The East Side Village Health Worker Partnership: Integrating Research with Action to Reduce Health Disparities

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SYNOPSIS

This article describes the work of the East Side Village Health Worker Partnership as a case study of an initiative that seeks to reduce the disproportionate health risks experienced by residents of Detroit's east side. The Partnership is a community-based participatory research and intervention collaboration among academia, public health practitioners, and the east side Detroit community. The Partnership is guided by a steering committee that is actively involved in all aspects of the research, intervention, and dissemination process, made up of representatives of five community-based organizations, residents of Detroit's east side, the local health department, a managed care provider, and an academic institution. The major goal of the East Side Village Health Worker Partnership is to address the social determinants of health on Detroit's east side, using a lay health advisor intervention approach. Data collected from 1996 to 2001 are used here to describe improvements in research methods, practice activities, and community relationships that emerged through this academic-practice-community linkage.

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The authors wish to acknowledge the contributions of the East Side Village Health Worker Partnership, which includes representatives from the Butzel Family Center, the Detroit Health Department, the Friends of Parkside, the Henry Ford Health System, the Islandview Development Coalition, the Kettering/Butzel Health Initiative, the University of Michigan School of Public Health, and the Warren Conner Development Coalition. The Partnership is a project of the Detroit Community-Academic Urban Research Center and is funded by the Centers for Disease Control and Prevention. This research was supported in part through a cooperative agreement with the Centers for Disease Control and Prevention, Grant #U48/CCU515775. The authors thank Sue Andersen for her help the preparing this manuscript and Adam Becker, Juliana van Olphen, and Stephanie Farquhar for assistance in analyzing the data.

One of the most persistent challenges faced by contemporary public health professionals is reducing disparities in health—differences in morbidity and mortality that persist between groups with differential access to social resources. Socioeconomic disparities persist across countries, regions, and political economies.[1–7]

Although patterns vary across health outcomes, socioeconomic differences are heavily implicated in racial and ethnic disparities in health and life expectancy.[8–11] Socioeconomic and racial disparities in health converge in urban areas, where residents of census tracts with the highest concentrations of poverty are disproportionately members of labeled racial or ethnic groups[12–15] and experience disproportionately high rates of mortality.[16–18] These racial and socioeconomic disparities in health persist, even in the face of overall declines in all-cause and infant mortality, because mortality among more privileged groups has declined at the same rate as, or in some cases, faster than, the health of those with fewer economic and social privileges.[19,20]

One way to reduce disparities is to identify and implement effective strategies to improve health within communities with fewer resources. Public health professionals and community residents alike continue to seek such strategies. Community-based partnerships have emerged as one mechanism through which community members and public health professionals can work together to identify and implement efforts to improve health, ideally combining the knowledge base and skills of public health researchers, practitioners, and community residents with community residents' in-depth understanding of their communities and the resources within them. Advocates of community-based participatory approaches within public health have argued that such approaches have the potential to overcome the mistrust that often exists among members of economically or socially marginalized communities, service providers, community-based organizations, and research institutions and to enhance the quality, relevance, and application of research to more effectively address needs identified by communities.[21–24] These approaches are based on the recognition that the very social processes that contribute to inequalities in the distribution of social and economic resources—and therefore to inequalities in health status—are often reflected in relationships between public health professionals and residents of communities with disproportionately high health risks. The effectiveness of community-based participatory research efforts, therefore, rests on their ability to address those inequalities within partnerships themselves.

The experience of one community-based participatory research partnership, the East Side Village Health Worker Partnership in Detroit, Michigan, allowed us to examine mechanisms through which such partnerships can enhance relationships between community residents and public health professionals through research designed to understand health risks and through efforts to improve health. Specifically, we examined what, if any, improvements in research methods, practice, and community relationships came about as a result of this community-practice-academic partnership.

THE EAST SIDE VILLAGE HEALTH WORKER PARTNERSHIP

The East Side Village Health Worker Partnership (ESVHWP) is a community-based participatory research effort that uses a lay health advisor model to address social determinants of health on Detroit's east side. A project of the Centers for Disease Control and Prevention–funded Detroit Community-Academic Urban Research Center, the Partnership includes more than 40 community residents as Village Health Workers (VHWs) and a Steering Committee made up of representatives from community-based organizations (the Butzel Family Center, the East Side Parish Nurse Network, Friends of Parkside, the Kettering/Butzel Health Initiative, and the Warren/Conner Development Coalition); health service agencies (the Detroit Health Department and the Henry Ford Health System); and an academic institution (the University of Michigan School of Public Health).

Between 1950 and 1990, the population of Detroit dropped from just under two million to just over one million, and the proportion of residents who reported their race as African American rose from 16% to 76%.[25,26] By 1990 Detroit was one of the most racially segregated cities in the United States,[14,15] and rates of poverty and unemployment were among the highest in the country. Consistent with the high proportion of families living in poverty, Detroit's infant mortality rates, death rates among young adults, and overall mortality rates were considerably higher than national averages.[17,18,27]

Yet Detroit is also a city with many resources, including strong social networks and a long tradition of neighborhood organizing, church and community organization involvement in community development efforts, and community members with skills and commitment to enhancing their communities. Moreover, unlike in many other large metropolitan areas, almost 75% of Detroit's population live in single-family dwellings, 53% of which are owner-occupied.[29] Together, these community resources and the city's strong history

of collective mobilization offer a solid foundation for a public health intervention to address underlying social determinants of health.

The structure and the process of the Partnership built on these resources. Representatives from each of the organizations represented on the Steering Committee actively participate in the partnership and with VHWs to extend and enhance relationships among the participating organizations and the VHWs.

The Partnership is guided by a set of community-based public health research principles,[24,30] developed by representatives from Detroit-area community-based organizations, academic institutions, and health care institutions. These principles encourage the active participation and influence of community members and representatives of the partner organizations in all major phases of research and intervention.[23,24,30–33] This model of research and action brings together participants who represent a variety of perspectives and experiences to contribute to and learn from each others' theories and experiences and to plan, implement, and evaluate actions taken to address identified concerns.[24,33–36]

VHWs involved in the Partnership are residents of the east side of Detroit. In keeping with the literature on lay health advisors,[37–39] many were invited to participate on the basis of their identification by community members or organizations as people who are considered trustworthy, competent problem solvers to whom others turn for advice and support. Some VHWs also sought out the Partnership, having heard of it by word of mouth.

Many VHWs had been involved in local organizing efforts in the past, and most were firmly embedded in social networks in which they played key roles in providing instrumental and emotional support to others. VHWs completed an eight-week training sequence that covered such topics as community problem-solving, social support networks, health and well-being, and identification of resources within the community. Every month they also met as a group with the project coordinator and members of the Steering Committee. In between those meetings, they met in small groups to plan specific initiatives.

VHWs attempted to address change at many levels within an ecological framework of health.[22,28,40–44] At the individual level, they provided information, referrals, and direct assistance to promote positive health behaviors and coping strategies among members of their social networks (e.g., sharing information about community resources to address health concerns, collecting and distributing clothing to area families). They conducted activities to foster socially supportive relationships (e.g., Pamper-Me events for women). At the organizational level, they advocated for organizational changes that may increase the accessibility or appropriateness of services provided (e.g., by working with the local health department to modify services provided). They also worked toward community change through community organizing and policy change activities in their local communities (e.g., through collective efforts to strengthen neighborhood block clubs and enhance relationships with the police).

RESEARCH METHODS

In this article we draw on data collected from 1996 through 2001 as part of the basic research on and evaluation of the ESVHWP. While multiple methods were used in the overall research and evaluation design,[45,46] for the purposes of this article we analyzed the in-depth, semi-structured interviews conducted with Steering Committee members (n = 10) and VHWs in the second (n = 31) and fourth (n = 24) years of the project. Selected items from the interview protocol relevant to this analysis are presented (see Figure).

Interview respondents were primarily African American. They ranged in age from their mid-20s to mid-80s, with educational levels ranging from less than high school to completion of graduate degrees. In keeping with the principles of community-based participatory research, community partners were engaged in all phases of the research and evaluation process, including the development of research questions and study design, the interpretation of results, and the integration of findings into the work of the Partnership. Three of the co-authors of this article are residents of Detroit (two live on the east side), two work for a public health agency in Detroit, and three work for an academic institution. (There is some overlap among these categories. Two authors, for example, are employees of a local health practice organization and residents of the community.) All have been actively involved with the ESVHWP for at least three years.

All interviews were transcribed and analyzed using a focused coding process[47,48] that identified sections of the interviews in which respondents spoke of their assessments of the Partnership in terms of improvements in: research design, practice activities, and relationships among community members, representatives from community-based organizations, academic institutions, and practice institutions. Within each of these broad areas, categories were created using in vivo coding and a constant comparison method to construct

Figure. Selected items from in-depth interviews with village health workers, East Side Village Health Worker Partnership, 1997 and 1999

In *general*, how do you think the Village Health Worker Partnership has gone to date? We are interested in hearing your opinion of both the positive and the negative aspects of the Partnership.

What, if any, have been some of the accomplishments of the overall Partnership to date?

Please describe one of those projects that you have worked on as a VHW. Choose whichever you would most like to talk about.

> What, if anything, do you feel was/has been accomplished through _____? (INTERVIEWER: FILL IN NAME OF PROJECT; BE CLEAR THAT VHW IS REFERRING TO PROJECT AND NOT OVERALL PARTNERSHIP)
>
> In what ways, if any, did the ESVHW Partnership help to support this effort?
>
> What more, if anything, might the ESVHW Partnership have done to support this effort?
>
> In your activities to address (NAME PROBLEMS/CHALLENGES NAMED ABOVE) in the community, have you worked with any of these members/organizations of the steering committee? (HAND LIST) If yes, please describe.

In the process of your work with the ESVHWP, have you been involved with any efforts to influence decision-makers or to bring about changes in city, state, or federal policies that affect your life and the life of your community? If yes, please explain.

What was it that helped you decide to become a VHW?

Would you say that your experience as a VHW has been about what you expected or different from what you expected it would be? (Please describe.)

Could you give me an example of a time when you *had influence in a decision* that the VHWs made?

Could you give me an example of a time when you *did not have influence in a decision* that the VHWs made?

discrete subcategories.[48–50] For example, the broad theme examining improvements in community relationships included improvements in relationships among community members, improvements in relationships between community members and academic institutions, and improvements in relationships between health practice organizations and community-based organizations.

LESSONS LEARNED

Partnership approaches and improvements in research methods

The collaboration of partners in the East Side Village Health Worker Partnership resulted in several improvements in research methods and enhanced the ability of the research to inform specific interventions to improve the health of east side residents (see table).

Development of a context-specific stress process model. Collaboration between academic researchers and community representatives resulted in the generation of a stress process model that combined a general framework of stress and health (developed and refined by academic researchers over several decades to document the relationships among stressors, conditioning variables, and health outcomes) with the specific experience of residents of this community. The process of bringing together representatives from academic, practice, and east side communities allowed us to develop a context-specific stress process model grounded in community members' in-depth knowledge of stressors experienced in this community and strategies used to respond to or reduce the effects of those stressors on health.[45]

Implementation of a community survey. The stress process model generated by the Steering Committee was used to guide development of the interview protocol for a random sample community survey conducted in the first year of the project.[45] The knowledge and expertise of community and practice partners contributed both to the development of the questionnaire items and to the implementation of the survey. For example, through extensive discussion of east side resources, concerns, and boundaries, as well as the anticipated strength of the intervention, the ESVHWP Steering Committee reached a decision regarding the boundaries of the intervention area. These intervention area boundaries were used in determining the survey sample

and in subsequent decisions about recruiting community members as VHWs. In addition, on the basis of discussions within and decisions made by the Steering Committee, community members were hired to conduct the block listing for the survey and were hired and trained as interviewers for the survey itself. One Steering Committee member maintains that "the 81% response rate on the survey is a result of those efforts," which helped address community residents' mistrust of research and increased community understanding of and support for the survey itself.

Interpretation and dissemination of results to the community. The Partnership strengthened the research through the collective engagement of all partners in the interpretation and dissemination of results. As results of various components of the stress process model were examined,[45,51–55] findings were presented to the ESVHWP and discussed at regularly scheduled meetings, special community events, and Partnership retreats. These presentations and discussions greatly contributed to the clarity and depth of interpretation of the findings. In addition, as academic, practice, and community partners worked together to develop manuscripts for publication based on the Partnership's work, new opportunities were created for discussing the results and their implications. Each of these dialogues helped extend our collective understanding of the social determinants of health on Detroit's east side and of the potential for interventions to address these factors.

Improvements in practice activities

Community-based participatory research models explicitly connect research with practice—that is, one purpose of the research is to inform and improve practice. A variety of improvements in practice activities came about as a result of the Partnership (see Table). Each of these areas illustrates opportunities for dialogue that contributed to the development of a common language and shared understanding of health and social conditions on Detroit's east side and the development of interventions aimed at addressing those conditions.

Integration of social context and health. Community members with interest in becoming a VHWs participated in an eight-week training sequence designed to (*a*) introduce them to lay health advisor models and to the Partnership, (*b*) get to know one another and establish supportive relationships, (*c*) enhance their familiarity with community resources through presentations and exchanges with other participants, (*d*) increase their knowledge of specific health areas and risk factors, and (*e*) extend their community organizing skills. One training session, based on the stress process model, engaged VHW trainees in discussions about the stressors they and others in their communities confront. Discussions within this session focused on relationships between underlying social conditions and health outcomes, placing individual health behaviors within the context of broader social conditions that influence them (e.g., placing individual food choices within the context of economic conditions that shape access to fresh produce).

Table. Improvements in research methods, practice activities, and community relationships achieved through the East Side Village Health Worker Partnership

Improvements in research methods	*Improvements in practice activities*	*Improvements in community relationships*
Developed context-specific stress process model	Integrated social context and health	Strengthened social networks among village health workers
Implemented community survey • Increased specificity of stressors • Increased specificity of conditioning variables • Improved response rate	Identified strategies for individual and collective action	Strengthened relationships between village health workers and steering committee members
Interpreted and disseminated results to the community	Developed shared vision of change (priorities)	Strengthened relationships among academic, practice and community-based organizations

Identifying strategies for individual and collective action. The training session in which the VHWs developed a stress process model also provided opportunities for participants to talk about the things they do daily to promote their own health and that of others. As VHWs identified stressors associated with neighborhood conditions, discussion focused on potential actions the Partnership might take to address those conditions—participating in police precinct meetings, developing relationships with community police officers, mobilizing neighbors to work with city officials to ensure that burned-out street lights are promptly replaced, for example. Participants also identified actions that they and other members of their communities had taken, or might take in the future, to modify the relationships between stressors and health outcomes (e.g., providing tangible and emotional social support). Through these discussions, potential interventions were identified that build on existing community relationships and patterns of action—interventions such as strengthening social networks among community residents and extending those networks to incorporate new members.

Results from analysis of the survey and in-depth interviews were presented to members of the Partnership on several occasions, in a variety of arenas. These discussions often validated residents' own experience of their communities. As one VHW noted, "Now it's in black and white, and no one can tell us that it's not like that in the community." Discussion of results benefited the analysis and interpretation of the data and led to discussions about implications for practice, sometimes to action. For example, following a presentation of results from Partnership data that suggested that social support provided by members of one's place of worship had positive implications for health outcomes, one VHW organized an overnight for women at her church, designed to build and strengthen social networks and to provide social support to participants.

Developing a shared vision of change (priorities). Themes and excerpts from in-depth interviews with VHWs and other community members were incorporated into retreats and other planning meetings to structure discussions of intervention priorities and strategies. These venues provided opportunities for members of the ESVHWP to learn from and with each other and to discuss priority areas for addressing social conditions related to health in their communities.

In 1999, VHWs and representatives from the Steering Committee gathered to identify priorities for the Partnership for the next four years. Descriptive data and partial correlations between stressors and mental and physical health outcomes were presented, indicating the extent to which respondents in a community survey reported a range of stressors and the strength of relationships between stressors and health outcomes.[45] Results were also presented from the in-depth interviews, which included community members' descriptions of the stressors and community resources or conditioning factors. These results became a starting point for a discussion of Partnership priorities. After considerable discussion and an exercise that engaged each participant in defining priorities, the Partnership agreed on five priorities for intervention over the next four years: policing and safety, strengthening social support for parents, improving access to health care, addressing the financial vulnerability of many east side residents through economic development efforts, and addressing community factors that influence the risk of diabetes and cardiovascular disease. These opportunities for dialogue and participation in decision-making not only helped integrate research with practice, they also offered opportunities for all partners to influence Partnership priorities. As one VHW noted, "We have input and influence, especially when we have retreats or planning meetings. That's a good place for Village Health Workers' voices to be heard and to come to some sort of consensus in planning."

Improvements in community relationships

Community relationships improved in three major ways as a result of the Partnership. Each of these improvements is described below.

Stronger social networks among VHWs. As VHWs and Steering Committee members discussed their experiences in their communities and defined their visions and strategies for change, they also built relationships that extended and strengthened their own social networks. One VHW described the impact of her participation in the Partnership, saying it had been "more than what I've expected, because Village Health Workers are like a sister and a brother. We sort of embrace each other. Like I was saying about [names several VHWs and Steering Committee members], they all are there for you, supporting you in whatever it is you're going to do." Through participation in the Partnership, VHWs strengthened their relationships with each other.

Stronger relationships between VHWs and Steering Committee members. The initial structure of the ESVHWP, which included a Steering Committee made up of representatives of community-based organizations, health practice institutions, and academic institutions, was intended to create a forum within which relationships

could be developed and strengthened and through which these organizations could work with community members who became VHWs. During the first two years of the Partnership, the Steering Committee and the VHWs met separately to discuss Partnership business, with staff acting as a liaison between the two groups.

Results from the first wave of in-depth interviews conducted with VHWs and Steering Committee members in 1997–1998 indicated that, while some VHWs appreciated the Steering Committee, there was significant confusion about what the Steering Committee was, which organizations were represented, and what role the committee played.

These results were shared with members of the Steering Committee and with the VHWs as part of the formative evaluation of the project. To build closer relationships between VHWs and Steering Committee members, the Partnership held a Pastors' Breakfast, organized by the Steering Committee but featuring the VHWs. The Partnership initiated an annual picnic for VHWs and Steering Committee members and an annual overnight Partnership retreat, at which plans for the upcoming year were discussed. The Steering Committee structure was also changed to include two VHWs, elected by the VHWs as a whole, and Steering Committee members were encouraged to attend and participate in monthly VHW meetings.

The second wave of in-depth interviews conducted with VHWs two years later suggested that these efforts had had modest success in building stronger connections between VHWs and Steering Committee members. One VHW noted, "The organizations and institutions [that make up the Steering Committee] are a nice foundation for the project—a good collaboration. Good things have, and will continue to, come out of it." Another VHW said, "The ESVHWP brings the resources [to us, and] we can take them back out into the community." These positive statements were tempered by others indicating that they wanted the Steering Committee to be even more visibly engaged in the Partnership's efforts. For example, one health worker said, "We could do more if we saw the Steering Committee members more often." Participation of Steering Committee members in VHW meetings allows for exchange of information about resources available from these institutions and greater coordination and synergy of efforts.

Stronger relationships among academic, practice, and community-based organizations. Strong relationships between academic institutions, public health practice institutions, and community-based organizations on the one hand and residents of east side neighborhoods on the other are essential if the Partnership is to effectively address the social determinants of health on Detroit's east side. As one Steering Committee member from a health services organization indicated, the "Partnership has strengthened relationships between [my organization], and community-based organizations and University faculty . . . . [Our] relationship and credibility within the community is healthier." Thus, as organizations participate actively in partnerships such as the ESVHWP, they not only disseminate their resources more broadly among community members but also build stronger relationships with the other involved organizations.

Mistrust of academic researchers remains a concern and is linked to the history of human rights violations in health-related research within disenfranchised communities.[56,57] Some members of the Steering Committee made clear that when they joined the Partnership, they saw themselves as watchdogs or guardians for the community. The mistrust of academic partners manifested itself early in the project, as VHWs requested a meeting with the project coordinator (a resident of the city) to discuss the role and intentions of the academic partners.

All members worked to establish positive relationships that allowed members to put challenges on the table, recognizing at the same time the power differentials and the risks involved in doing so. Data from the second wave of in-depth interviews suggested that some progress had been made toward achieving this goal but that challenges remained. One VHW indicated to a partner from an academic institution that she remained involved in the Partnership in part because "I know that you guys are up at school trying to work with us to make a change, that you are meeting people that are trying, with their education, to make a difference. And when we see that you're involved, it makes us more comfortable to say, 'Hey, well, we can do it.'" Such indicators of progress, which became visible after four years of building and strengthening relationships, speak to the potential for improving relationships between community members and public health professionals. The realization of such potential takes time, commitment, mutual respect, and consistency.

CONCLUSION

The community-based participatory research approach used in Detroit offered opportunities for community, academic, and practice partners to work together to develop research questions, collect data, interpret that

data, and apply the study results to address jointly determined priorities for health.

The approach described here endeavors to account for multiple, interrelated risk factors that affect health and to link those risk factors—as they are experienced at the local level—to broader social and economic processes that contribute to widespread disparities in health. Those broader processes, which include economic policies that contribute to income inequalities and racial ideologies that isolate members of labeled racial groups in economically marginalized urban communities, also contribute to social (and often physical) distances between public health professionals and many economically disenfranchised residents of communities. Partnership approaches such as those adopted here try to bridge these distances.

These efforts to work collectively for change face multiple challenges.[23,24,58,59] However, as we have attempted to illustrate here, they also offer opportunities for improving research methodologies, public health practice, and relationships among academic researchers, public health practitioners, and residents of communities who bear a disproportionate burden of ill health.

As public health professionals attempt to address health disparities, they confront social processes and inequalities that affect the economic and political resources of historically marginalized communities. These processes are also reflected in everyday interactions among practice, academic, and community partners. The equitable engagement of members of the involved communities in the design, implementation, and evaluation of interventions; recognition of the value of the contributions of all partners; and opportunities for reflection, feedback, and dialogue are essential to efforts to prevent the reproduction of these inequalities within the Partnerships themselves. Public health practice efforts that explicitly acknowledge these dynamics and attempt to address them—through community-based participatory partnerships or other means—can realize important improvements in research, in practice, and in relationships that begin to address the fundamental processes that contribute to health disparities.

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