Parents, Practitioners, and Researchers: Community-Based Participatory Research With Early Head Start

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Community-based participatory research (CBPR) is an approach to research and evaluation that is receiving increased attention in the field of public health. Our report discusses the application of this approach to research and evaluation with an Early Head Start (EHS) program in Pittsburgh, Pa. Our primary purpose is to illustrate the key elements that contributed to effective collaboration among researchers, EHS practitioners, and parents of EHS children in the conduct of the study. The focus is not on research findings but on research process. Our goal is to make the practices of CBPR visible and explicit so they can be analyzed, further developed, and effectively applied to a range of public health issues in a diversity of community contexts. (*Am J Public Health.* 2003; 93:1672–1679)

Community-based participatory research (CBPR) is an approach to research and evaluation that is receiving increased attention in the field of public health. Identified by the Institute of Medicine as one of the focal areas for development of the field,[1] CBPR supports many of the core principles of public health as a science dedicated to improving the health and well-being of diverse communities of people.

The W.L. Kellogg Foundation's Community Health Scholars Program defines CBPR as "a collaborative approach to research that 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."[2(p4)] CBPR promotes building partnerships between research institutions and local communities. It facilitates the translation of research into practice and fosters the social agency of community members.

While these are important considerations in any research effort, they may be particularly important when studies are conducted with racial/ethnic minority communities or with communities that experience other forms of discrimination because of cultural differences or poverty. An underlying premise of the approach is that including community members and community-based service providers *as partners* in the research process not only is a matter of respect but also increases the capacity of researchers to identify, understand, and effectively address key public health issues.

This article discusses applying this approach to research and evaluation with an Early Head Start (EHS) program in Pittsburgh, Pa, as part of the national, multisite EHS Research and Evaluation Project. Our primary objective is to illustrate the key elements that contributed to effective collaboration among researchers, EHS practitioners, and parents of EHS children in conducting the local study. Thus, the focus is not on research findings but on research process.

Our experience supports the observations of others that a participatory approach improves the quality and usability of research findings.[3,4] However, our purpose is not to argue that point but rather to examine some ways in which CBPR can be achieved. In research reports and published articles, such practices often remain hidden and unarticulated. Our goal is to make these practices visible and explicit so they can be analyzed, further developed, and effectively applied to a range of public health issues in a diversity of community contexts.

WHAT IS CBPR?

In their recent volume, Minkler and Wallerstein define CBPR as a new paradigm that represents "alternative orientations to inquiry that stress community partnership and action for social change and reductions in health inequities as integral parts of the research enterprise."[5] They emphasize that CBPR is not a new research method but instead a *new approach* to public health research. As pointed out by Israel et al.,[3] the essence of the approach is a collaboration between researchers and community members, such that the expertise of each is shared to identify, study, and address health issues of importance to the community.

The popularity and credibility of CBPR in public health have grown in part because organizations such as the Centers for Disease Control and Prevention (CDC),[6] the National Institute of Environmental Health Sciences,[7] and Cooperative for Assistance and Relief Everywhere International (CARE)[8] are espousing CBPR. For instance, in a collaboration between the CDC and CARE, several international projects using a CBPR approach have addressed the public health issue of delivery of safe water.[9,10] CBPR is also gaining visibility because of its use by the environmental health and justice movement, which has sponsored projects focused on reducing risks for asthmatics[11–13] or educating subsistence fishermen about risks of toxic contamination.[11] Furthermore, governments have adopted CBPR in their efforts to increase community involvement in public health projects.[14]

While relatively new in the field of public health, CBPR is related to other participatory research approaches; most germane to our discussion is participatory evaluation. Also called the stakeholder approach, participatory

evaluation, as introduced by the National Institute of Education in 1977, was not conceived as a new methodology but as a new structuring of how evaluations are conducted.[15] As first described by Gold,[16] this approach was adopted to increase the use of evaluation results in making programming decisions by involving stakeholders in decisions around research questions and design.

A common model of participatory evaluation involves an initial consultation between researchers and practitioners to delineate the program's objectives and services, and then a joint discussion of evaluation findings at the end. In these cases, collaboration serves to inform the study, but execution of the research design, data collection, and analysis remain solely in the hands of researchers. In the case of our EHS study, we employed a more full-spectrum participatory model, which involved building on a preexisting partnership between researchers and a community-based program and extending that partnership throughout the research process.

Our program partners participated in decisions about study design, helped to solve problems that arose during data collection, and helped interpret findings as they emerged throughout the different stages of data analysis. There was shared ownership of the data in the sense that both national and local data sets, as well as preliminary findings from qualitative research, were made available to program partners as soon as this could be accomplished without jeopardizing the integrity of future data collection. The collaboration was not just between researchers, program designers, and managers but involved many stakeholders in EHS, including direct-service staff and enrolled families, thereby extending the principles of participatory research into local communities.

ESTABLISHING A CBPR APPROACH IN THE EHS CONTEXT

The overall framework of the EHS Research and Evaluation Project both facilitated and presented challenges to CBPR. Representing an expansion of the long-standing Head Start Program, EHS is designed to provide high-quality child and family development services to pregnant women and to families with infants and toddlers up to 3 years old. A national evaluation was conducted from 1996 to 2001 in which the Family Foundations EHS Program in Pittsburgh, Pa, served as 1 of 17 research sites.[17]

Selection as a research site entailed participation in the national data collection as well as completion of an embedded local research study. Both of these activities were carried out by researchers from the University of Pittsburgh. The national evaluation focused on child and family outcomes, while local studies explored program and contextual factors hypothesized to mediate or moderate effects of EHS on child health and development.

The call for participation in the EHS Research and Evaluation Project was directed at EHS programs rather than researchers. The decision to submit a proposal—and who to work with as local research partners—rested with the program. This, in itself, encouraged a participatory research approach. In addition, the relative autonomy of local embedded studies within a highly systematized national cross-site evaluation allowed for flexibility in research approaches and methodologies at the local level. At the same time, the experimental design of the national study, which relied on random assignment of study participants into treatment and control groups, created tensions in local communities, and the use of standardized measures across all research sites discouraged local input into instrumentation for the national evaluation.

The basic approach of the Family Foundations EHS Program—first to research and evaluate and then to enrolled families and local communities—was key to the realization of CBPR. The program had a commitment not simply to being researched but to partake actively in self-study and critical thinking about program development. This promoted an engaged partnership with researchers and the research process. Family Foundations also employs a strengths-based approach to enrolled families, focusing on family strengths rather than deficits, and emphasizes building partnerships between families and staff. Program services are community based and help families achieve their own goals. Staff are hired from local EHS communities, and the program collaborates with other community organizations. Because of this orientation, EHS families were empowered to become active partners in the research, while communities as a whole became engaged through their multidimensional links to the EHS Program and its research endeavors.

IMPLEMENTING CBPR

The foregoing describes some foundational elements that helped support CBPR. However, realization of this approach required consistent attention to how collaborative principles are put into operation and to the intentional development and implementation of participatory practices. In the Pittsburgh EHS study, this was accomplished through 5 primary vehicles:

1. collaboration between researchers and program/community partners to develop the local research focus, questions, and design;
2. community-focused recruitment of study participants under the leadership of community-based program staff;
3. employment of community residents as research staff and use of a team approach in research decisionmaking and practice;
4. joint program–research oversight of the research process; and
5. sharing preliminary findings with program/community partners, and engaging them in interpretation of findings and implications for program practice.

COLLABORATION IN DETERMINING RESEARCH FOCUS AND DESIGN

As noted previously, collaboration among researchers, program managers and staff, and community participants began before the local research proposal was written. Starting from the beginning was important for building trust and developing a sense of engagement and ownership among all partners. It also helped ensure that the questions asked, and the methods used to answer them, would be congruent with program and community—not just researcher—interests.

After the Family Foundations management team decided to submit a proposal for the EHS Research and Evaluation Project, the researchers held a series of discussions with them. These discussions tried to discern

how program designers and managers understood their local EHS program model—in particular, the key pathways through which desired child and family development outcomes are achieved—and to identify the main questions to be addressed in the local research study. From the beginning, there was agreement that the study should be based on the program's own theory of change—that is, a model of what the local program was intending to accomplish and how it planned to realize its objectives.[18] There was also attention to contextual factors that might facilitate or impede the implementation of this model and the achievement of child and family outcomes.

However, a truly participatory approach, as well as an accurate reading of a program's theory of change, requires more than discussions with program management. Those responsible for implementing the planned services, and recipients of the services themselves, must also be consulted. The researchers therefore held a series of focus groups with direct-service staff and with parents of children who had been enrolled in the Family Foundations Program prior to its funding as an EHS site. The discussions with staff focused on what they perceived to be the fundamental elements in their work and how these elements were affected by the changing environments in which the program was operating. Discussions with parents focused on what program involvement had meant to them, what had changed in their lives and why, and what issues they felt we needed to explore further.

Focus groups with staff and families were held separately in each of the 3 EHS community sites, for a total of 6 groups. Participants in each group discussion, in addition to their role in the program, were also community residents and in some cases informal leaders of significant sectors of the local community. Our focus group discussions thus generated community as well as program input into research questions and design, and helped locate the study within appropriate community contexts.

The research questions that resulted from this collaborative process highlighted major issues that our program/community partners wanted to investigate:

1. How does the family support approach of the Pittsburgh EHS program (i.e., an approach to service delivery that is based on family strengths, is respectful of families' own needs and goals, and is community oriented) affect the health and development of EHS children, families, and communities?
2. How does the program help parents and children to build strong relationships and support systems and realize a sense of efficacy or empowerment, and how do these qualities in turn influence the achievement of parenting, child health and development, and family goals?
3. How do policy changes concerning welfare, health care, child care, and housing affect EHS families, communities, and the EHS Program and moderate the effects of program services on child and family health and development?

It was through such group discussions that consensus emerged about the value of qualitative as well as quantitative methods to attempt to answer our research questions. The richness and complexity of these early conversations made clear that such methods would be critical if we wanted to accurately map the development of the program and to understand its significance for the families and communities it served. There was thus agreement to conduct our local research through a mixed-methods research design,[19] which included an ethnographic strategy of inquiry[20,21] and a strong array of qualitative methods (participant observation, focus groups, ethnographic case studies) combined with more conventional quantitative measures.

RECRUITMENT OF STUDY PARTICIPANTS

In Pittsburgh, 202 families were recruited into the study. Following the protocol of the national evaluation, families were randomly assigned to the treatment group, which received EHS program services, or to a comparison group, who received only existing community services. At the same time, each specific community served by the EHS Program recruited its own study families, anchoring recruitment in the local community context.

Recruitment of study participants was carried out by community-based program staff assisted by families who had participated in the Family Foundations Program prior to its becoming an EHS site. During this time, the program employed what it called "indigenous workers." These local community residents, known as family advocates, related to enrolled families as peers, working with them to support and strengthen parent–child relationships and positive parenting. Family advocates had strong ties in the local community, and the other direct-service staff who helped with recruitment were also community residents or at least familiar with the local community.

Participation in both the research and the program was completely voluntary, and recruitment was accomplished largely by door-to-door canvassing throughout the EHS communities. The parameters of the study were clearly explained to families during the recruitment process, in particular the process of random assignment and the expectation that families would participate in in-home parent interviews and child assessments upon study enrollment and when their children were 14, 24, and 36 months of age, as well as complete phone interviews at 6, 15, and 26 months following enrollment. Reflecting demographics in the 3 EHS service communities, approximately 75% of the children in the study were African American; the other 25% were White.

Following random assignment of study families, a program staff person and a member of the research team revisited each family to inform them of the random assignment outcome and to review study protocols and expectations. When the research was later extended into a transitional prekindergarten phase, all families who had participated in the birth-to-3-years study were invited to participate in the prekindergarten study. Again, the decision to participate was voluntary, and the consenting process was repeated for this new research component.

Families participating in the study were compensated for their time and effort. The practice of the national evaluator and of the majority of research sites was to mail the family a check upon completion of each inter-

view. The Pittsburgh site used cash or gift certificates for local grocery stores, in deference to community expectations that payments would be forthcoming immediately upon completion of interviews and would not require that families open checking accounts. It was our collaboration with local community partners, including some of our own research staff, that led us to this understanding. The result was a more culturally appropriate research protocol, and therefore more effective research, including a greater willingness on the part of families to continue their participation in the study.

COMMUNITY-BASED RESEARCH STAFF

During the birth-to-3-years study, most of our research staff were African American, hired from local EHS communities, and were well-known and respected community residents. Employing community-based staff was a local decision that both reflected and strengthened our CBPR approach. It was, in fact, a distinctive and very important feature of an integrated CBPR design at the Pittsburgh site.

At the beginning of the study, there were 2 primary categories of research staff: community family liaisons, who were responsible for sample retention and phone interviews concerning service usage, and family interviewers, who carried out in-home child assessments, parent interviews, and videotaping of parent–child interactions. As part of the research–program partnership, active recruitment for these staff positions took place first among EHS Program staff and families and then from the wider EHS communities.

Program staff learned of these research positions through their regular staff meetings, and they in turn notified families during home visits. These personal communications were supplemented by announcements in the program's newsletters and by advertisements in local community news weeklies. Applicants were interviewed by the local researchers, with a focus not on research experience, which we expected to be minimal, but on whether the applicant could understand the basic goals of research and the primary roles of an interviewer. Equally important were the positive attitudes of the applicant toward both the study and the programmatic and community context in which it would take place. All 3 community family liaisons were hired from the communities in which they would work; 2 were parents who had been enrolled in Family Foundations. The primary family interviewer had previously been a home visitor for the program and had lived her entire life in 1 of the EHS communities.

Training of research staff was extensive and took place at both the local and national level. Because of their lack of previous experience in conducting research, community-based research staff were introduced to general principles of research and researcher roles as well as to fundamentals of interviewing and data collection. At the same time, their close familiarity with the EHS Program and its principles of family support provided a good foundation for the respectful, partnership approach we wanted to take with study participants. The general professional development and training of community-based research staff took place at the local site and was guided by both the project coordinator and the managing principal investigator. In addition, community family liaisons and family interviewers, along with the project coordinator, traveled to the national evaluator headquarters for training on cross-site instruments and protocols; this was followed by a rigorous process of certification on all national research procedures. This certification process, though stressful for community-based staff, proved important not only for quality data collection but also for the growing self-confidence of these individuals in their research roles.

Our community-based staffing pattern helped to develop and maintain positive relationships among the research team, local program sites, and study participants. The fact that former program staff and families were hired and trained as researchers strengthened the commitment of the program staff and families to the research process. This commitment, combined with the community connections and knowledge of the research staff, proved key in our ongoing attempts to engage study participants.

However, this community expertise would not have been fully used without the team approach of the research project itself. Biweekly research team meetings were held, in which data collection issues were discussed and problems were collaboratively solved. These meetings served as ongoing training opportunities for community-based staff, who, in turn, sensitized other research team members to community concerns and viewpoints. While the managing principal investigator spent considerable time in program and community sites, she still relied on insights from community-based staff to ensure that research methods and interview questions were respectful of community values. For example, one of the national evaluation protocols involved giving children a task beyond their ability and observing how parents supported them verbally during this frustrating episode. Our local interviewers viewed this as creating undue stress for both parents and children and as insensitive to community norms of how parents relate to their infants. After raising the issue with the national EHS evaluator and research consortium, changes were made in the protocol so that it was more congruent with local community practices.

Integrating community-based staff into an unfamiliar university research environment, and providing adequate support for their work, was sometimes challenging, especially because the EHS interviewing required a high degree of flexibility and independent functioning in the field, while also being emotionally difficult for interviewers working with families experiencing economic and social distress. Our community-based interviewers were, in fact, particularly alert to signs of distress because they lived in the same communities and because study families generally trusted them enough to share information about personal situations. While this increased the burden on interviewers, it indicates how our CBPR approach improved the richness and quality of information we gained through the interview process.

During early stages of data collection, considerable supervisory support of both a personal and professional nature was offered to community-based research staff by the project coordinator, who served as their immediate supervisor, and also by the managing principal investigator. This support included not only the usual reviews of data for quality as-

surance but also extensive debriefing of experiences in the field and strategizing for upcoming family visits. Such support was well worth the effort since it ensured not only high-quality data in the conventional sense but also an engaged and thus high-quality research process on the part of interviewers, study families, and program staff.

At least as challenging was achieving a degree of flexibility in university systems to facilitate the work of community-based staff. As mentioned previously, our research staff, in collaboration with our program partners, wanted to offer compensation for interviews directly to families rather than having the university or national evaluator send them a check. At the same time, interviewers were not comfortable carrying large amounts of cash in EHS communities. One solution was to ask families to go to the EHS Program center to pick up their monetary compensation; another was to offer gift certificates for local grocery stores in addition to cash. Since these were unusual payment options for research projects, we had to work out special procedures with university administrators and the national evaluator in order to accomplish these objectives.

SHARED OVERSIGHT OF THE RESEARCH PROCESS

Throughout the conduct of the study, there was shared oversight of the research process among program families, staff, and researchers. There was also agreement that as much as possible, the same family support principles that guide the program's thinking and practices (e.g., a strengths-based approach and respect for family needs and goals) would also guide the conduct of the research.[22]

The initial mechanism for shared oversight was the Research Oversight Committee. At first, this committee was composed of parents who had participated in the Family Foundations Program prior to its funding as an EHS site, along with representatives of program staff from each EHS community. As soon as possible, parents who were participating in the EHS research were added. The key roles of this body, as determined at its initial meeting, were as follows:

1. to make sure the research was family- and staff-friendly;
2. to make sure the research was addressing questions that families, staff, and other community members wanted answered within the framework of the research proposal;
3. to make sure the researchers were collaborating well with program staff and families, including timely feedback of information and insights;
4. to understand the research and contribute to the analysis and interpretation of findings;
5. to support and enhance cooperation with the researchers in their respective EHS communities; and
6. to serve as representatives and liaisons for staff and families in our program sites.

One of the first actions of this group was to review our local parent interview questions to ensure that they "made sense" and were respectful to the study families. Subsequent Research Oversight Committee meetings developed strategies for making the interview process less burdensome on parents and children, while still ensuring that data would be collected in a timely and reliable fashion. While this proved challenging, some of the strategies we adopted included dividing the in-home interview into 2 shorter rather than 1 lengthy visit, condensing some of the locally designed measures, and converting some interview questions into self-administered questionnaires. Committee discussions also emphasized the need for flexibility in scheduling interviews, including use of weekend and evening hours, and making sure parents felt comfortable interrupting the interview to attend to the needs of their children.

The oversight role of the committee continued during the early stages of the study, through the development of research instruments and procedures and the initial waves of data collection. The committee was, however, difficult to sustain over the long run. Despite efforts to revive participation (for example, changing meeting times and locations, offering meals and more flexible child care options, and trying to involve parents in preparation for the meeting), we eventually abandoned this structure and began to bring research issues and findings into the newly established EHS Policy Council.

The Policy Council is a governing body composed of elected parents and community representatives from each of the EHS community sites. This council is a mandatory component for all Head Start and Early Head Start programs, facilitating parent involvement in program decisions. In that capacity, it reviews program decisions concerning staffing, program services, and budgetary matters. At first, we requested time on the Policy Council agenda for research-related matters. As its members came to know us, and as their own leadership skills and levels of confidence rose, they began to make requests to us for research information and reports.

The Policy Council reviewed and approved our proposal to continue the birth-to-3-years phase of the EHS study into the transitional prekindergarten phase. We recommended to the council that our local prekindergarten research focus on the issue of school readiness; council members, in turn, helped develop the research focus so that a wider range of parental concerns about school readiness would be examined. They also strongly supported the use of qualitative interviews to ask parents about their own ideas of school readiness, and they requested that we report back to them initial findings from these interviews.

While these were fairly formal mechanisms for shared oversight, input of staff and parents into the research process also occurred on an ongoing informal basis. For example, the EHS program director attended research team meetings on a monthly basis, while the managing principal investigator sat in on program management team meetings at about the same frequency. In addition, discussions of the research project were often included in all-staff meetings and training.

All of these were opportunities for conversations about research design and process. For example, at an all-staff meeting near the beginning of the research project, one of the home visiting staff raised a question about why we were interviewing only the primary caregivers (generally mothers) of the study children and not including fathers as well. He argued that this weakened the efforts of program staff to involve fa-

thers in program activities and in children's lives. This discussion led to our development of a pilot fathers study at the Pittsburgh site, which subsequently contributed to a national research project on fathers of EHS children.

In addition, the principal investigator, in her role as ethnographer, carried out participant observations of staff, parent, and community meetings and activities. This, along with other qualitative data-gathering methods such as focus groups and case studies, provided opportunities for researchers to note new issues that were of concern to our program partners and that might be addressed in the research.

A good example occurred about a year into our study. During participant observations of staff team meetings, discussions about the issue of family engagement began to emerge. Home visiting staff expressed concerns about how well program families were able to be engaged during their weekly home visits and whether they actively participated in program services. Questions were then raised about the link between levels of engagement on the part of individual families and a family's achievement of parenting, child development, and family goals. These questions led to new strategies of data collection, including the design of both a series of scale items and ethnographic interviews to explore differences in family engagement and goal achievement.

In general, our use of ethnographic and other qualitative methods facilitated the operationalization of the CBPR principle of shared oversight. This is not surprising, since these methods depend on building trusting relationships and engaging in active listening with the aim of understanding the perspectives and viewpoints of study participants. In addition, qualitative, unlike quantitative, research allows—in fact, requires—the evolution of new questions and research directions based on insights that emerge during the conduct of a study. Using such methods thus enabled us not only to discover the interests and concerns of our program and community partners but also to be responsive to these interests and concerns as they revealed themselves over the course of the study.

SHARING AND INTERPRETING STUDY FINDINGS

A crucial aspect of CBPR involves sharing preliminary findings with community partners. In the case of our EHS research, informal sharing occurred through unplanned discussions and questions during participant observations of program meetings as well as by having the program director attend research team meetings.

An interesting example of how this informal sharing influenced the research process involves the issue of community-based child care. Part of the data collection for the national cross-site evaluation involved observing the quality of children's day care environments. As the interviewers on the research team attempted to complete observations of child care settings used by study families, 2 things became apparent. First, most of the study families used informal neighbor/relative care, rather than formal child care; second, families frequently moved their children from caregiver to caregiver. By sharing this information with program partners, we learned that program staff were observing similar developments and were concerned about the frequent changes in caregivers. This dialogue between practitioners and researchers led to the addition of qualitative questions about child care choices and changes to our local parent interviews.

More formal sharing of research results occurred as the researchers developed interim reports of findings that were presented to both program staff and parents. One example involves the qualitative interviews on school readiness that we conducted with parents during the transitional prekindergarten study. As requested by the Policy Council, we shared the findings from the first round of parent interviews at a council meeting. We then asked Policy Council members to share with us their own ideas of school readiness and how they would interpret the responses of study parents.

The ensuing discussion reinforced many of the responses of study participants, such as the "foreignness" of the school environment and the central role of parents in preparing and supporting children to enter this new milieu. But these parent leaders also went further to suggest that schools need to "get ready" for their children as much as their children need to "be readied" for school. In particular, they were concerned that schools learn to "follow the child" and to appreciate and value individual differences. They began to contemplate social action with the suggestion that EHS itself might influence and inform local school policy in this regard. These discussions enhanced our understanding of how EHS parents view the concept of school readiness and also alerted us to possible differences among parents, depending on their level of active engagement in program leadership opportunities.

Timely sharing of preliminary findings is easiest with qualitative data that are analyzed on an ongoing basis. The analysis of quantitative data cannot occur until most of the sample has been collected, and so one must sometimes wait a considerable length of time for the findings. In the EHS case, there was an added constraint in that program–control group differences in the birth-to-3-years study could not be shared with program partners until data collection was complete; national findings were then embargoed from wider dissemination until they had been reported to Congress.

In spite of these limitations, our sharing of study findings proved very beneficial to both sides of the research–program partnership. An important aspect of this practice is that findings were never simply *reported* but rather program/community partners were always invited to contribute to the interpretation of the findings. This iterative process resulted in adjustments and elaborations to the initial research plan. It also led to a clearer picture of the program model on which our research was based, and a more nuanced understanding of the perspectives of both staff and families. This, in turn, strengthened our analysis of the data and our comprehension of the meaning and significance of key findings.

On the program side, the sharing of findings often prompted discussions about program practice. For example, the early findings about child care, noted above, spurred a discussion of this home visiting program's relationship to community-based child care. This led to a new program component involving outreach to neighbor/relative caregivers and

partnerships for quality improvement with family day care homes and child care centers. The result has been a significant improvement in child care quality for EHS families and communities. As with preliminary findings, researchers never simply reported program implications to EHS staff and families, but rather worked together with them to discern these implications, given the ongoing evolution of the program model and practices. This collaborative work, in turn, deepened researcher understanding of program thinking and the contexts in which such thinking was developed and applied.

CONCLUSIONS AND FUTURE DIRECTIONS

The employment of a CBPR approach in our research and evaluation with a local EHS program enhanced the design, conduct, and conclusions of our study. The research design was based on questions our program and community partners found compelling and wanted us to address, while our research–program partnership influenced our adoption of a combination of methods that allowed not only measurement of quantifiable, preselected variables but also exploration of the lived experiences and perspectives of EHS families and staff. Our CBPR approach helped us to conduct the study in ways that were respectful of community values. It also enabled us to be responsive to developments in program thinking and experience by augmenting our original research design with new components and procedures. Our inclusion of program partners in the interpretation of study findings led to more dynamic modes of analysis and more reflective conclusion drawing, processes that also proved useful for program and community development.

Our EHS study was characterized by an active interchange among researchers, program staff, and families. However, it should be noted that most discussions about research design, conduct, and findings either were initiated by the researchers or occurred as a by-product of other research activities such as participant observations of program activities. A challenge of CBPR is to empower all participants to initiate these discussions and to independently raise issues relevant to the research. In the case of our EHS partners, this lead was taken most frequently by program managers and less so by direct-service staff, the Policy Council, and study families.

Using a CBPR approach inevitably focuses attention on particular characteristics and concerns of the program or community being studied. This process of individualization is, in fact, one of its strengths. While this means we cannot simply repeat the *same* study in another program or community setting, nor assume that our *specific* findings can be applied elsewhere, it remains important that researchers recognize and build on the contributions of CBPR to general and theoretical questions.

Community-based studies frequently address issues that have applicability beyond local contexts. For example, in the case of our EHS research, we explored the advantages of family support as a program model, the impacts of welfare reform on parenting and child development initiatives, and the meanings of school readiness in low-income communities. One advantage of CBPR is that it brings into dynamic interaction researchers and community members who often have different experiences and modes of thinking in relation to common problems. For this reason, it is especially useful in helping develop new perspectives or new lines of inquiry on issues that have particular local manifestations but that transcend program and community boundaries.

Our experience of conducting research with a local EHS program suggests that certain elements are necessary for, or at least facilitative of, CBPR. Of fundamental importance is the commitment of both researchers and community-based stakeholders to engage in a partnership that will be at once respectful and honest. This partnership also needs to be ongoing—to persist throughout the course of the research, allowing community input into research focus, design, conduct, and interpretation and application of findings—as well as to involve multiple stakeholders—in our case, community-based staff and families in addition to program managers. This represents the foundation of the CBPR approach. Its realization, in turn, requires consistent attention to practices that operationalize and implement these participatory principles.

In the case of the Pittsburgh EHS study, implementation of CBPR occurred through 5 primary vehicles: (1) collaboration between researchers and community-based partners in determining research focus and design; (2) community-focused recruitment of research participants; (3) full use of the expertise of community-based research staff; (4) shared oversight of the research process among EHS parents, program staff, and researchers; and (5) sharing of preliminary findings with community partners and incorporation of their interpretations in further analyses. In addition, we suggest that our integrated research design, with a strong emphasis on qualitative methods and ethnographic modes of thinking, significantly strengthened participatory practices. While each of these elements might not be essential for implementing CBPR, we would argue that their combination facilitates its use. In our experience, they act in a synergistic fashion, each reinforcing or making possible the others.

Our EHS study was carried out with predominantly minority communities whose prior experiences with social service and research projects had created feelings of distrust. We believe that our CBPR approach helped establish new lines of trust and collaboration. However, for CBPR to be consistently and effectively implemented, and for communities, especially minority communities, to engage as partners in research endeavors, additional changes in the practices of researchers, funding agencies, and research institutions, including schools of public health, are needed. Among the most important areas to address are the following:

1. support for the establishment of researcher–community partnerships before the research is under way, preferably before the study proposal is written;
2. elimination of barriers to the use of research funds for the joint benefit of partnering communities and research institutions;
3. adequate supports for community-based research staff and their work;
4. commitment to “translational research” and a social ecology model of public health to increase the usefulness of research findings for community partners; and

5. increased support, both practical and intellectual, for the development and use of qualitative research methods and mixed-methods research designs.

On the basis of our research experience with EHS, we suggest that these changes will facilitate models of research and practice that are more fully participatory, benefiting partnering communities and the field of public health in its mission of improving the health of diverse communities of people and of society as a whole. ■

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This article was accepted May 16, 2003.

Contributors

C.L. McAllister, B.L. Green, and L. Mulvey conceived and designed the study. C.L. McAllister supervised its implementation and conceptualized and took the lead in writing the article. B.L. Green provided support to the study's implementation and helped prepare the article. M.A. Terry assisted with implementation of the study and drafted the literature review for the article. V. Herman and L. Mulvey, as program partners, collaborated in study implementation and reviewed drafts of the article.

Acknowledgments

The findings reported here are based on research conducted as part of the national Early Head Start Research and Evaluation Project funded by the Administration for Children and Families (ACF), US Department of Health and Human Services, through grants 90YF0002 and 90YF0025 to the University of Pittsburgh. The research is part of the independent research the University of Pittsburgh conducted with the Family Foundations Early Head Start Program, which is one of 17 programs participating in the national Early Head Start study. The authors are members of the Early Head Start Research Consortium. The consortium consists of representatives from 17 programs participating in the evaluation, 15 local research teams, the evaluation contractors, and ACF.

The ideas in this article were first presented and discussed at the 2003 Minority Health Summit sponsored by the Center for Minority Health, Graduate School of Public Health, University of Pittsburgh. We are grateful to the organizers and participants of the summit for providing us this opportunity.

The authors wish to thank Patrick Wilson, who helped with final editing and preparation of the manuscript. We gratefully acknowledge the contributions of Monique Johnson and Annette Grady, who did excellent interviews, enhanced our understanding of the families and communities with whom we were working, and helped make this research project both personally respectful and intellectually sound. Special thanks to all the managers, staff, and families of Family Foundations Early Head Start, and to the elected parent and community members of the EHS Policy Council. We could not have conceptualized, carried out, or completed this research without the collaboration of each of these people. They became in a very real sense our research partners and taught us much about working together toward our common goal of improving the health and well-being of young children, their families, and the communities in which they live.

Note. The contents of this article do not necessarily reflect the views or policies of the US Department of Health and Human Services, nor does mention of any trade names, products, or organizations imply endorsement by the US Government.

Human Participant Protection

The study on which the article is based was reviewed and approved by the University of Pittsburgh's institutional review board.

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