

Conducting a Participatory Community-Based Survey for a Community Health Intervention on Detroit's East Side

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This article describes a participatory action research process that brought together community members, representatives from community-based organizations and service providers, and academic researchers to collect, interpret, and apply community information to address issues related to the health of women and children in a geographically defined urban area. It describes the development and administration of a community-based survey designed to inform an intervention research project; discusses the establishment of a community/research partnership and issues that the partnership confronted in the process of developing and administering the survey; and examines the contributions of participants, and implications for research and collective action.

Key words: *community-based intervention research, community-based research, community health education, community health promotion, community/research partnerships, community survey, participatory action research*

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In the past decade there has been a resurgence of interest in community-based initiatives to address differentials in health status associated with social inequalities.¹⁻⁵ Among the many questions that face practitioners, researchers, and policy makers who seek to enhance health in community

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settings are: (1) Who to work with; (2) How to work together most effectively; and (3) How to understand and address both global and local social, economic, and political processes that affect the health of particular communities.^{3,6-9}

In this article we describe a participatory action research process that brought together community members, representatives from community-based organizations (CBOs) and service providers, and academic researchers to collect, interpret, and apply community information to address issues related to the health of women and children in a geographically defined urban area. Specifically, we describe the development and administration of a community-based survey designed to inform the work of the East Side Village Health Worker Partnership in Detroit, Michigan. We discuss issues that arose in the ongoing process of engaging representatives from CBOs, health care institutions, key informants, and other community members in the development of the community-based survey. Finally, we examine the diverse contributions of the participants, the negotiation of priorities, and implications for research and collective action in community settings.

Community-Based and Participatory Action Research

There are nearly as many definitions of "community-based" research and interventions as there are definitions of "community."¹⁰⁻¹³ Community may refer to geographically defined areas, groups that share a common history or interest, a sense of collective identity, shared values and norms, mutual influence among members, common symbols, or some combination of these dimensions.^{3,14} In the research described here, we began with a geographically defined area, a neighborhood whose residents share some common history and social ties. Other more relational dimensions of community, such as the extent to which residents share values and norms, interact with each other, and exert mutual influence, are among the variables of interest in the survey.

Like community, the term community-based requires a more explicit definition. We use "community-based research" to refer to research that engages members of a community – in this case, a geographic area – in all phases of the research process, including the application of results to guide planned community change.^{13,15-20} This definition draws upon principles of participatory action research to integrate community participation and influence in each stage of the research process: setting the direction for the research; defining the study problem; constructing the research design; collecting, analyzing, and interpreting the data; and applying the data to inform subsequent action. This model of research brings together participants who represent a variety of perspectives and experiences to contribute to and learn from each others' theories and experiences.²¹⁻²³ The knowledge-building process is connected to planned community change as participants work together to define and critically analyze neighborhood concerns, and to plan, implement, and evaluate actions to address those concerns.¹⁶⁻²³ Thus, community-based research does not refer to research that is simply conducted in community settings. We use this term to refer to research that centers on community strengths and issues and that explicitly engages those who live in the community in the research process. The insights and perspectives of community participants enhance the knowledge and understanding of researchers about community dynamics and conditions. This research seeks to strengthen the skills of community members in gathering and using data to facilitate planned community change.²⁰

The East Side Village Health Worker Partnership

The East Side Village Health Worker (VHW) Partnership is one project developed as part of the Detroit Community-Academic Prevention Research Center (hereafter the Detroit PRC), funded in October 1995 through a cooperative agreement with the Centers for Disease Control and Prevention (CDC) as part of its Urban Research Centers initiative. The VHW Partnership includes representatives from the local health department, hospitals, CBOs (e.g., community development organizations, citizen action groups, community centers), and academic institutions. The overall goal of the Detroit PRC is to promote and conduct collaborative, community-based prevention research that strengthens the ability of communities to address and expand the knowledgebase of public health regarding the health of women and children. In early 1996, the Detroit PRC adapted research principles initially developed by the Detroit Genesee-County Community-Based Public Health Consortium.¹⁵ These principles encourage participatory research processes that engage a variety of community groups in all phases of research conducted under the rubric of the Detroit PRC, with the broad aim that the research benefit the community.²⁴

The academic and health department partners developed the conceptual framework for the Detroit PRC and the VHW Partnership, drawing upon their past history of collaboration, expertise, and interests, and using census and vital statistics data to define priority areas. Key informants, individuals who were knowledgeable about and respected in the community, helped to identify four CBOs located on Detroit's East Side with a history of effective community-level collaboration. These organizations were invited to work with the academic and health department partners and funding was included to support their participation. Representatives from each of these organizations comprised the Steering Committee for the East Side Village Health Worker Partnership. The first six months of the project were dedicated to establishing working relationships and specific objectives that drew on the local knowledge of committee members and key informants. Within the first year, based on recommendations from the Steering Committee, three additional CBOs joined the committee.

The Steering Committee agreed upon three specific aims for the Partnership: (1) to design, implement, and evaluate a collaborative VHW intervention.^{2, 25-27} to address the factors associated with women's and children's health on Detroit's East Side; (2) to identify personal, interpersonal, organizational, community, and policy factors associated with poor health outcomes for women and children on Detroit's East Side; (3) to increase knowledge among participants in the VHW Project and among community members about these risk factors and protective factors, and to increase participation in strategies to modify these factors to improve the health of women and children. The VHW Partnership intervention and evaluation plans are discussed in more detail elsewhere.²⁴

Developing the Survey

This article focuses on a description and analysis of the process of designing and administering a community survey to inform and assess the VHW intervention. The tasks and timeline for the survey are shown in Table 1, and described below. The article draws on field notes and in-depth interviews collected as part of the overall evaluation plan, which also includes pre- and post-training assessments, documentation of activities, and focus group interviews.^{24,28}

Developing structures and setting the course

One of the first Steering Committee tasks was to develop and administer a survey of the community in which the intervention would be implemented. In doing so, they worked with a university-based Survey Committee, made up of individuals with expertise in survey design and methods, community organizing, women's and children's health, health behavior and health education, epidemiology, health services management, biostatistics, sociology, nutrition, and environmental health. The Survey Committee was to ensure that the survey would be constructed and conducted in a manner that would produce reliable and valid information that could be used to inform and evaluate the intervention and contribute to the body of knowledge in public health. The Steering Committee was responsible for: determining the boundaries of the community or neighborhoods that would be part of the survey; operationalizing the conceptual framework underlying the project and the intervention in these neighborhoods; helping to define the study population; and deciding upon the most effective strategies for administering the survey. A core support team of faculty and staff were members of both the Survey and Steering Committees, and conducted support work between meetings (e.g., minutes, background research). The two committees worked intensively, meeting every other week for a period of several months to define the study population and discuss survey design issues, content of the questionnaire, and the process for administering the questionnaire.

Conceptualizing the survey

Broadly, the purposes of the survey were defined as: (1) to assess community concerns and resources to guide the intervention; (2) to gather baseline data in order to evaluate the effects of the intervention on community-level change; and (3) to test the stress process model (described below) as a conceptual framework linking stressors to enduring health

Table 1

Tasks and timeline to conduct a participatory community survey

Task	Timeline
<i>Develop and maintain working relationships with members of the Steering Committee</i>	<i>January 1996-ongoing</i>
<i>Define specific aims for the Partnership</i>	<i>January-March 1996</i>
<i>Define the purpose of the survey</i>	<i>March-April 1996</i>
<i>Develop conceptual model</i>	<i>March-April 1996</i>
<i>Define the survey population</i>	<i>March-May 1996</i>
<i>Define the survey items</i>	<i>March-May 1996</i>
<i>Develop and pretest the questionnaire</i>	<i>March-June 1996</i>
<i>Blocklisting</i>	<i>May 1996</i>
<i>Draw the sample</i>	<i>May 1996</i>
<i>Send letters to selected households and area police departments to inform them of the survey</i>	<i>May 1996</i>
<i>Recruit and train community members as interviewers</i>	<i>May-July 1996</i>
<i>Establish field office and procedures</i>	<i>June 1996</i>
<i>Administer survey</i>	<i>June-December 1996</i>
<i>Monitor survey administration</i>	<i>June-December 1996</i>
<i>Feedback from interviewers</i>	<i>November-December 1996</i>
<i>Enter survey data into database</i>	<i>Nov. 1996-Jan. 1997</i>
<i>Data management/scale construction</i>	<i>Jan-March 1997</i>
<i>Begin analysis of data</i>	<i>February 1997</i>
<i>Preliminary feedback of survey results to Steering Committee and other community members</i>	<i>March-June 1997</i>
<i>Discuss implications of survey results with community members</i>	<i>April 1997-ongoing</i>
<i>Analyze data for basic research purposes</i>	<i>April 1997-ongoing</i>
<i>Prepare manuscripts for publication/presentation</i>	<i>April 1997-ongoing</i>

outcomes for women and children living in an urban community. The survey questionnaire was developed by bringing together information from the literature on women's and children's health with the particular local knowledge of community members.

Building on the work of Israel and colleagues,^{14,29} House,³⁰ and Katz and Kahn,³¹ we developed an initial conceptual framework that postulated that stressors (psychosocial and environmental conditions conducive to stress) in women's environments contribute to increases in perceived stress, and that this may in turn be linked to short-term responses and enduring health outcomes for women and their children. Conditioning variables such as knowledge, skills, social support, community problem-solving abilities, and accessible health and social services could reduce the potential for negative short-term or enduring health outcomes associated with exposure to stressors (see Figure 1). The stress model²⁴ provided an initial conceptual framework that linked social, structural, and physical factors in the environment with enduring health outcomes for women and children, consistent with the literature in this area.^{5,11,32-40} This framework provided the broad outline for the survey questionnaire. The next steps were to define the study population and operationalize the model for women living in this particular urban area.

Defining the survey items

The Steering Committee participated in a series of discussions to translate the conceptual framework of the stress model to the specific experience of women living on Detroit's East Side. They first identified sources of stress for women caring for children living on the East Side and how people feel and respond to these sources of stress. Next, they talked about the health and social effects of these stressors over long periods of time, and finally what might keep these stressors from having a negative effect on people's health in the long run. In a group session, Steering Committee members drew upon personal experiences of friends, relatives, and, in some cases, clients to generate a list of 49 stressors experienced by women who live on the East Side and who care for children. They discussed conditions that created or supported these stressors in this community, and followed a similar process of identifying and discussing each of the other components of the stress model.

Through this process, the Steering Committee began to define the particular stressors experienced by women living on the East Side of Detroit, and pathways through which they might translate into enduring health outcomes. These stressors and conditioning variables were used to define broad sections of the questionnaire and to develop specific items within each section. For example, a section of the questionnaire on "problems and worries" included items developed from those identified by the Steering Committee (e.g., how often do you worry about your children's safety when they play outside in your neighborhood). In other instances, standardized items from other questionnaires were used that tapped into the dimensions identified by Steering Committee members (e.g., access to health services), allowing us to compare our results with those from national surveys. Table 2 shows selected results from the Steering Committee discussions and corresponding items developed for the questionnaire.

Pretesting the questionnaire

An early version of the questionnaire was reviewed by Steering Committee members and revised substantially based on their comments. Community members in training as field interviewers (described in a later section) also pretested the questionnaire and their comments were used to make further revisions. The process of developing and pretesting the questionnaire occurred over several months: the feedback from Steering Committee and other community members was essential to the development of the final questionnaire.

Negotiating the survey-intervention balance

The initial grant application proposed that the community survey would be conducted within the first year of the project. This meant that the multiple partners involved needed to develop working relationships, decide on the intervention area, agree upon specific intervention aims, establish a locally determined conceptual model, and develop and conduct the survey within the first twelve months. This timeline was set to ensure that baseline data collection would be completed before the first Village Health Workers were trained and began their work, and to maximize the intervention period before final evaluation data were collected.

This timeline was renegotiated through a series of discussions during the first year, with some Steering Committee members arguing strongly for the intervention to begin sooner, while academic and some community partners argued for a slower time line to conduct the survey and to implement the "reputational" method to recruit lay health advisors, as described in the literature.⁴¹ Ultimately the Steering Committee agreed to begin the survey in mid-May and complete it July 30, with recruitment of Village Health Workers to begin in August and the first Village Health Worker training to occur in October 1996.

Deciding Who To Interview

Defining the study population

Determining who would be included in the survey involved a series of decisions; defining the geographic community and the population of interest within that community, developing the sampling frame, and deciding on a sampling strategy. In agreement with the initial grant proposal, both committees believed that the effectiveness of the Village Health Workers would be strengthened if the intervention and documentation efforts were concentrated in an area smaller than the overall area involved in the Detroit PRC (1990 population of 82,182).

Figure 1. Stress model as it relates to maternal-child health

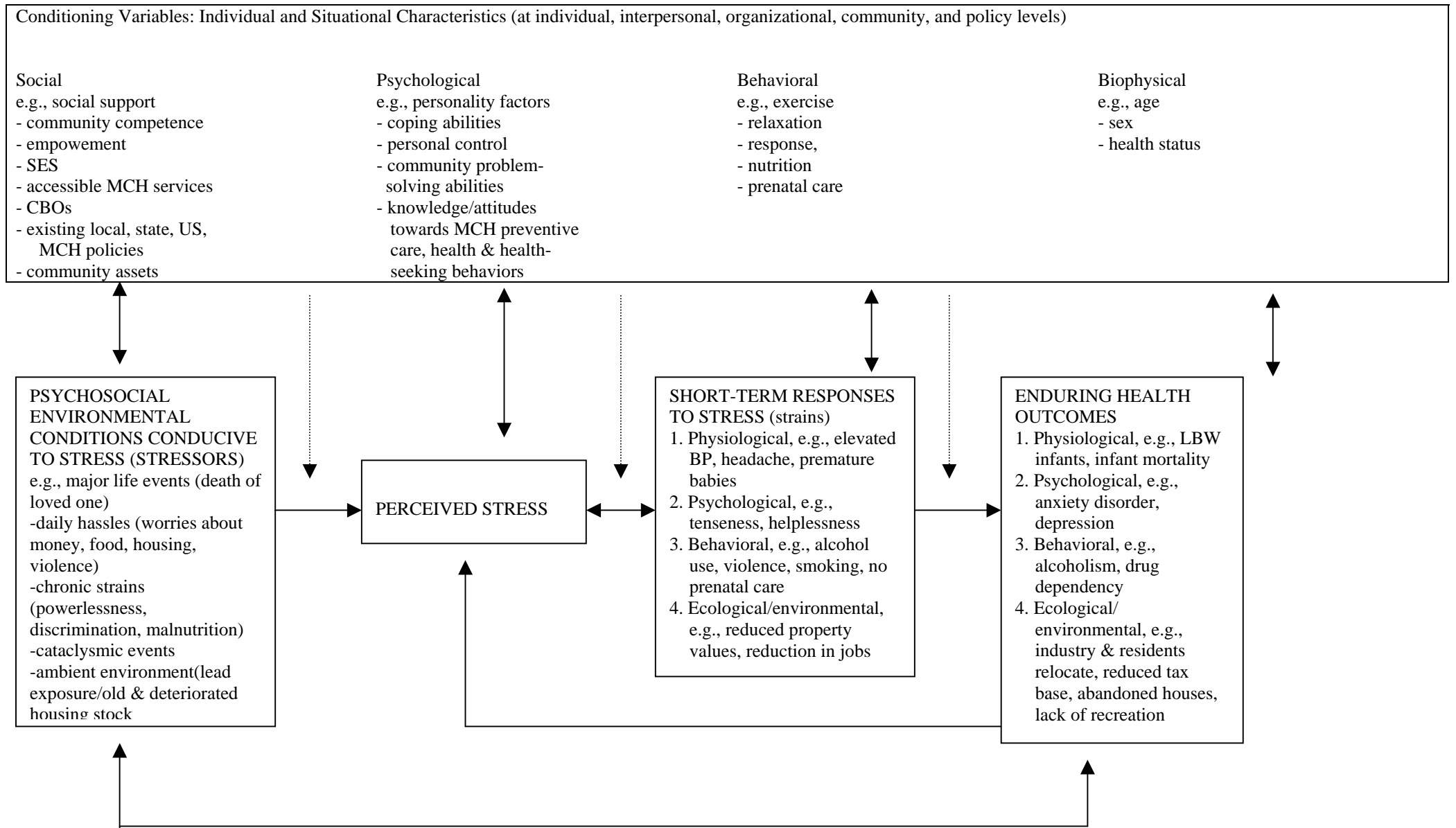


Table 2

Selected results from steering committee group discussions and examples of corresponding survey items

	Results from steering committee discussions	Example survey items
Stressors	Long waiting times for scheduled medical care appointments	The last time you went to see your usual health care provider, how well would you say they did in terms of seeing you close to the time you arrived (excellent, good, fair, poor)
	Poor neighborhood environment (abandoned cars and lots, weeds, vacant homes, illegal dumping, not safe)	How often are the following a problem (in your neighborhood): <ul style="list-style-type: none"> • Not safe being on the street during the day; • Gangs in your neighborhood • Litter, garbage, or dumping in vacant lots
	Poor housing, lack of good housing	How often are the following a problem for you: <ul style="list-style-type: none"> • Poor housing • Vacant housing
	Worries about children	How often do you worry about: <ul style="list-style-type: none"> • Your child getting involved in gangs; • Your children's safety when they play outside in your neighborhood
Conditioning Variables	Social support	If you needed someone to watch your children for a few hours, how often would you get somebody to help without paying them?
	Religion/spirituality	In general, how important is your faith or spiritual beliefs as a source of strength in your day-to-day life?
	Perceived influence	By working together with others in this neighborhood, I can influence decisions that affect the neighborhood
	Neighborhood ties	Thinking about the last twelve months, how often have you asked one of your neighbors over to your house or gone over to their house for a meal, to play cards, to watch TV, or just to socialize?

Over a period of several months, the Steering Committee examined information related to Detroit's East Side and discussed how to use this information to define the geographic area for the intervention. Resources and infrastructure in the subcommunities were examined, and knowledgeable residents were interviewed to learn about the community, including the history of collective action and perceived problems, as well as resources in the area. Census data describing household income, proportion of households headed by women, proportion of households with children under the age of 18, and vital statistics data such as infant morbidity and mortality rates were also considered in this process. Using criteria that included available resources (e.g., churches, block clubs), history of collaboration or community organizing, interest of community members, the potential for ongoing institutional support for the Village Health Workers, the size and shape of local networks and catchment areas, available data about social and health indicators, and ongoing initiatives or activities within the area, the Steering Committee defined an area within the East Side within which they would focus the efforts of the VHW Partnership. This area, bounded by four major East Side streets, contained approximately 6,000 households.

At the same time, the Survey Committee discussed sample size, sampling frame, and the definition of the study population (e.g., whether survey respondents would include both men and women, women of childbearing age, all women over the age of 18). Ultimately, based on estimated eligibility and response rates, and projected attrition between the two waves of the survey (the second wave to be conducted three years later) the Survey Committee recommended that the study area include approximately 5,000 households (roughly 20,000 people), and set a goal of 1,000 completed interviews. The Steering and Survey Committees together defined eligibility for the study as women 18 years and older with responsibility for the care of children under the age of 18 for five hours a week or more.

Preparing to Conduct the Survey

Blocklisting

Once the geographic area for the survey and intervention had been defined, a process called "block-listing" was carried out to develop a sampling frame of individual housing units within that area. Blocklisting involves listing each individual housing unit on a given block.⁴² Steering Committee members identified individuals who lived in the area, who were paired with university students, faculty, and staff researchers. Folders were prepared for each census block within the survey area, and each team was given a set of folders containing a detailed map of the area and forms for listing the addresses of individual housing units. A formal half-day training on block-listing procedures was held to explain the process, and blocklisting was conducted over a series of several weekends. Community residents who participated in the blocklisting process contributed invaluable knowledge of the community by locating hard-to-find units, identifying vacant units, accessing apartment buildings, explaining the presence of university participants to community members, and offering practical guidance on safety-related concerns.

Sampling

A two-stage simple random sampling process was used to generate the sample for this survey. As a first step, 2,800 households were randomly selected from the sampling frame of 6,124 households blocklisted. These represented the estimated number of households needed to achieve the desired 1,000 completed interviews based on one interview per household and an estimated 60 percent eligibility rate, 85 percent occupancy rate, and 70 percent response rate.^{43,44} Within households with more than one eligible member, a Kish selection table was used to randomly select one respondent.⁴⁵

Letters of introduction were developed by the core support team, signed by locally recognized Steering Committee members, and sent to the selected addresses. The letters explained the purpose of the survey and indicated that an interviewer would soon be visiting. For units with an illegible address, and for unnumbered units within large apartment buildings, letters were hand-delivered using directions and maps produced by the blocklisting teams. In addition, letters were sent to police precincts in the survey areas, alerting them that interviewers affiliated with the VHW Partnership would be in the area during the survey time period.

A unique address/sample identification label was prepared for each address to be visited, and a cover sheet was designed to introduce the survey; establish eligibility, and, as needed, randomly select one eligible respondent by applying a Kish selection table to the household listing.⁴⁵ The coversheet also documented informed consent, collected re-contact information, provided a "call record" of attempted contacts with that household, and recorded the final outcome (i.e., completed interview, non-eligible, vacant unit, refusal, other).

Recruitment and training of interviewers

The Steering Committee decided to hire and train residents of the neighborhood to administer the survey for several reasons, including:

- The interviews would be conducted by individuals who were familiar with the neighborhood and its concerns;
- The potential respondents would be more likely to participate in an interview conducted by someone from the area;
- The quality of the data would be enhanced due to greater trust between the interviewer and interviewee;
- Local interviewers would set the tone for the community-based nature of the research and the intervention that would follow;
- This would provide employment, although temporary and part time, in an area with an unemployment rate of 19 percent.⁴⁴

The Steering Committee contributed to the development of a job description that specified interviewer qualifications, and helped to determine reasonable compensation for the interviewers.

Steering Committee members were actively involved in recruiting interviewers, distributing fliers, and contacting individuals they felt might be interested in the positions. Applicants were screened to determine eligibility, with questions that included past experience with survey interviewing, residence, community involvement, availability for the training and the survey field period, and their perceived strengths and challenges in conducting survey interviews. Those who were invited to attend the training were paid for the training time, and informed that the final decision about who would be hired as interviewers would be made at the end of the training period. Because all respondents would be assured of the confidential and anonymous nature of the interview, professionals (such as social workers and educators) whose state licenses required them to report certain activities (e.g., suspected child abuse) were considered ineligible.

The training, which included lecture, group discussion, role plays, and group and individual practice and feedback, was based on curricula developed by the Detroit Area Study and the Institute for Social Research at the University of Michigan, supplemented by materials developed by the University of North Carolina at Chapel Hill Breast Cancer Screening Program. (In addition, the Collaborative Initial Glaucoma Study-Interviewing Center and the Women Take Pride Project, both based at the University of Michigan School of Public Health, shared strategies for training interviewers.) Trainees received 17 hours of formal training that included basic information about survey research, descriptions of random sampling techniques, information on obtaining respondent participation, instruction on use of the survey instrument, confidentiality, use of standardized probes and responses to questions from respondents, and verification of interviews. Of 62 individuals who were screened for the training, 50 attended at least one training session, 23 completed the training sequence and were selected to work as interviewers, and 19 worked for one week or more.

Final preparations and getting into the field

As the date initially set for beginning the survey approached, many details remained to be addressed. Faculty and staff involved in the survey administration spent weeks preparing and conducting the interviewer training, blocklisting, sampling, mailing letters to residents and area police precincts, and preparing coversheets and folders for the interviewers. The folders, bearing the same address/sample ID label, contained the coversheet and all supplies needed to conduct the interview: questionnaire, respondent booklet, incentive coupon and neighborhood resource directory (to be distributed to those who completed interviews), VHW Partnership brochure; appointment cards, interviewer labels, and copies of introductory letters sent to households and local police precincts.

Furthermore, as pretesting of the questionnaire progressed, revisions of the survey instrument were required, which in turn led to changes in the interviewer training and field office procedures. In the press to begin the survey on time, it was a challenge to involve all members of the Steering Committee in making decisions about the questionnaire content and its administration. For example, in the hurry to mail letters to selected households in time for the initial interviews to start according to the set timeline, the letters were mailed without the approval of the Steering Committee members. They were subsequently revised and approved by the Steering Committee, but this could have become a serious division within the Committee had there not been a prior history of working relationships and trust developed over the preceding months. The time and energy involved in this process, and the importance of the contributions of all participants, should not be underestimated. Even with the hard work of Steering Committee members and the students, staff, and faculty who supported the survey process, the field period began in the second week of June, two weeks later than scheduled.

Conducting the Survey

Survey administration

The survey field office was established at Butzel Family Center, a member of the VHW Partnership. A team of field supervisors consisting of researchers and students was recruited and at least one supervisor was available in the field office at all times that interviewers were in the field. Field supervisors were responsible for checking out survey folders to interviewers at the beginning of their shift, and for debriefing with interviewers at shift's end. This involved reviewing all coversheets, call records, and completed interviews with the interviewer; noting any discrepancies; providing in-service training where needed; and discussing any interviewer problems or concerns. Completed interviews were logged on a standard tracking form (adapted from those used by the Detroit Area Study in the University of Michigan's Sociology Department), and follow-up appointments were noted in an appointment log book. The first six interviews completed by each interviewer were verified by phone or in person, followed by verification of every sixth interview thereafter. Verifications were completed by field supervisors and a community member who was hired to assist with this task.

Nine interviewers began interviewing in mid-June. A second training was conducted in July and 12 additional interviewers joined the team. At the suggestion of Steering Committee members, respondents were given a copy of the "Kettering-Butzel Community Resource Directory," a listing of community programs and service providers developed by the Kettering Butzel Health Initiative (a Steering Committee member), along with a small gift certificate to a local retail center. The community interviewers were clearly an asset; their knowledge of the community, long hours, and ability to encourage community members to be interviewed contributed to the success of the survey. In the few instances when problems arose (e.g., interviewers not returning on schedule; interviews conducted at the wrong address; improper procedures followed), the Steering Committee was invaluable in finding ways to address them, and in supporting decisions made by the office staff. It was particularly important that decisions made by those who managed the survey office be informed and supported by members of the Steering Committee, since the survey would be followed by the community intervention and was the first introduction of the VHW Partnership to the community. For the same reason, it was important to

maintain positive working relationships among university staff and community interviewers. Toward this end, periodic group meetings were held with the interviewers to inform them of progress, changes in procedures, and elicit feedback and discussion of concerns and challenges they faced in the field.

Despite the long hours worked and the commitment of the field office staff and the interviewers, the field period continued two months longer than initially anticipated as we sought to reach the goal of 1,000 completed interviews. At the end of August, with about 660 interviews completed, several hundred coversheets remained to be closed out and the graduate students and faculty who had staffed the field office needed to return to their other academic responsibilities. At this point, the Steering Committee established the procedures under which a transition would be made from the community interviewers to professional interviewers. To ensure that the professional interviewers who completed the survey were familiar with community norms and that they were as similar to the community interviewers as possible, the Steering Committee requested that the professional interviewers hired be African-American, live in Detroit, and modify their interviewing techniques somewhat (e.g., be less assertive about following up with soft refusals than they might have been if the survey were not linked to a subsequent intervention in the community). Eight interviewers were hired and worked for four months to follow up on the remaining coversheets.

Response rates

Altogether, 700 interviews were completed and verified as usable interviews. In 1,075 of the households selected to be part of the sample, no resident met the eligibility criteria. There were 307 vacant houses, 43 at which no interviewer was ever able to establish contact with a resident, and 104 selected households were classified as "other." In 84 households an eligible respondent was identified but refused to participate, and 40 additional interviews were completed but were not usable for a variety of reasons (e.g., in-complete, conducted at the wrong address). Thus, the completed interview rate (the number of completed interviews divided by the number of eligible households in the sample) was 81 percent.

Feedback from the interviewers

Debriefing sessions were conducted with community interviewers after the end of the interview period, providing information about which neighborhoods had strong networks and which were more fragmented, stressors discussed by women in the community that were not included in the survey (e.g., lack of safe recreation for children), and additional resources (e.g., strong family networks). Interviewers described strategies that they had used to obtain interviews and minimize risks (e.g., how to conduct interviews in distracting situations, how to identify potentially unsafe houses, safety precautions). These insights are helpful to inform the intervention and future interviewer training sessions. In addition, interviewers were encouraged to reflect on aspects of the interviewer/supervisor relationship that could be improved in the second wave of the survey.

Next Steps

Dissemination of results

We are beginning to disseminate preliminary survey results to community members. The Steering Committee is developing processes that will allow community members and researchers to examine the stressors and conditioning variables identified, and discuss ways to reduce the stressors or strengthen the protective factors (e.g., enhance control, social support). Initially envisioned as a single large community forum, other options now being considered for disseminating the survey results include: printed summaries made available to neighborhood residents, presentations at block club meetings and other small groups working to address local concerns, presentations at local police precinct meetings, and a half-day "retreat" with Village Health Workers and Steering Committee members.

Determine priorities and change strategies

We anticipate that community members will want more than information, about the problems in their communities. As one Steering Committee member noted, "This community has been researched to death – they're going to want to hear solutions, not just the survey results." Recognizing this, one goal of this project is to work together to prioritize community concerns and develop solutions.

A part of this process will involve disentangling concerns that are amenable to change at the community level from those more effectively addressed through state and federal policies. For example, the social, political, and economic processes that reduce access to resources within Detroit and that contribute to the health problems of residents, are connected to patterns of production and processes of racial and class segregation that may not be within the range of influence of members of those communities.⁴⁶⁻⁴⁹ These processes may not be immediately responsive to local influence. On the other hand, as residents of marginalized communities mobilize to address social, economic, and political patterns within their communities that are linked with differentials in health

status, they may also address some of these broader political and economic processes. Furthermore, the development of coalitions and alliances within and beyond the boundaries of the immediate community can expand the resources available to leverage change at the policy level. Determining priorities and building skills, organizations, and other resources necessary to promote change is essential to the development of influence at the local level and beyond.

Implications for linking research with health promotion at the community level

Our experience highlights some of the dynamics that may shape participatory research that is linked to community interventions. As we indicated at the beginning of this article, one of the challenges is that of defining community, what dimensions of community are important, and how to tap into them. These may emerge and evolve over time, as new information is gathered and as participants develop new understandings of community dynamics and their relation to particular health issues.

Steering Committee members familiar with the community were essential to begin to understand the social and economic worlds of women living in this neighborhood. They helped to identify a smaller geographic area and determine the extent to which it was a community, shape the research questions, define the survey population, develop questionnaire items, select interviewers, and make other day-to-day decisions about the administration of the survey. The expertise, credibility and support of members of the Steering Committee will be critical throughout the upcoming community dialogues about the survey results and their implications for action. This is particularly relevant considering the differences of ethnicity and class that continue to separate many academic practitioners from communities of color, and the mistrust associated with those differences and with the history of health-related research within disenfranchised communities.^{20,50}

While practitioners engaged in community research are strongly encouraged to create a community advisory board, they should be aware of the time commitment, vigilance, and energy required to effectively maintain open lines of communication and trust. Among members of the VHW Steering Committee, there were different perspectives, priorities, and resources, and these translated at times into differences of opinion. Some of these differences arose from the pressures and politics that shape the lives of researchers based in academic settings and those who work in larger service organizations such as health departments. These pressures are not always visible or acceptable to those who are working in small CBOs, who face their own sets of pressures and politics that may be equally invisible to those based in larger institutions or outside of the community. Other differences arise between representatives from CBOs based on their distinct experiences within and views about the communities in which they live and work. Thus, the ability of the Steering Committee to work together to come to consensus despite these differences depends on members' ability to educate each other about the pressures and politics of their organizations, and establish a level of trust that allows open dialogue. It demands a willingness to discuss problems, listen, forge solutions to which all members can agree, challenge each other, address conflicts, and, when necessary, apologize and move beyond mistakes made by one or more of the partners. Effective community-based research hinges on the ability of Steering Committee members to engage in honest and productive dialogue that examines pressures and conflicts and the way that they shape the research process, the information that is gathered, and the way that it is interpreted and used.

Limitations

The use of the survey as one aspect of a community-based intervention is a time and resource intensive process for gathering information about the community itself. The decision to use a participatory research approach increased the number of persons involved in the decision-making process, and thus increased the time spent in negotiation and discussion. At the same time, we believe that this approach increased the number of different perspectives that informed the survey and enhanced its relevance to community members.

The Survey and Steering Committees decided not to conduct a parallel survey in a comparison community. The decision was based on the desire to maximize the use of available resources, ethical considerations in not providing an intervention subsequently in the comparison community, and concerns articulated in the literature and expressed by some members of our research team about the ability to adequately match and the usefulness and interpret-ability of data from a "control" community.^{20,28,51,52} Without power to control, or resources to monitor in enough detail, changes that might occur in a "control" community, real questions arose about the extent to which such a study design would contribute to an understanding of the process or effects of the intervention. Instead resources were focused on documenting change within the intervention community.

Interpretations and generalizations made on the basis of the results of this survey will be applicable to women 18 years and older living in this community who are responsible for the care of children under the age of 18 for five hours a week or more; that is, the study population. Care must be taken in generalizing to other populations – including other communities – on the basis of these results. Furthermore, we are limited in making some kinds of comparisons. For example, because of the small number of Caucasian respondents included in this survey (1%), we can not test for differential neighborhood effects by race of respondent. In addition, we can not use these data to make comparisons between African American women living in this

community and other, perhaps less economically marginalized, communities. This survey, because of the purposes for which it was conducted and the decisions made about sampling and eligibility, provides a rich description of the experiences of women living in the community. These decisions were based on the goals and objectives for the survey data and the intervention. They are not limitations of the use of a participatory process per se, but are limitations (and strengths) of the data, based on decisions that were made through a participatory process.

This article describes a participatory action research process that brought together community members with health service providers and academic researchers. As practitioners and researchers work together with community members to understand and to intervene in social conditions associated with health and illness, the processes that are used to collect and interpret information about the community may reflect or challenge the very social inequalities that shape differentials in health status. Processes that involve community members in framing the research questions, collecting and interpreting data, and determining the uses of the information in community change efforts, can both contribute to the scientific literature and to the social resources available to residents of disenfranchised communities.

Explicit attention to power relationships between researchers and community members is linked to theories of the social construction of knowledge as well as to a history of activist research in the social sciences.^{53,54} Questions of who participates in the process of creating knowledge, what kind of influence they have, and implications for those who are not represented or who have less influence become particularly salient.²⁰ These questions of representation and participation are directly linked to the history of local political and social processes, and have important implications for research and interventions developed at the local level.^{8,46,55} Specifically, we suggest that community research and interventions that seek to address the social inequalities that are fundamental to differentials in health should explicitly work to establish more equitable power relationships among participants, and between those who participate and other subgroups within geographically defined communities.^{10,20, 56} Community-based research that is grounded in community concerns and linked with reflection and action can begin to address underlying social and political inequalities that contribute to differentials in health status.

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