

Community-Based Participatory Research: Partnering With Communities for Effective and Sustainable Behavioral Health Interventions

Laura M. Bogart

Children's Hospital Boston and Harvard Medical School

Kimberly Uyeda

Los Angeles Unified School District

The present issue contains one of the first studies published in *Health Psychology*—by Resnicow and colleagues—that uses elements of community-based participatory research (CBPR) (Resnicow et al., 2009). The authors engaged community partners (three health maintenance organizations or HMOs) to develop and implement a fruit and vegetable promotion intervention (Tolsma et al., 2009). African American HMO patients (the intervention targets) participated in formative work (i.e., focus groups) on survey items and intervention content and in survey pilot testing. A diverse group of researcher and nonresearcher expert stakeholders (e.g., African American health plan staff; consultants with expertise in Black identity theory, on which the intervention was based) was engaged in major project decisions regarding the measures and intervention design.

Using Community-Based Participatory Research to Advance Health Psychology

We commend the publication of this article and believe it represents a broader and growing movement toward using CBPR in the study of health. The increasing incorporation of CBPR principles into intervention planning and conduct parallels a trend among researchers to recognize the importance of ecological factors and multilevel intervention approaches that address policy change, environmental factors, and individual-level characteristics (Estabrooks, Fisher, & Hayman, 2009; Sallis, Owen, & Fisher, 2008). CBPR is particularly appropriate for addressing racial/ethnic and other types of health disparities, which have multiple individual and community-level determinants (U.S. Department of Health and Human Services, 1998). CBPR provides a unique mechanism for translating basic conceptual models and research knowledge from health psychology into effective and sustainable interventions. CBPR has been used to develop and test interventions targeting a variety of health conditions and behaviors, including asthma (Levy, Brugge, Peters, Clougherty, & Saddler, 2006), cardiovascular disease (Pazoki, Nabipour, Seyednezami, &

Imami, 2007), cancer (Christopher, Gidley, Letiecq, Smith, & McCormick, 2008), obesity (Kim et al., 2008; Patel et al., in press; Uyeda, Bogart, Hawes-Dawson, & Schuster, in press), sexual risk (Rhodes et al., 2006), and smoking (Andrews, Bentley, Crawford, Pretlow, & Tingen, 2007).

In CBPR, community-initiated interventions are designed with community members and researchers as joint contributors on every phase of the project, from development of the research question to dissemination of the results or intervention product (Israel, Eng, Schulz, & Parker, 2005; Viswanathan & R. T. I. International—University of North Carolina, 2004). CBPR unites researchers' technical knowledge with community partners' experiences and understandings of local attitudes to address problems of concern to both parties (Jones & Wells, 2007; Macaulay et al., 1999; Schulz et al., 2003). Community partners provide researchers with unique insights into the local context, such as information about local policies or norms, or methodological considerations (e.g., about effective recruitment venues and materials). These insights potentially lead to more effective interventions with more sustainable effects or to innovative approaches that otherwise may not have been considered (Lasker & Weiss, 2003). Community involvement builds community capacity (e.g., research knowledge about how to design and evaluate programs), which increases the likelihood of intervention sustainability through existing social structures (Israel et al., 2005; Wallerstein & Duran, 2006; Wright, 2000).

Myths About Community-Based Participatory Research

CBPR has origins in public health, which has a tradition of involving the community in public health decisions (Israel, Schulz, Parker, & Becker, 2001). Health psychologists have only recently recognized CBPR as a potential route to improving health and reducing health disparities. The relatively late uptake of CBPR in the field of health psychology may be due to propagation of misconceptions about the field.

Below we counteract myths about CBPR using examples from Resnicow and colleagues' (2009) study, as well as our own research, to illustrate the benefits of using a CBPR approach. Our team is using a full CBPR approach to develop, pilot test, and conduct a randomized controlled trial of a school-based adolescent obesity prevention intervention, SNaX (Students for Nutrition and eExercise; Patel et al., in press; Uyeda et al., in press). The primary community partner is a large school district (as represented by the second author); the community partnership involves stakeholders of the school district (e.g., students, parents, central and local district staff, public health department staff, staff from community-based organizations focused on child nutrition and physical activity) who contribute via three community advisory boards (one

Laura M. Bogart, Department of Medicine, Division of General Pediatrics, Children's Hospital Boston and Harvard Medical School; Kimberly Uyeda, Department of Health and Human Services, Student Medical Services, Los Angeles Unified School District.

Preparation of this article was supported by Grant R24 MD001648 from the National Center on Minority Health and Health Disparities of the National Institutes of Health.

Correspondence concerning this article should be addressed to Laura M. Bogart, Division of General Pediatrics, Children's Hospital Boston, 300 Longwood Avenue, Boston, MA 02115. E-mail: laura.bogart@childrens.harvard.edu

focused on adolescent health in one area of the school district in which pilot work was conducted, one focused on youth obesity, and one comprising high schools students). As jointly defined by community and academic partners, a major goal of SNaX is to translate school district obesity prevention policy into practice at the individual school level. Community insights about the local school-based context for obesity prevention allowed the research team to gain and maintain awareness of community priorities and policies related to school-based obesity prevention and anticipate future needs for intervention.

Myth 1: Every Study Should Include All Elements of CBPR

Using a full CBPR intervention process can be daunting; researchers may not have the resources for full engagement with community members (e.g., with a community advisory board that makes joint decisions with the research team) and for comprehensive formative research (e.g., qualitative interviews, focus groups, and observations of community settings). However, a full CBPR model may not necessarily fit the needs of the partners or researchers (Israel, Schulz, Parker, & Becker, 1998). Instead of focusing on covering all CBPR elements, researchers should engage in a dialogue with community partners about the type of CBPR approach needed to realize the goals of their particular project, taking into account time and resource constraints.

Whatever level of CBPR is incorporated into a project, awareness of power differentials between academics and community members is critical. Formative research with participant groups targeted by the intervention is extremely useful for gaining insights; however, such research maintains power differentials between community members and researchers, who in part gain power because of their greater financial resources for program implementation and evaluation. In our adolescent obesity prevention research (Patel et al., in press; Uyeda et al., in press), the project leadership team included both academic researchers and community members, which involved community members beyond their traditional role as research subjects. Although we did conduct formative research (i.e., focus groups) with parents and adolescents about their ideas for nutrition and physical activity interventions, we also invited parents, adolescents, representatives and leaders of community groups to participate on our community advisory boards. Thus, we were able to engage key members of participant groups in a way that promoted equality and did not maintain status differentials.

Myth 2: CBPR Leads to Compromised and Weak Research Methodologies

Health psychologists may question the rigor of CBPR methodologies. They may be concerned about conceding any control of the research process to community members who are not schooled in research methodology. Furthermore, because no-treatment control groups that do not receive a desired program may not be acceptable to a community, randomized controlled trials, the gold standard of intervention testing, may in some cases not be possible.

Although working in community settings presents challenges, what may be sacrificed in internal validity (e.g., not all community units of analysis, such as schools, are exactly the same) can be gained in increased external validity and generalizability of results

to real settings, in which programs can show tangible impact on individuals' health. Moreover, CBPR can lead to stronger research by allowing for the testing of interventions that would not be possible without community support, and ultimately resulting in more sustainable and effective programs that are tailored to the community context and consistent with community priorities. A major component of our obesity prevention intervention, SNaX (Patel et al., in press; Uyeda et al., in press), was changes to the school food environment, which required that school cafeteria staff prepare new food offerings, post attractive food signs in the cafeteria, and display point-of-sale nutritional information. Such additions to staff members' everyday duties would not be possible without a full partnership with food services administrators at the school district level. Thus, a major component of the intervention would not have existed without the CBPR process.

On a similar note, some research questions would never be posed without a CBPR framework. For example, SNaX's school food environmental changes stemmed directly from policies advanced by the school board that were not being implemented at the school level because of lack of capacity (e.g., resources, funding, training). Allowing research questions to emanate from communities rather than from researchers leads to novel solutions that come from the local, as opposed to the academic, context. Partnerships with local experts who have experience with the community can lead to new perspectives in developing interventions that would not have otherwise been considered.

Myth 3: CBPR Helps Community Members More Than Researchers

CBPR has been viewed as helping the community but stunting the careers of researchers, who depend on early publishing of strong, relatively short-term projects, rather than waiting for the fruits of long-term partnerships, which may involve several years of formative work prior to intervention design and testing (Israel et al., 1998). Although developing solid research partnerships is indeed a long-term investment, the benefits are vast in terms of facilitating innovative research that not only addresses key community priorities, but also allows researchers to gain important knowledge to design culturally tailored and effective interventions. For example, as described in this issue, Resnicow et al. (2009) were able to study ethnic identity, a potentially sensitive topic, by working with community experts to determine an acceptable intervention approach. For junior faculty to be able to devote research careers to CBPR, however, academic tenure and promotion committees need to create incentives. For example, university committees could take into account community relationship and capacity building, as well as tangible community change, when making tenure and promotion decisions. Although such activities may lead to fewer publications (and potentially less theoretical advancement) than other more traditional (e.g., laboratory) psychological research, the value of such work toward societal change should be recognized appropriately.

Researchers may also fear that CBPR will be misunderstood by grant review committees that are unfamiliar with the approach. To the contrary, integrating at least some aspects of CBPR into health psychology intervention research may become critical for competitive grant applications and journal articles. In 2004, the National Center for Minority Health and Health Disparities of the National

Institutes of Health (NIH) issued its first-ever request for applications for CBPR projects to strengthen community relationships, conduct formative research, design and test a pilot intervention, and conduct a randomized controlled trial. Other NIH Program Announcements have since been issued for CBPR (e.g., <http://grants.nih.gov/grants/guide/pa-files/PAR-07-133.html>). The Centers for Disease Control and Prevention and nongovernmental funding entities (e.g., Robert Wood Johnson Foundation) actively solicit CBPR and in some cases require community partners for health promotion and disease prevention research.

Avoidance of CBPR due to the misconception that CBPR hurts research careers estranges researchers from community members as remote entities with separate and antagonistic goals. Like community stakeholders, researchers are also members of families, neighborhoods, and larger communities affected by health disparities and inequality. Moreover, community members benefit from working with researchers, not only in learning new ways to tackle health issues, but also by gaining valuable transportable research-related skills (e.g., for organization, data collection, writing, and oral presentation). Greater awareness of the shared goals of researchers and community members is needed. Without a CBPR approach, intervention tests would lack ecological validity, which would compromise the research and lead to less beneficial community programs. Researchers and community members each bring their own specialized knowledge to solve public health problems and influence policy and practice change.

Conclusion

As demonstrated by the work reviewed here (Resnicow et al., 2009; Uyeda et al., in press), community-academic partnerships are essential for effective intervention development. Without knowledge of the local context, health psychologists cannot design sustainable and cost-effective interventions that catalyze communities for change. Identification and change of ecological factors, including public policies, may be best supported by research emanating from within communities, backed and promoted by respected community leaders, and conducted in partnership with community members.

References

- Andrews, J. O., Bentley, G., Crawford, S., Pretlow, L., & Tingan, M. S. (2007). Using community-based participatory research to develop a culturally sensitive smoking cessation intervention with public housing neighborhoods. *Ethnicity & Disease, 17*, 331-337.
- Christopher, S., Gidley, A. L., Letiecq, B., Smith, A., & McCormick, A. K. (2008). A cervical cancer community-based participatory research project in a Native American community. *Health Education & Behavior, 35*, 821-834.
- Estabrooks, P. A., Fisher, E. B., & Hayman, L. L. (2009). What is needed to reverse the trends in childhood obesity? A call to action. *Annals of Behavioral Medicine, 36*, 209-216.
- Israel, B. A., Eng, E., Schulz, A. J., & Parker, E. A. (2005). *Methods in community-based participatory research for health*. San Francisco: Jossey-Bass.
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: Assessing partnership approaches to improve public health. *Annual Review of Public Health, 19*, 173-202.
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (2001). Community-based participatory research: Policy recommendations for promoting a partnership approach in health research. *Education for Health, 14*, 182-197.
- Jones, L., & Wells, K. (2007). Strategies for academic and clinician engagement in community-participatory partnered research. *Journal of the American Medical Association, 297*, 407-410.
- Kim, K. H.-C., Linnan, L., Campbell, M. K., Brooks, C., Koenig, H. G., & Wiesen, C. (2008). The WORD (Wholeness, Oneness, Righteousness, Deliverance): A faith-based weight-loss program utilizing a community-based participatory research approach. *Health Education & Behavior, 35*, 634-650.
- Lasker, R. D., & Weiss, E. S. (2003). Broadening participation in community problem solving: A multidisciplinary model to support collaborative practice and research. *Journal of Urban Health, 80*, 14-47; discussion 48-60.
- Levy, J. I., Brugge, D., Peters, J. L., Clougherty, J. E., & Saddler, S. S. (2006). A community-based participatory research study of multifaceted in-home environmental interventions for pediatric asthmatics in public housing. *Social Science & Medicine, 63*, 2191-2203.
- Macaulay, A., Comanda, L., Freeman, W., Gibson, N., McCabe, M., Robbins, C., et al. (1999). Participatory research maximises community and lay involvement. *British Medical Journal, 319*, 774-778.
- Patel, A. I., Bogart, L. M., Uyeda, K. E., Martinez, H., Knizewski, R., Ryan, G. W., et al. (in press). Site visits as a tool for community based participatory research. *American Journal of Preventive Medicine*.
- Pazoki, R., Nabipour, I., Seyednezami, N., & Imami, S. R. (2007). Effects of a community-based healthy heart program on increasing healthy women's physical activity: A randomized controlled trial guided by community-based participatory research (CBPR). *BMC Public Health, 7*(216). doi:10.1186/1471-2458-7-216
- Resnicow, K., Davis, R. E., Zhang, N., Strecher, V., Tolsma, D., Calvi, J., et al. (2009). Tailoring a fruit and vegetable intervention on ethnic identity: Results of a randomized study. *Health Psychology, 28*, 394-403.
- Rhodes, S. D., Hergenrather, K. C., Montano, J., Remnitz, I. M., Arceo, R., Bloom, F. R., et al. (2006). Using community-based participatory research to develop an intervention to reduce HIV and STD infections among Latino men. *AIDS Education and Prevention, 18*, 375-389.
- Sallis, J. F., Owen, N., & Fisher, E. B. (2008). Ecological models of health behavior. In K. Glanz, B. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* (4th ed., pp. 465-486). San Francisco: Jossey-Bass.
- Schulz, A. J., Becker, A. B., Parker, E. A., Allen, A. J., Israel, B. A., & Guzman, J. R. (2003). Critical issues in developing and following community-based participatory research principles. In N. W. Meredith Minkler (Ed.), *Community-based participatory research for health* (pp. 53-76). San Francisco: Jossey-Bass.
- U.S. Department of Health and Human Services. (1998). *Call to action: Eliminating racial and ethnic disparities in health*. Washington, DC: Grantmakers in Health.
- Uyeda, K. E., Bogart, L. M., Hawes-Dawson, J., & Schuster, M. A. (in press). Development and implementation of a school-based obesity prevention intervention: Lessons learned from community-based participatory research. *Progress in Community Health Partnerships: Research, Education, and Action*.
- Viswanathan, M., & R. T. I. International-University of North Carolina. (2004). *Community-based participatory research: Assessing the evidence*. Rockville, MD: Agency for Healthcare Research and Quality.
- Wallerstein, N., & Duran, B. (2006). Using community-based participatory research to address health disparities. *Health Promotion Practice, 7*, 1-12.
- Wright, R. J. (2000). Social capital and policy: Summary statement. In L. R. O'Fallon, F. L. Tyson, & A. Deary (Eds.), *Successful models of community-based participatory research*. Research Triangle Park, NC: NIEHS. Available at http://www.hud.gov/offices/lead/library/hhts/NIEHS_Successful_Models.pdf