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Overcoming Barriers to Effective Community-Based Participatory Research in US Medical Schools

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ABSTRACT *Research to improve the health of communities benefits from the involvement of community members. Accordingly, major federal and foundation funding agencies are soliciting health promotion/disease prevention programme proposals that require active community participation. However, creating such partnerships is difficult. Communities often perceive conventional research as paternalistic, irrelevant to their needs, manipulative, secretive and invasive of privacy. Many institutions and researchers view community knowledge as lacking in value. Community-based participatory research (CBPR) is a collaborative partnership approach to research that equitably involves community members, organizational representatives and researchers in all aspects of the research process. In this article the authors consider the barriers to institutional change and faculty participation in CBPR, and propose some steps for overcoming the barriers and making CBPR an integral part of a medical institution's research agenda. Training and supporting faculty in the philosophy and methods of this approach is the cornerstone of improved community-based research.*

KEYWORDS *Community-based research, medical education, academic medical institutions.*

Although the call for evidence-based interventions is increasing, the difficulties in applying health-promotion and disease-prevention research in communities cause consternation among policy makers, funders and community leaders. Research done in the community setting is limited, and most community

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members and leaders are not eager to participate in such research. They often perceive conventional research as providing no community benefit but much researcher benefit. They may also view conventional research as paternalistic, irrelevant to their needs (Green *et al.*, 1995), manipulative, secretive and an invasion of privacy. The approach of disseminating research results and exhorting communities to change their behaviours has not only been unsuccessful but has also often increased the disenfranchisement felt by community members. An Institute of Medicine report states it bluntly ''lack of access to and cooperation from community groups are common ramifications of poor relationships with communities'' (Gebbie *et al.*, 2003). Not only is there a problem of trust, but there appears to be a gap in knowledge about effecting behavioural change in not only individuals but also in populations. Recognizing the need to include community members in the research process, several major funders have encouraged proposals in which communities actively participate (Nichter, 1990; CDC Urban Research Centers, 2001; Corburn, 2002; O'Fallon & Dearry, 2002). However, it is not sufficient to mandate community involvement. Communities and academic institutions must desire and learn how to work together.

Community-based participatory research (CBPR) is a collaborative partnership approach to research that equitably involves in all aspects of the research process those who are affected by the issue being studied – community members, organizational representatives and researchers (Israel *et al.*, 2001). This is also a type of research that promises to directly benefit the people studied (US Department of Health and Human Services, 2003). This systematic form of inquiry includes education and social action to effect change (Green *et al.*, 1995). For CBPR to be successful, however, participatory research models must be fully integrated into the academic culture, and faculty must be given skills and experience to successfully conduct such research.

Based on several years of combined experience in community-based research, the authors describe the status of community-based participatory research (CBPR) at US academic medical institutions. We outline institutional and individual barriers preventing CBPR from becoming an integral part of academic institutions and propose both philosophical and practical changes within the academic culture that acknowledge the value of community ideas and actively include the community when conducting research that affects them. Finally, we outline steps for developing academics into successful CBPR researchers.

Community-Based Participatory Research Characteristics and Literature

Community-based Participatory Research requires the continuous exchange of knowledge, skills and resources and a commitment to having a sustained impact

in the community where the research is being conducted (Cheadle *et al*., 2002) Minkler and Wallersein (2003) define CBPR as a new paradigm that represents ''alternative orientations to inquiry that stress community partnership and action for social change and reductions in health inequalities as integral parts of the research enterprise.'' The CBPR process has proved useful for (a) developing trust and mutual acceptance between researcher and community, (b) verifying research results and (c) applying research results (Green *et al*., 1995). There is evidence that involvement of community members in the decision-making and planning process is more likely to produce meaningful change in the community (Green, 1986; Stratford *et al*., 2003). The success of CBPR projects in many different fields from sociology to applied anthropology in the US and abroad support CBPR as a legitimate process for conducting successful research in the community (Green *et al*., 1995; Casswel, 2000; Krieger *et al*., 2002; Schulz *et al*., 2002; Gebbie *et al*., 2003).

Institutional Barriers

The evidence and promise of CBPR as an effective approach to community-based research have raised interest among academicians, foundations and government agencies. Although interest has increased, institutional barriers have prevented CBPR from becoming an accepted research model in many academic institutions, and there are very few researchers who have had formal training in the CBPR method. Though some schools of public health have programmes to teach skills in CBPR (Gebbie *et al*., 2003), the lack of CBPR researchers will create a void in participatory researchers for years to come. To begin to alleviate this situation, CBPR needs to be included in the medical institution's repertoire of supported research processes. How well institutions are able to embrace another framework is key to the success of community-based research in discovering, teaching and implementing effective approaches to health promotion in the community.

Following are some institutional structures and beliefs that may adversely affect interest in CBPR

Objectification in Research

Historically, most academic researchers have viewed community members as objects of research. This detached attitude toward communities has contributed to community members' reluctance to participate in research (Casswel, 2000). CBPR researchers develop and follow a different research framework for working with communities in order to build relationships based on trust, a key ingredient of this research method.

Lack of Respect for Community Knowledge

Conventional researchers have difficulty thinking that a community, without any background in research, can significantly contribute to the

research process. This mindset clearly separates research institutions from communities. In CBPR, researchers not only respect community knowledge but also value it as an additional source of important information. Implicit in the concept of CBPR is the idea of reciprocal learning. Both entities have a great deal to learn from and teach each other (Lemkau *et al*., 2000).

Limited Understanding of the CBPR Concept and Perception That It Lacks Rigour

CBPR does not fit within the commonly accepted perception of academic research. Because it includes service and teaching components, it is often not seen as research. Lack of understanding of CBPR by key decision-makers in academic institutions (e.g. presidents, vice presidents, deans, department chairs and committee chairs) is a major barrier affecting the institutionalization of CBPR as a valued and desirable mode of conducting research. Dependence solely on traditional clinical research methods limits the efficacy of community research. Participatory research is a process that complements and provides context for more traditional qualitative research methods (Krieger *et al*., 2002).

Few CBPR Researchers/Role Models/Mentors; Few on Committees

Lack of experienced CBPR researchers in academic institutions translates to a lack of role models for junior faculty interested in learning about and conducting CBPR. Another ramification of the lack of experienced CBPR researchers is that they are rarely found on Institutional Review Boards (IRB), Research, Faculty Development, Curriculum, or Promotion & Tenure committees. As a result, knowledge about how to evaluate a CBPR proposal or the effectiveness of researchers is limited and so is advocacy for curricular change, faculty development activities that help educate faculty and students in CBPR, or promotion of CBPR researchers.

Few Grants/Rewards/Incentives for Faculty

Few academic institutions offer seed grants for CBPR similar to those that exist for basic, clinical or educational research (Polanyi & Cockburn, 2003). Additionally, most institutions consider community-related projects to be community service, which is not rewarded in the same way as other categories of academic achievement. As CBPR involves relationship building and continuity over time, it often takes longer than clinical research, making it difficult for CBPR practitioners to meet the scholarly expectations most academic institutions hold for numbers of publications (Gebbie *et al*., 2003). Subsequently, many CBPR researchers have difficulty achieving promotion and tenure.

Proposed Changes in Academic Culture

As depicted in Figure 1, a significant paradigm shift towards CBPR requires institutions to address proposed changes both at philosophical and practical levels.

Philosophical Shift

The philosophical shift (Figure 1) of an organization toward any new focus is a major undertaking. This shift does not suggest completely or even partially abandoning the long-standing focus of the organization, but instead it requires the leadership of an organization to agree to expand its current focus and definition of research. Before CBPR can be included in the research construct of institutions, organization leaders and opinion-leader champions must believe that:

The institution is a part of the surrounding community. It does not reside in a vacuum. This understanding benefits both the community and academia.

Improving the health of the community will more likely happen if the community collaborates, cooperates and participates. Which parallels physicians' successful practical clinical experiences treating patients who cooperate and take an active role in their health.

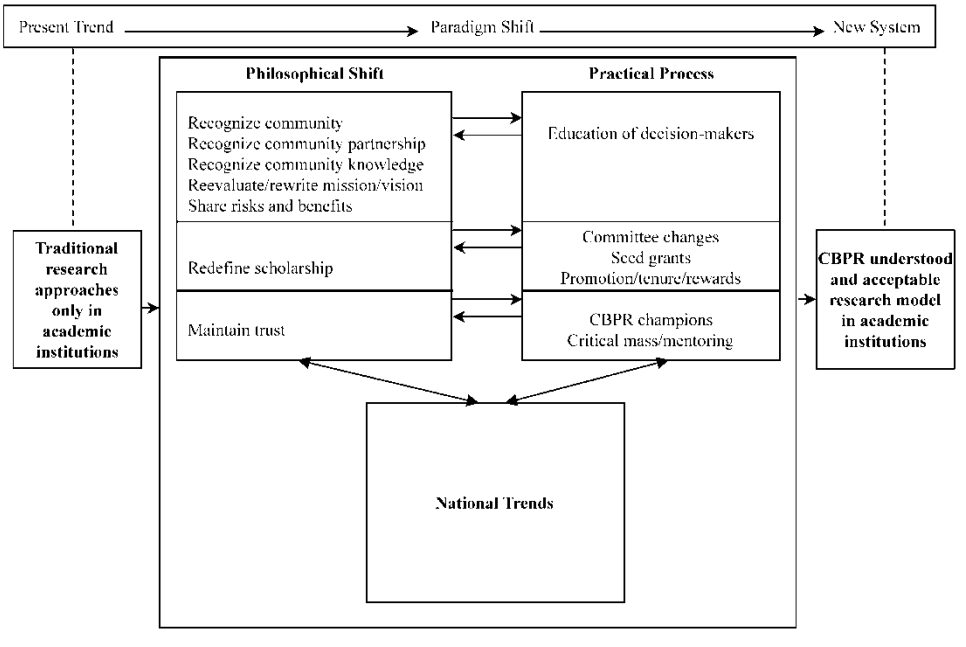

Figure 1. Shifting paradigm: philosophical shift, practical process, and national trends.

Community knowledge is a valuable asset for improving the health of the community. Recognizing the limits of academic knowledge leads to embracing co-learning where information and knowledge flow back and forth (Gebbie *et al.*, 2003).

Improving the health of communities is an integral part of the academic institution. Revisiting (and revising if necessary) the institution's mission and vision statements may show the value that CBPR can bring in producing scholarly products is directly linked to improved health outcomes in the community.

Partnership means sharing work and rewards. In participatory research, the academic institution shares credit, benefits, risks and grant dollars with the community when appropriate. Community partners may be paid when appropriate and, in some cases, the community, not the academic institution, will be the primary grant recipient (Casswel, 2000).

Scholarship has many forms and applications. Boyer described the scholarships of discovery, application, integration and teaching (Boyer, 1990). Community scholarship is a valid form of scholarship that includes all four aspects rather than isolating them. CBPR products result from active, systemic engagement of academics with communities for such purposes as meeting community-identified needs, studying community problems and issues and engaging in the development of programs that improve health (Maurana *et al.*, 2001).

Trust is a mutual relationship. Trust is bi-directional and is based not only on authority but also on experience and relationship. CBPR develops and nurtures trusting relationships that benefit both the community and the institution.

Practical Shift

At the practical level, the following steps can help to overcome barriers to institutionalizing CBPR.

Educate key decision makers. As CBPR usually is an unknown or misunderstood, educating deans, department chairs and key committee members is imperative.

Institute change in committee membership. The leadership in the institution should evaluate committee structures and encourage and/or mandate CBPR researchers on IRBs, Promotion and Tenure, Research, and Faculty Development committees (Nyden, 2003).

Invest in seed grants for CBPR. An institution needs to invest in CBPR if it wants to reap major grants in the future. Providing seed grants will encourage

some younger faculty to venture into participatory research and later to enable them to apply for larger grants from governmental and non-governmental agencies and organizations.

Reward faculty for community scholarship. If an institution values CBPR, it will reward faculty for their involvement in communities and CBPR, and more faculty will be interested in participatory research. Placing CBPR researchers on Promotion and Tenure committees is essential to this process (Nyden, 2003).

Identify and recruit champions of CBPR. An institution will progress more quickly toward integrating CBPR if there are CBPR champions in the institution. These champions must hold highly visible leadership roles and be well respected within the academic institution.

Enhance critical mass of CBPR researchers and mentor new faculty. Whether CBPR mentors or CBPR researchers come first is debatable. However, CBPR cannot produce optimal value or become institutionalized without a critical mass of CBPR researchers. For new faculty, having mentors and faculty development training in their respective institutions will enable faculty to consider using CBPR and give and receive guidance throughout the research process. Formal and informal faculty development is necessary (Nyden, 2003).

Individual Barriers

Individual as well as institutional barriers militate against faculty performing CBPR. Chief among them are lack of knowledge or training in CBPR, lack of interest in CBPR and fear of the unknown. Most practitioners involved in CBPR have learned the process on their own. Lack of interest in CBPR may result in part from lack of knowledge. We believe that if CBPR were known and available, with other nearby researchers engaged in participatory research, interest in the field would develop.

Perhaps most problematic is overcoming fear of the unknown. Partnering and sharing credit with the community as equals can produce anxiety, particularly in health related fields where practitioners are trained to think in terms of ''turf'' or exclusive possession of expertise. Academics may find their standard modes of operation much more comfortable than venturing into the relatively uncharted realm of CBPR. Even for a community-sensitive researcher or institution, there may be significant discomfort with the prospect of losing control and power.

Steps for Faculty Change

As indicated in Figure 2, six steps are involved in order for academics to overcome individual barriers and become CBPR researchers. Some of the steps

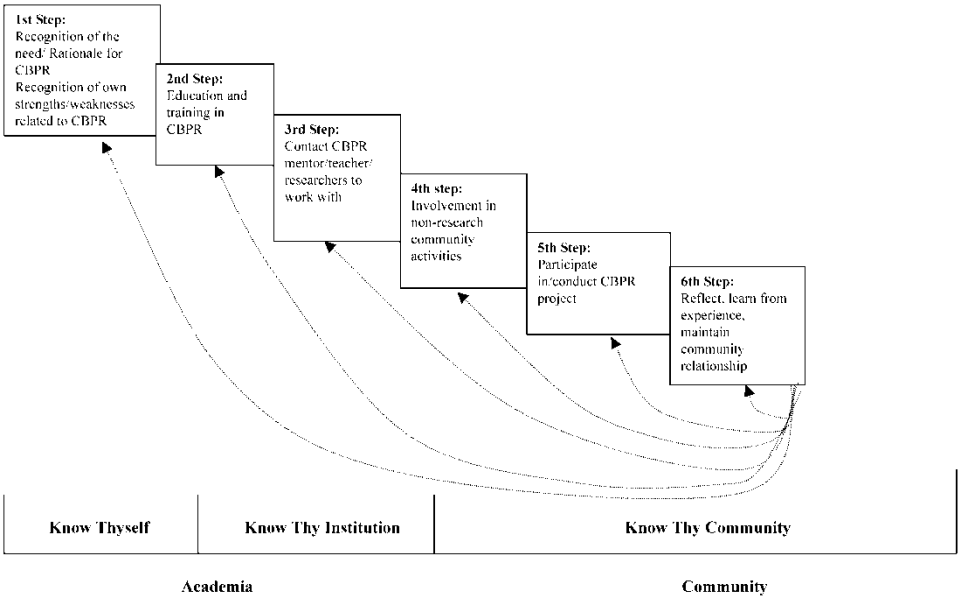

Figure 2. Steps to becoming a CBPR researcher.

require individual action, while others involve a larger group, such as a department, division or other institutional group. These experiences involve internal trust building and partnering and will provide academicians with a greater understanding of the importance of partnering with communities. The steps and methods parallel some of those required in community-based participatory research.

Recognize the need to learn how to conduct CBPR. Though obvious, it bears repeating that a researcher must recognize his or her strengths and weaknesses as it relates to any new content, process, and method. This is even more important for CBPR, as very few researchers have undergone formal training to conduct CBPR. Most practitioners will need to develop new skills or modify existing skills, including ''the ability to collaborate and share control in decision making and action regarding programme design, implementation, and evaluation; the non-trivial use of community resources, skills, and relationships; and the cultivation of new capacities and partnerships among organizations and individuals'' (Gebbie *et al*., 2003).

Seek resources and acquire education and training in CBPR. This includes participating in seminars, workshops and distance learning modules on the topic. In addition, researchers must discover the status of and plans for participatory research at their institutions and request that they offer education in CBPR. Researchers must also find and work with key individuals in their

institutions (e.g. dean's office, curricular committees, faculty development committees, etc.) to develop a blueprint for change. These activities are time consuming and may seem daunting, but are absolutely necessary for change.

Find a mentor in CBPR. There is a definite need for mentoring in research education in general, and particularly for participatory research. However, many academic medical institutions lack appropriate mentors to fulfil this role. If a local mentor is not available, faculty interested in CBPR need to seek out mentors from other institutions. A ''connector'' programme sponsored by a participatory research institution could help fill this void by providing CBPR resources and connections to faculty experienced in participatory research.

Spend time in a community and get involved with the people there. CBPR researchers need to have a genuine interest and involvement in a community's well being. Spending time in a community and getting involved in non-research activities are key to forming trusting relationships with community-based organizations and individuals and to acquiring a better picture of the community's strengths and limitations. It is also personally rewarding. Researchers may get involved in community activities, such as health fairs, school physicals and youth programmes, in order to learn about the community and also help the community learn about the researcher.

Participate in and conduct projects. For a novice researcher, it is helpful to start any research project on a small scale. The researcher can begin by participating in a more experienced researcher's CBPR project and/or developing a pilot project. This experience will teach the researcher more about CBPR than any formal course work or journal article. Hands-on experience can teach the novice researcher how to use basic principles of CBPR—and what not to do. In addition, it demonstrates the need to be pragmatic when getting involved in any community-based activities.

Reflect, form relationships and repeat the process. Researchers involved in CBPR need to continuously work on reflection throughout the research process. They also need to continue to develop and nurture community relationships. This step is inherent in all of the previously mentioned steps, but it deserves to be mentioned separately because of the value of reflection and the importance of maintaining relationships. At the end of a project, a researcher needs to actively summarize his/her thoughts and share these with others, as well as to maintain long-term relationships with a community. A key principle of CBPR is an emphasis on long-term commitment by all partners (Gebbie *et al*., 2003). As noted in Figure 2, a researcher can and should revert to earlier steps if needed.

Conclusion

Policy makers, funders, and community leaders are frustrated with the inability to apply research findings to health problems facing communities. Community-based participatory research is recognized as a viable process of conducting research that is meaningful to both academia and community, reduces community member distrust and expands academic knowledge of application beyond bedside and clinic to a much broader and more complex setting. To bring CBPR into the mainstream of academic culture, academic institutions must expand their vision to include the community and multiple forms of scholarship, and they must take practical steps to include CBPR. Individual researchers will need to make major personal efforts, supported by their academic institutions, to venture into a new and exciting world known as community based participatory research.

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References

BOYER, E. (1990). *Scholarship Reconsidered. Priorities of the Professoriate*. Princeton, NJ; Princeton University Press.

CASSWEL, S. (2000). A decade of community action research. *Substance Use Misuse*, *35*, 55 – 74.

CDC URBAN RESEARCH CENTERS (2001). CDC Urban Research Centers: Community-Based Participatory Research to improve the health of urban communities. *Journal of Womens Health & Gender Based Medicine*, *10*(1), 9 – 15.

CHEADLE, A., SULLIVAN, M., KRIEGER, J., CISKE, S., SHAW, M., SCHIER, J.K. & EISINGER, A. (2002). Using a participatory approach to provide assistance to community-based organizations: The Seattle Partners Community Research Center. *Health Education & Behavior*, *29*, 383 – 394.

CORBURN, J. (2002). Combining community-based research and local knowledge to confront asthma and subsistence-fishing hazards in Greenpoint/Willamsburg, Brooklyn, New York. *Environmental Health Perspective*, *110*(suppl. 2), 241 – 248.

GEBBIE, K., ROSENSTOCK, L. & HERNANDEZ, L.M. (Eds) (2003). *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century*. Washington, DC: The National Academies Press.

GREEN, L.W. (1986). The theory of participation: a qualitative analysis of its expression in national and international health policies. *Advances Health Professions Education*, *1*, 211–236.

GREEN, L.W., GEORGE, A., DANIEL, M., FRANKISH, C.J., HERBERT, C.P., BOWIE, W.R. & O'NEILL, M. (1995). Study of participatory research in health promotion: Review and recommendations for the development of participatory research in health promotion in Canada. *Institute of Health Promotion Research, the University of British Columbia and the BC Consortium for Health Promotion Research for the Royal Society of Canada*.

ISRAEL, B.A., SCHULZ, A.J., PARKER, E.A. & BECKER, A.B. (2001). Community-based participatory Rresearch: Policy recommendations for promoting a partnership approach in health research. *Education for Health*, *14*(2), 182–197.

KRIEGER, J., ALLEN, C., CHEADLE, A., CISKE, S., SCHIER, J.K., SENTURIA, K. & SULLIVAN, M. (2002). Using community-based participatory research to address social determinants of health: Lessons learned from Seattle Partners for Healthy Communities. *Health Education & Behavior*, *29*, 361–382.

LEMKAU, J.P., AHMED, S.M. & CAULEY, K. (2000). The history of health in Dayton: A community-academic partnership. *American Journal of Public Health*, *90*, 1216–1217.

MAURANA, C.A., WOLFF, M., BECK, B.J. & SIMPSON, D.E.. (2001). Working with our communities: Moving from service to scholarship in the health professions. *Education for Health*, *14*(2), 207–220.

MINKLER, M. & WALLERSTEIN, N. (Eds). (2003). *Community Based Participatory Research for Health*. San Francisco, CA: Jossey-Bass, p. 3.

NICHTER, M. (1990). Project community diagnosis: Participatory research as a first step toward community involvement in primary health care. In R. Hahn (Ed), *Anthropology in Public Health*. New York, NY: Oxford University Press, pp. 300–324.

NYDEN, P. (2003). Academic incentives for faculty participation in community-based participatory research. *Journal of General Internal Medicine*, *18*, 576–585.

O'FALLON, L.R. & DEARRY, A. (2002). Community-based participatory research as a tool to advance environmental health sciences. *Environmental Health Perspectives*, *110*(suppl. 2), 155–159.

POLANYI, M. & COCKBURN, L. (2003). Opportunities and pitfalls of community-based research: A case study. *Michigan Journal of Community Service Learning*, *9*(*3*), 16–25.

SCHULZ, A.J., PARKER, E.A., ISRAEL, B.A., ALLEN, A., DECARLO, M. & LOCKETT, M. (2002). Addressing social determinants of health through community-based participatory research: The East Side Village Health Worker Partnership. *Health Education & Behavior*, *29*, 326–341.

STRATFORD, D., CHAMBLEE, S., ELLERBROCK, T.V., JOHNSON, J.W., ABBOTT, D., REYN, C.F. & HORSBURGH, C.R. (2003). Integration of a participatory research strategy into a rural health survey. *Journal of General Internal Medicine*, *18*, 586–588.

US DEPARTMENT OF HEALTH AND HUMAN SERVICES (2003). *Creating Partnerships, Improving Health: The role of Community Based Participatory Research*. Agency for Healthcare Research and Quality. Pub. No. 03–0037, June.