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Title

Case Study of an Unsustainable Community–Academic Partnership: Toward Core Standards for the Structure of Emerging Participatory Research.

Permalink

<https://escholarship.org/uc/item/5h65r2rp>

Journal

Ethnicity & Disease, 25(3)

ISSN

1049-510X

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Publication Date

2015

DOI

10.18865/ed.25.3.363

Peer reviewed

CASE STUDY OF AN UNSUSTAINABLE COMMUNITY-ACADEMIC PARTNERSHIP: TOWARD CORE STANDARDS FOR THE STRUCTURE OF EMERGING PARTICIPATORY RESEARCH

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This report retrospectively examines the structure of an emerging community-academic participatory research (PR) partnership that was not sustainable, despite attempts to adhere to PR principles and demonstrable success in research outcomes. The influence of community and academic parent organizations on the PR process and outcomes is presented in the context of the Donabedian Model. We dissected the structural elements contributed by parent organizations to forming the structure of the PR partnership (memorandum of understanding, policy environment, human resources and effort, community and academic resources, expertise and experience, and funding) and explored the influence of potential and actual conflicts on the PR partnership's sustainability. The effect of potential and actual conflict on the PR process and quality of PR outcomes is discussed. Based on this, we conclude by proposing seven core standards for the establishment and development of emerging community-academic PR partnerships. *Ethn Dis.* 2015;(3):363-372.

Key Words: Core Standards, Participatory Research, Organizational Structure, Disambiguation, Conflict Resolution

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INTRODUCTION

Community-Driven Approaches

The *Action Plan to Reduce Racial and Ethnic Disparities*, US Department of Health and Human Services (HHS), calls for a comprehensive, community-driven approach, in keeping with objectives of *Healthy People 2020* and the *2011 National Stakeholder Strategy for Achieving Health Equity*.^{1,2} Community-driven approaches have been used globally for sociopolitical, economic and health reform.³⁻⁵ The underpinning of the community-driven paradigm is partnership.⁶ These partnerships are commonly characterized by collaborations between resource-limited communities and more resource affluent institutions from outside of the community. The overarching objective of the

partnership is to drive community-centered efforts to promote social justice and equity in all its forms.^{7,8}

Participatory Research

Community-based participatory research (CBPR) or participatory research (PR) is a community-driven approach whereby community-based groups are partnered with academic institutions as co-researchers, imbued with equitably shared research resources and empowered with decision-making responsibility to prioritize, plan and implement health promotion projects.⁹⁻¹¹ It is a health-related research activity performed by a community-academic partnership for, or on behalf of, a defined community.^{12,13} Participatory research is the current gold standard for community-centered research targeting elimination of health disparities, and seeks to effect social change by driving community-centered efforts to promote health equity in all its forms.^{14,15} A set of generally accepted core principles are *sine qua non* in designing and implementing PR.

Nine widely published and accepted core PR principles guide community-based partnerships toward: 1) recognizing community

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as a unit of identity; 2) building on strengths and resources within the community; 3) facilitating collaborative, equitable involvement of all partners in all phases of the research; 4) integrating knowledge and action for mutual benefit of all partners; 5) promoting a co-learning and empowering process that attends to social inequalities; 6) involving a cyclical and iterative process; 7) addressing health from both positive and ecological perspectives; 8) disseminating findings and knowledge gained to all partners; and 9) engaging in long-term commitment. Collectively they describe PR as a shared process whereby community and academic partners contribute equally toward promoting mutual learning, benefiting local capacity building, and empowering community-level social change.^{16,17} These core principals are the edicts and ethics by which PR partnerships operate and are compulsory for community-based research to be labeled participatory. They underscore the partnership's shared vision and mission and represent a key element of a partnership's organizational structure and policy environment.

Participatory Research Organizational Structure

The Agency for Healthcare Research and Quality defines PR as "A collaborative research approach that is designed to ensure and establish structures for participation by communities affected by the issue being studied."¹⁸ The University of Washington's Examining Community-Institutional Partnerships for Prevention Research Group advises: "Throughout the process of establishing a CBPR partner-

ship, it is equally important to devote time and resources to developing an effective organizational structure that will provide support to the partnership."¹⁹

All institutions have an organizational structure.²⁰ PR organizational structures may be defined as the relatively unchanging attributes related to a partnership's capacity to implement community-centered research

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for achieving research goals.²¹ Six domains characterize PR organizational structure: 1) the memorandum of understanding (MOU); 2) policy environment; 3) human resources and dedicated effort; 4) community and academic research capacity; 5) expertise and experience; and 6) funding sources.

The first two domains are directional in character. The MOU is often used as a signed, non-binding agreement between community and academic PR partners to define the

partnership mission and shared vision as well as to codify concurrence in, for example, adopting core PR principles.^{22,23} The policy environment influences resource allocation and how other organizational domains function to meet the PR partnership's research goals.^{24,25} The last four domains are resource related and describe, for example, contributions and disbursement of resources by partners and partnership capacity and needs.

The body of literature addressing PR organizational structure is sparse and guidance for emerging PR partnerships in developing organizational structure is virtually non-existent. The application of PR core principles, challenges to PR implementation, ethics in PR, and conflict resolution are the current sources of guidance.²⁶⁻³² We sought to identify a set of core standards for PR organizational structure by retrospectively exploring the case of an emerging community-academic partnership that, despite accruing federal funding and meeting several research benchmarks, was not sustainable. This case offers an interesting and revealing set of circumstances since, in the spirit of core PR principles, the community partner was awarded more than half of the grant funding; served as co-principal investigator; and had a full-time research project coordinator budgeted to their staff.

CASE HISTORY

A community-based, Hispanic-operated, social services agency and a college of pharmacy in a Hispanic-serving institution collaborated to apply for and received funding to conduct a randomized controlled

trial (RCT) to test the efficacy of a multimethod education/training intervention designed to improve type 2 diabetes clinical outcomes. This RCT was conducted between 2008 and 2010. The community partner identified type 2 diabetes (T2D) as a high priority health concern for the diverse Spanish-speaking immigrant Latino population of Broward County (Florida). With the exception of one junior faculty, all partnership staff and faculty were native Spanish-speakers from Chile, Colombia, Cuba, Puerto Rico or Venezuela.

The community partner was a non-profit, organization with 25 years of service. Its organizational structure comprised senior officers, a board of directors, managers, and a staff of about 50. Its policy environment was oriented to social services programs. Government and philanthropic funding required demonstration of successful program implementation defined by the number of clients successfully served. The academic partner was a college of pharmacy within a private university with hierarchical academic structure: deans, department chairs, senior and junior faculty. Its policy environment was oriented to education. Tuition and research funding from pharmaceutical companies required demonstration of successful enrollment and graduation of students and drug discovery, respectively.

The community partner provided effort from a project manager with community-based research experience to serve as the community co-principal investigator; dedicated space for project implementation; and agreed to recruit participants from among clients seeking social services. The ac-

ademic partner was the grant application institution of record and agreed to provide effort from a senior faculty with PR experience to serve as project principal investigator, and four junior faculty to serve as co-investigators. The academic partner also provided: space for meetings and implementation of the participatory research education/training program (PREP); access to library resources; and clinical supplies. Community staff and faculty agreed to adopt PR principles and to budget 55% of funding to the community partner from which they would hire an MPH-level project coordinator. Table 1, column 1 provides an outline of community and academic partner contributions to the partnership's structure and agreed-upon roles in the PR process.

METHODS

Most challenges to timely implementation of PR and sustaining partnerships point to conflict-related issues. We explored instances of potential conflict and actual conflict related to the six domains of PR organizational structure. Potential conflicts arise by any action or decisions that may negatively impact the PR process and/or cause disagreement or discord. Potential conflicts may be disambiguated by mediation within the partnership before they become actual conflicts requiring third party mediation. Neutral and factual observation was used as the approach to data gathering.

Conceptual Framework

The Donabedian Model for assessing quality of health care provides the

conceptual framework for retrospectively exploring the PR partnership by three levels of assessment: structure, process and outcome. In the model's original application, structure referred to the context of health care delivery: physical plant, policy environment, human, technical and financial resources. Process is the interaction between providers and consumers of health care and outcomes result from the effect of health care structure and process on consumer health status. This model is flexible and a logical framework to use for this study since we explore the PR processes to explain PR outcomes in the context of PR organizational structure and the quality of those outcomes.

Data Sources and Analysis

Direct observations, open-ended interviews (community senior administrator and managers, academic administrators) and archival records (monthly project coordinator reports, quarterly funder reports, grant continuation report, grant final report) served as data sources. We explored and characterized: 1) number and type of conflicts; 2) results of disambiguation and conflict resolution; and 3) quality of research outcomes, as measured by timeliness of project implementation, participant recruitment, project outcomes, research team satisfaction, and PR partnership sustainability.

RESULTS

Conflicts

Five potential and four actual conflicts occurred during the two-year project period. Table 1 Column 2 lists them by order in which

Table 1. Organizational structure, potential conflicts, actual conflicts, disambiguation and outcomes

Partnership structure	Conflicts	Resolution process	Research outcomes
Policy Environment - Undefined without MOU	1. Memorandum of understanding (PC) - AP cites MOU as legalistic - Cites duplicity with sub-contract	Unsuccessful - Partnership proceeded without MOU	- No MOU or written mission or shared vision
HR/Dedicated Effort - CP Administrative staff - CP Project coordinator - CP Community co-PI - AP Research faculty - AP Clinical faculty - AP Principal investigator	2. Sr. admin non-participation (PC) - Participation in participatory education program (PREP) refused	Unsuccessful - Training perceived as unnecessary	- CEO and dean buy-in poor - CEO and dean unsupportive
	3. CP refuses OHRP registration (AC) - Concern with community view - Concern with HR requirement - Refuses to sign sub-contract	Successful - AP extends FWA to CP - OHRP registration not needed - CP staff IRB training by AP	- Major delay to implementation - Grant funding jeopardized - No-cost extension required
Community Resources - Administration - Community-based space - Recruitment	Year 2	Year 2	Year 2
	4. CP staff protected time (AC) - Social services supersedes research	Unsuccessful - Staff research time diverted by CEO	- Sub-optimal recruitment - Delays to project implementation
Research Resources - Grant Administration - Meeting/conference space - Clinical supplies - Data Storage & Analysis	5. AP faculty protected time (PC) - Faculty time diverted by dean - Pharmacy supersedes research	Successful - New faculty and student recruitment	- New faculty & student training - Delays to project implementation - Delays to recruitment
	6. Research team exclusion (PC) - Faculty time diverted by dean - Pharmacy supersedes research	Unsuccessful - CEO & dean dissatisfaction - Research team dissatisfaction	- Diminished logistics between senior leadership & research team
Expertise/Experience - CP with no PR experience - AP faculty PR experience	7. Loss of screening equipment (PC) - Dean cites equipment needs in pharmacy	Successful - Pharmaceutical co. equipment loan	- Cancellation of screenings - Delays to project implementation
Funding Sources - Grant funding - AP In-kind contributions to faculty effort	8. CP request for additional funds (AC) - Cites increased operating costs	Unsuccessful - CP not in agreement with no-cost extension	- Cancellation of screenings - Delays to project implementation
	9. CP withdrawal from project (AC) - Prior to end of project implementation	Unsuccessful - CP cites cost in time & human resources	- Project moved to on-campus pharmacy

PC, potential conflicts; AC, actual conflicts; CP, community partner; AP, academic partner; MOU, memorandum of understanding; CEO, chief executive officer; OHRP, Office of Human Research Protection; FWA, Federal wide assurance.

they occurred. Three occurred during funding year one (FY1) and six during FY2. All conflicts emanated from unilateral decisions made by the community CEO or academic dean. All actual conflicts arose from community CEO decisions: refusal to register with the Office of Human

Research Protection (OHRP); withdrawal of project manager protected time; requests for additional funding; and renegeing on community-based space for project implementation (Table 1, Column 2: 3,4,8,9).

Three of the five potential conflicts are attributed to academic

dean decisions: not entering into a MOU with the community partner: withdrawal of faculty protected time; and renegeing of clinical screening equipment (Table 2, Column 2:1,5,7). The fourth and fifth potential conflicts are attributable to independent, though joint, com-

Table 2. Core standards for participatory research partnership and contribution to organizational structure

Core standard	Contribution to organizational structure
1. Memorandum of understanding	Defines policy environment: The Magna Carta Senior administrator signatory commitment Codifies all other core standards
2. Mission & shared vision statement	Classifies policy environment Codifies partnership goals and expectations
3. Core participatory research principles	Characterizes policy environment Experience and expertise development Research resources development
4. Participatory research training	Solidifies policy environment Experience and expertise development Research resources development Funding by promoting research capacity
5. Protected research time	Secures the policy environment Human resources and dedicated effort Experience and expertise development
6. Office of sponsored contracts early contact	Influences policy environment Experience and expertise development Funding by research resources development
7. Preliminary project implementation	Test bed for policy environment Human resources and dedicated effort Experience and expertise development Funding by preliminary data for grant proposals

munity CEO and academic dean decisions: refusal to participate in PREP education/training sessions prior to grant funding and during FY1; and exclusion of senior members of the PR research team in their first face-to-face meeting to discuss project implementation delays in FY2, (Table 2, Column 2:2,6). There were no potential or actual conflicts identified within the PR team itself.

Conflict Resolution and Disambiguation

Of the four actual conflicts, the community partner's refusal to sign a sub-contract because the funder's Terms and Conditions required registration with OHRP was the only one successfully resolved. The

community partner cited concerns about dedicating human resources to monitoring human subject protection, and the potential for their clients to perceive the organization as research-oriented. Liaising between the Office of the University Vice President for Research and Technology Transfer and the community partner CEO by the principal investigator and community co-principal investigator led to an agreement by which the academic partner extended its OHRP Federal Wide Assurance to the community partner. This placed the onus on the academic partner to monitor and report on human subject protection and allowed the community partner research collaboration

without OHRP registration. In addition, the community partner's staff was required to participate in the academic partner's Institutional Review Board human subject protection training program.

Of the five potential conflicts, the academic dean's withdrawal of faculty protected time and renegeing on clinical equipment were successfully disambiguated by junior faculty and student recruitment and pharmaceutical company equipment loan. The academic dean required a proviso that participation in research would not deter faculty teaching responsibilities. Three potential conflicts were not successfully disambiguated: academic dean's refusal to sign a MOU citing du-

plicity with the sub-contract; community CEO and academic dean refusal to participate in PREP education/training citing no need since they were not on the research team; and exclusion of senior PR team members from the first ever face-to-face meeting between the community CEO and academic dean in FY2.

Quality of PR Partnership and Research Outcomes

Timeliness

Project implementation was often delayed. In each instance, delays were rooted in decisions made independently by community and academic partner senior administrators. All actual conflicts caused serious project delays. The CEO's refusal to register with OHRP, the only project delay in FY1, caused a four-month delay in the project start date and need for a three-month no-cost extension to the project at the end of FY2. Of three potential conflicts occurring in FY2, all caused project delays despite two being successfully disambiguated.

Recruitment

Despite successful outreach by active and passive recruitment, over recruiting, and mail and telephone reminders, there was a high rate of no-show for baseline clinical screenings, which was a barrier to recruitment of participants with T2D into the intervention arm of the study. Family, work, transportation and time constraints were the most commonly cited reasons. However, retention was excellent for participants who reported for the baseline screenings.

Research Outcomes

The PR partnership entered into a research enterprise without the MOU. Senior leadership did not participate in the training (PREP) citing time constraints and non-participation in the research project. Community CEO commandeering of research staff effort and renegeing on community space use, and academic Dean commandeering of research faculty efforts and renegeing on clinical equipment use adversely affected recruitment, causing cancellation of clinical screenings and delays to project implementation. Out of three hundred proposed participants, 84 (28%) were recruited and screened at baseline. Despite representing sub-optimal recruitment, this allowed the intervention to be piloted wherein the efficacy of the intervention at improving clinical outcomes was demonstrated (glycosylated hemoglobin, body mass index) and results reported in a peer-reviewed journal.³³

Satisfaction

The PR team (community staff and academic faculty and students) reported being very satisfied with PREP, the observational and clinical aspects of project implementation, and perceived working relationship. Intervention and control study participants reported being very satisfied with clinical screening, particularly use of capillary vs venous blood, and with explanations of results during debriefing sessions at the end of baseline screening. Intervention group participants reported being satisfied with the hands-on aspects of education/training, and the two one-on-one

follow-up sessions with a pharmacist. Throughout the project, the PR team leaders were often dissatisfied with unilateral community and academic senior administrative decisions. The community partner CEO was dissatisfied with participant recruitment, cancellation of clinical screening, and project implementation progress. Furthermore, the academic partner dean was dissatisfied with the community CEO's dissatisfaction.

Sustainability

The community partner's request for additional funds for use of community-based space could not be met during the no-cost extension. The community partner withdrew its participation from the PR partnership, citing facilities and human resource costs, lack of additional funding during the no-cost extension, and dissatisfaction with project progress as reasons. Because the community-based space was unavailable during the no-cost extension phase, the project was moved to the academic partner's college campus pharmacy, effectively ending the participatory nature of the project.

DISCUSSION

This case study describes an emerging PR partnership with excellent potential to conduct research that was not sustainable due to challenges to each of six PR organizational structure domains: MOU, policy environment, human resources and dedicated effort, experience and expertise, community and academic research resources, and funding. These challenges reflect uni-

The earliest and arguably the most important challenge to the partnership was lack of a MOU, which would have served as the foundation for the PR partnership organizational structure.

lateral decision-making by community and academic senior administrators. In effect, a lack of transparency in decision-making at the senior level resulted in conflict during the PR development and implementation process, delayed project implementation, dissatisfaction and sub-optimal research outcomes. Consequently, despite research-related successes, the research partnership of competent community staff, academic faculty and students was dissolved. The earliest and arguably the most important challenge to the partnership was lack of a MOU, which would have served as the foundation for the PR partnership organizational structure.

The MOU is the Magna Carta of a PR partnership that codifies commitment, mission and shared vision, codes of conduct, roles, resource allocation and expectations. In the case of this PR partnership, lack of a MOU may have contributed to unilateral decision making by community and academic senior administrators, who were in effect,

not officially accountable to the PR partnership as an organizational entity. Though legally non-binding, the MOU is a signatory agreement that is an important incentive to honor partnership agreements.³⁴

Importantly, without the MOU, this PR partnership lacked a defined policy environment by which it may operate. A PR partnership may be viewed as an independent entity whereby organizational structure is its anatomy and policy environment its physiology. In addition to the MOU, several other core issues related to organizational structure that negatively impacted policy environment and research outcomes were identified from exploration of potential and actual conflicts. These included lack of: 1) senior administrator agreement to participate in PREP education/training; 2) community staff and research faculty protected time; 3) office of grants and contracts experience with PR and community sub-contracts; and 4) PR experience before soliciting grant funding.

These deficiencies fatally affected an emerging PR partnership with high potential. Therefore, it is logical to translate them into core standards for the organizational structure of emerging PR partnerships and that are codified in the MOU. In addition to the MOU, the first core standard, six additional core standards for emerging PR partnerships are proposed.

Mission and Shared Vision Statement

Without the MOU, the partnership's mission and shared vision were not established as made evident by the academic dean's and commu-

nity CEO's unilateral decisions that caused project delays (Table 1). Developing a mission and shared vision statement is an important undertaking requiring input from community and academic stakeholders and staff and faculty at all levels to ensure a united objective and focused purpose.^{35,36} Mission and shared vision statements contribute to organizational structure by classifying the policy environment and codifying the partnership's goals and expectations.

Core Participatory Research Principles

Without adoption of core PR principles, research is not participatory. An agreement to use a PR paradigm must be codified in a MOU to ensure power and resource sharing, particularly when partnering institutions are new to the concept. In the case presented here, core PR principles were not formally agreed upon and consequently were not adhered to by senior administrators. Core PR principles contribute to organizational structure by characterizing policy environment, promoting experience and expertise, and developing research resources.

The relevance and contribution of each core standard to organizational structure is listed in Table 2. It is important to note that each core standard for PR organizational structure contributes to the PR policy environment.

Participatory Research Education

This case emphasizes the critical need for senior administrator participation in PR education/training program sessions and partnership meetings to understand its underpinnings

and requirements. The purpose of PREP was to promote mutual knowledge and understanding within the partnership about PR, Latino health and T2D. In this PR effort, PREP was an important undertaking that contributed significantly to research team satisfaction and project positive project implementation outcomes. PR education contributes to organizational structure by solidifying the policy environment, promoting experience and expertise, human research resources development, and funding by promoting research capacity.

Protected Research Time

In this study, the commandeering of the time and effort of the community co-PI and clinical faculty in FY2 significantly delayed participant recruitment, project implementation and quality of PR outcomes. Timely implementation, completion, quality and productivity of research is directly linked to protected research time.³⁷ Protected research time contributes to organizational structure by securing the policy environment by protecting human resources and dedicated effort and by promoting experience and expertise development.

Office of Grants and Contracts

This community partner was uninformed about human subject protection, despite having participated in previous research. In addition, the community CEO, academic dean and office of grants and contracts were lacking in experience with PR. The important lesson learned was the need to communicate with appropriate offices of grants and contracts and their associated IRB to discuss PR

research and the institution's specific requirements to support it. Familiarity with the office of grants and contracts contributes to organizational structure by its influence on policy environment, promoting experience and expertise, promoting research capacity, and promoting funding by research resources development.

Preliminary PR Project

PR and community-based research experiences of the PI and community co-PI, respectively, were the only community-driven expertise lent to project implementation. Given the potential challenges faced by emerging PR partnerships, conducting a preliminary small project, funded or unfunded, may help to refine their organizational structure and test its associated policy environment, provided the partnership agrees to entering into a MOU. A small PR project may generate preliminary data and enhance competitiveness for grant funding. Pilot projects contribute to organizational structure by being a test-bed for policy its environment, contributes to human resources and dedicated effort, and promotes funding opportunities by accrual of preliminary data.

CONCLUSIONS

This case history revealed the formative influence of PR organizational structure deficiency on restrictiveness of policy environment, and its negative effect on the PR process and quality of PR outcomes. Importantly, although some potential conflicts were disambiguated and actual

conflicts resolved, the time and effort required to bring about mutual agreement affected the timeliness of the PR process and quality of outcomes. In this case, without a MOU, there was no written mission and shared vision statement to guide PR policy environment development and sustenance. The MOU is compulsory as the foundation of PR organizational structure; it is the first core standard, without which other core standards cannot be codified and are not referable.

Community and academic partners can be considered parent organizations and PR partnerships as their progeny. Supportive and flexible parent organizations that say 'I do', by way of a MOU, are more apt to conceive healthy PR partnerships, ensure it adequate resources to promote growth in research capacity, and give it unwavering support to ensure optimal outcomes in research and realizing community-driven health status change. Like any progeny, the PR partnership derives its genomic make-up from its parent organizational structure. However, what is often not realized is that, like any offspring, the PR partnership is a unique entity of its own with its own personality. It is derived from the interaction of the research team and community and develops with guidance from parent organizations.

Agreement on a MOU that codifies the additional six proposed core standards for the organizational structure of emerging PR partnerships may contribute to ensuring a policy environment whereby the partnership may thrive; and that may be at less risk for dismantling by parent organizations. This not-

withstanding, it is important to note that though organizational structures are relatively static, policy environments may change as occurs, for example, with changing power dynamics and leadership support. Future studies may investigate the impact of adopting these proposed seven core standards on emerging PR organizational structure, policy environment, research process, quality of research outcomes and, importantly, sustainability.

ACKNOWLEDGMENTS

Jose L. Calderón was supported by a grant from the Centers for Medicare and Medicaid Services (1H0CMS030309/01). Ron D. Hays was supported by grants from the National Institute on Aging (P30AG021684) and the National Institute of Minority Health and Health Disparities (2P20MD000182).

Keith C. Norris is supported in part by National Institutes of Health grants UL1TR000124, P30AG021684, and P20MD000182.

Patrick Hardigan was supported by a grant from the Centers for Medicare and Medicaid Services (1H0CMS030309/01).

Lorrin A. Calderón was supported by the Graduate Assistant Program, University of Akron Graduate School, Department of Curriculum and Instruction.

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