

B. SCIENCE AND THE COMMUNITY: A COLLABORATIVE MODEL FOR INTEGRATION OF RESEARCH WITHIN THE COMMUNITY

Linda S. Weglicki, PhD, MSN; Virginia Hill Rice, PhD, RN;
Adnan Hammad, PhD

OBJECTIVE

The purpose of this presentation was to: 1) discuss the importance of conducting community-based research; 2) identify six guiding principles and outcomes of conducting community-based research; and 3) identify strategies for increasing the ease and effectiveness of community-based research.

BACKGROUND

In the context of health, the word *community* refers to a group of individuals who share social, cultural, or economic ties, and who may share a physical location,¹ and/or exhibit an “awareness of their identity as a singular group.”² Community-based research is defined as research that is conducted by, with, or for communities. It differs fundamentally from what is considered mainstream or academic research by being coupled relatively tightly with members of the population who are eager to: 1) be involved in the data collection process; 2) know the research results; and 3) use findings in a practical manner to achieve constructive community-based social and health changes.³ Little has been written about the evolution of community-based research, the difficulties and practicalities of this approach, and how it might differ from other forms of conventional (positivist) scientific research.

Community-based research begins where the problems are. It entails innovative, collaborative, and practical problem-solving methods that build on cultural, social, and spiritual values derived from the community itself. According to Allman, Myers, and Cock-

erill, community-based research is a “philosophy of inquiry and not a discrete research framework.”⁴ It incorporates either full action, varying degrees of empowerment, or, at the other extreme, nothing more than the permission of an involved community regarding a particular research initiative. Within community-based research, the generation of new knowledge is a collaborative event that is facilitated by having community members self-reflect and transmit research findings to their community. By embedding these research activities within the community, the likelihood is increased that the results will be implemented with a direct benefit to the community.⁵

GUIDING PRINCIPLES OF COMMUNITY-BASED RESEARCH

Based on experiences and available literature, six guiding principles have been identified that must be considered when beginning and conducting community-based research.

—First and foremost, community partners must be involved during the earliest stages of the research project’s development. This involvement encompasses defining the research project’s objectives in detail to the community (including study design, methods, protocol, data collection, and processes of implementation). Having community partners involved during early development of the research study proposal facilitates community interest and influence in the project’s direction to ensure that the mission, goals, and methods are consistent with local needs. This involvement also helps the researcher to identify and

From the Wayne State University College of Nursing, Detroit (LSW, VHR); and the Arab Community Center for Economic and Social Services (ACCESS), Dearborn, Michigan (AH).

address potential research issues and barriers within the broader cultural, social, economic, and political context of the community.

—The second community-based research principle is that the research processes and outcomes must be designed to benefit the community. Whenever possible, community members should be included as part of the research team. Community members can be hired and trained so that they understand the purposes of the study, research process and methods, scientific integrity involved in conducting the research, and the community's active role in the project. By doing this, community members develop an inherent belief in the research as a tool for social action that benefits the community as a whole. Training and skills enhancement of community members is a key element as well as a by-product of community-based research that results in meaningful participation throughout the study project that is often carried over into future research projects. One example of training that is useful to community members participating in research projects is to require all research team members to review and complete the federal guidelines for the conduct of research required of National Institutes of Health (NIH) on-line or in person. This process results in participating community members being more knowledgeable and confident about the: 1) basics of research; 2) history and ethics of research; 3) roles and responsibilities as members of the research process; 4) compliance with human subjects guidelines; 5) processes of informed consent; and 6) the Health Insurance Portability and Accountability Act of 1996 (HIPAA). In addition, when community members become active members of community-based research, the strengths and resources of the community are increased.

—The third guiding principle of community-based research is recognizing that researchers and community members bring individual expertise and var-

ied resources to the study. Recognizing this uniqueness fosters mutual respect and trust among project members, which results in team building. According to Sieber,⁶ collaboration and shared trust are essential for intervention studies that are community-based. The outcome of the collaboration and team building often results in sharing the development of new knowledge and skills. When this occurs, it serves to enhance a richer dialogue, understanding, and dissemination of the study findings.

—The fourth guiding principle is that research community members must be part of the analysis and interpretation of the data. This participation provides an opportunity for all project members to have input into how the data and study results are considered and disseminated. In addition, it provides an opportunity to make clear the community's view prior to formal dissemination of the findings through conference proceedings and academic publications. An essential underlying component of this principle is to distribute the research data and study findings to all members in language that is understood and respectful of the relative contributions of each member. Scientists must employ terminology that all members of a community-based research project can understand. While difficult for scientists, agreement on terminology and study results takes into account the point of view, as well as the expertise, of the researcher and the community, which results in greater integrity and continuity of the research effort.⁷

—The fifth guiding principle is that productive collaboration between researchers and community members should be encouraged to continue beyond the life of the current project. Developing the collaborative relationship between the researcher and the community is a process that takes on a timeline of its own. The partnerships and relationships that develop during community-based research may best be described as symbiotic, where both parties

gain from the exchange. Such partnerships can foster and enrich future opportunities for innovative research and partnerships. Through partnerships, people can extend their knowledge and resources, thus strengthening the research enterprise.

—The sixth guiding principle when conducting community-based research builds on the preceding principle that community members should be empowered to initiate their own research projects. Community-based research provides community members with the building blocks for understanding the key elements in conducting scientific research. Once community members gain an understanding of the scientific research process, they are in a position to solve problems and develop independent research studies or collaborate with others. According to Tandon, understanding research may also liberate and empower people's and communities' capacities to conduct research with the scientific rigor required to influence health policy and social change.⁸

OUTCOMES OF COMMUNITY-BASED RESEARCH

A number of outcomes are associated with community-based research. First, community-based research facilitates identifying and defining health issues and concerns. By doing so, community-based research has been reported to improve community health planning efforts, influence environmental and social change, and secure funding for new research initiatives. Second, community-based research could result in developing culturally appropriate measurement instruments and interventions. Third, community-based research establishes trusting, collaborative relationships that enrich the value of the data and study findings. Fourth, community-based research results in far-reaching ancillary results. For example,

social relationships often develop that may not have otherwise. Finally, community-based research can decrease health disparities by improving community-based approaches to health promotion and disease prevention. According to Daniel Blumenthal, chair of the Department of Community Health and Preventative Medicine at the Moorehouse School of Medicine, "Community-based research is where we will get the most gain for our research dollar, and that's where we will have the most opportunity to improve the health of the public."⁹

A community-based research has a number of benefits for scientific researchers themselves, including: 1) access to under-served populations and various healthcare problems; 2) high levels of participation from community members; 3) new levels of trust; 4) initiating research development among community members and graduate and doctoral students; and 5) disseminating study findings through conference proceedings and publications.

A few drawbacks when conducting community-based research warrant consideration. For community members who partner with university faculty and researchers, the higher salary costs of university faculty and researchers can be a barrier to collaborative efforts for community partners. In addition, the university requirements of the institutional review board can be time consuming and restrictive to community members. Lastly, university administrators (who must sign off for release time and costs) have expressed indifference, skepticism, and resistance to community-based research efforts.³ Drawbacks for the researcher include: 1) a necessary lead time to identify key community leaders and members to participate in community-based research; 2) the unknown and unpredictable time necessary to build community trust; 3) the unspoken community and cultural barriers and customs that must be identified and often broken down before ef-

fective collaboration can occur; 4) the communication and language barriers that must be identified and addressed; 5) the cultural differences and uniquenesses that must be identified; 6) the scientific process occurring in a naturalistic setting as opposed to an academic or healthcare facility, where the researcher has more power or control; and 7) the greater risk for non-random events from the community to effect study outcomes.

STRATEGIES FOR CONDUCTING EFFECTIVE COMMUNITY-BASED RESEARCH

Researchers can use a number of key, common sense strategies to increase their effectiveness when conducting community-based research. For example, researchers should practice being good observers and listeners when in a community setting. Increasing one's awareness of the environment and people in it can result in rich information about the community, its members, and its health needs. Second, researchers must have a clearly developed collaborative, community-based strategic plan before taking any action. Third, researchers must always practice and use effective communication skills, including positive verbal and non-verbal messages. Seeking clarification and validation of messages is important; researchers may need to slow their pace. Researchers who normally work in a healthcare or academic environment are usually pressed for time and impatient when it comes to getting things done in the community. Researchers who function within a community setting may have to become aware of things happening at a slower pace. Fourth, researchers must become involved at the community level and in related community activities. This involvement can be accomplished by joining and taking an active part in ex-

isting community organizations. Researchers must be identified as someone concerned with the community on a day-to-day basis and not just the research study that they are administering. The fifth strategy for effectiveness is to be surrounded by "key" community leaders and gatekeepers. These individuals can help facilitate entry into groups and organizations and troubleshoot when obstacles and barriers are encountered along the way. Sixth, researchers must recognize and take advantage of "ripe opportunities" that occur during the study. For example, a new source of study participants may present itself and is worth the effort to capture what might result in richer sources of data. Finally, intervention strategies should incorporate the unique cultural factors of the community, which results in increased acceptability, use, and adherence to the study interventions and outcome findings.

CONCLUSION

A result of community-based research is that science is seen more as a truly useful tool for improving the quality of life in the community. Community-based research can be robust science. A growing base of experience demonstrates that being community-driven and involving communities in research does not water down the science, but strengthens it. Community members are as well equipped as trained researchers and scientists to talk about, think about, and understand their community's problems and needs. This paper underscores the growing importance of involving communities as collaborative partners in the research process. By involving community members in all aspects of the research process and dissemination of research findings, Ayers portends an increased acceptance and use of the study results.¹⁰ Therefore, researchers who participate in community-based research projects must facilitate and foster a

sense of community ownership at the grassroots level.

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