manner. Even without formal approval processes or IRBs, all community partners deserve similar respect and engaging community members in publications does lengthen the time to publication.

Seifer and colleagues proposed structural recommendations for universities in order to facilitate community–University partnerships and engagement: most important, they recommend establishing Centers with missions in health disparities, minority health, or CBPR (Calleson, Seifer, & Maurana, 2002). These Centers can provide a training ground for junior faculty of color (as have been supported in the past by several institutes at NIH), protect junior faculty from administrative or teaching burdens as they develop research careers, and act as a magnet for junior and senior faculty throughout the University who want to engage in community-based and minority-oriented research (Community-Campus Partnerships for Health [CCPH], 2003).

Issues of tenure and promotion also deserve rethinking. Junior faculty would do well to align themselves with existing partnerships to cut down the time related to relationship building as they launch research careers. Structurally, some universities are moving toward additional promotion and tenure criteria that emphasize excellence in practice and the scholarship of engagement, supporting multiple opportunities for faculty and students to be involved in the community (Seifer, 2003). These ideas have also been taken up by the Council on Practice of the Association of Schools of Public Health (Wallerstein, personal communication with Council on Practice, September 2003).

On a practical and personal level, we, as coauthors, have reflected quite a lot on what it means for dominant culture faculty to be allies to junior (and senior) faculty of color. Overall, we suggest it means impeccable attention to the structural issues and to day-to-day interaction. For dominant culture faculty, it includes buffering junior minority faculty from administrative responsibilities; building internal research partnerships that support their research, yet providing opportunities for scholarship advancement within the tenure track; and speaking out when concerns arise about discrimination, rather than leaving it to the minority faculty. It means acknowledging the very concrete ways White researchers are enriched by partnerships with minority faculty—in easier entry to communities, in access to data interpretations that can only come from lived experience closer to that of the research “participants,” and in more authentic research funding applications that include faculty from the target population. It also means maintaining honest self-reflection about one’s own privilege, with an understanding of one’s responsibility to “walk our talk” and to relinquish control

regardless of how that affects us personally. Possibly more important, however, it means having a relationship of dialogue so people can share their self-reflections with each other, challenge the boundaries, and learn from their mistakes, and their successes.

Within the domain of the academic–community partnership, the challenge within CBPR is to continually realign researcher–community relationships so that different partners and the partnership can be nourished and research developed that answers the important questions affecting health status and health disparities. As discussed throughout this article, partnerships need to have opportunities to reflect on the issues that surface related to participation, privilege, power, and race and/or ethnicity and to help identify structural changes that can support mutuality instead of dominance by one stakeholder. Historic ethical abuses, such as the Tuskegee syphilis experiment (Brandt, 1978), unfortunately still can resonate in communities, creating lack of participation by minorities in research studies (Moorman et al., 2004; Murthy, Krumholz, & Gross, 2004) and historic distrust. A recent US\$1.5 million dollar lawsuit, by the Havasupai tribe against Arizona State University for violating consent forms in use of blood samples, illustrates the continual potential for community–researcher distrust (Potkonjak, 2004).

Despite this challenge, CBPR and disparities research centers have grown and established long-term mutually beneficial relationships. Their success has been predicated on constant attention to core principles and practices of good partnerships: creating mutual principles, engaging community partners as coinvestigators, sharing budgets and other resources, providing technical assistance in research skills or other areas (especially when the research process often does not provide immediate community benefit), and maintaining open lines of communication. Communication depends not only on being able to develop mutual agendas but also on recognizing differences between academic and community interests, skills, and needs, and on developing willingness and mechanisms to deal with inevitable conflicts that emerge because of these differences. Naming differences and recognizing differential access to resources or power can be a first critical step to developing the trust needed for collaborative work (Gutierrez & Lewis, 2005).

► CONCLUSION

In conclusion, there is an important role for CBPR in reducing disparities. Although questions remain about exactly how participation may affect interventions and health, the growing interest demands that we become

more conscious about our CBPR practice. We need to maintain continual opportunities for self-reflection (about ourselves, our institutions, and cultures) and for dialogue around this self-reflection with our partners. For Nina, as an outsider in communities, I am always listening for the turning points in my relationships when trust can deepen. In one community during our data analysis and development of a joint-authored paper for publication, I was suddenly asked why I was doing this kind of work, “what are you getting by working with us anyway?” Even after 2 years, this straightforward question shocked me. Although initially the question made me uncomfortable, it also opened up a deeper honesty and led to all of us sharing perspectives and recommitment.

For Bonnie, in shifting and multiple relationship to communities, CBPR offers the opportunity to spend time with individuals who are culturally, socially, and economically more like my family of origin and provides respite from the indifference of the academic environment. CBPR practice invokes the challenge to call forth our deepest aspirations for higher education and public health practice, which is to live a meaningful life by being of service and working to reduce suffering.

In CBPR work, we suggest that the most important values are integrity coupled with humility. These values underlie our process with communities, in the science and how we present ourselves, and support our goals in doing this work. Myles Horton, the founder and long-time director of the Highlander Educational and Research Center, a southern organizing and education center, counseled “if you believe that you have a goal that you can reach in your lifetime, then it’s the wrong goal” (Horton, 1998, p. 228).

Taking his words seriously, we need to hold onto our goals to eliminate inequity and disparities, even if we won’t succeed in our lifetimes. If we put our work in participatory research in perspective, however, we are part of a longer journey. The practice of participatory research, done with integrity and humility, can contribute to this goal. The point of an ideal may not be to reach it but to let it guide our paths. And, as Horton said, when we decide what our vision is, all we can do is “just hack away on it.”

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