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Using Key Informant Interviews to Estimate Perceived Impact of Community-Engaged Health Research Partnerships Comprising Hispanic Groups and Academic Allies in Indiana

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Abstract

Objectives: To estimate the perceived beneficial impact of two NIH-funded, community-engaged oral health research partnerships taking place in Indiana 2016 thru 2021. These projects had a strong community-engaged research (CER) component but were not designed to be full-fledged community-based participatory research (CBPR) initiatives.

Methods: We used semi-structured key informant interview questions to elicit perceptions from community partners and academic allies. Statements were categorized using content analysis of the narratives from the interviews, using a classification that emerged thematically from the narratives. Results were summarized using frequencies and proportions.

Lessons Learned: Many respondents stated that CER projects connect community with dental care educational information and low-cost resources. In terms of building community capacity to address oral health issues, about half of respondents felt CER projects had positive impact. The approach followed did not constitute a formal evaluation of the CER outcomes in the two initiatives but rather accrued positive perspectives about them by both community partners and academic allies.

Conclusions: CER is seen as an approach that helps community increase their access to dental care, level of oral health knowledge, and support health education. The CER partnerships uniting Hispanic groups and academic allies are a foundation of trust to support current and future efforts in Indiana.

Keywords

Community-engaged research (CER), Latino/a, Hispanic, public health, dental care education

Introduction

Community-based research is a collaborative approach to conducting scholarly investigations; it shares power with and engages community partners in the process, while benefiting the communities involved. This positive interaction may happen either through direct changes in the life of the community, and/or by translating research findings into subsequent interventions and policy change (Israel et al., 1998). Various theoretical and conceptual models provide frameworks for understanding and assessing how community-engaged research (CER) partnerships operate, their impacts and their outcomes. Models such as “The Conceptual Logic Model of Community-Based Participatory Research” (Wallerstein et al., 2010) and other theoretical models (Lasker and Weiss, 2003; Schulz et al., 2003; Sofaer, 1999) outline how the structural characteristics of the partnership (for example, attaining membership) influence the group dynamics of the partnership (for example, communication, or conflict resolution). The partnership’s programs and interventions determine the intermediate measures or characteristics of partnership effectiveness (such as the degree of member involvement), which in turn influence the extent to which a partnership achieves its ultimate outcomes or outputs (for instance, improved community health outcomes).

Evaluating CER interactions is an important component of community-academic partnerships (Israel et al., 2012), including ascertaining the effectiveness and sustainability of CER partnerships, allowing for approaches that respect the modalities of interactions between partners, and that strive for balanced power relationships. While a formal evaluation of CER outcomes and processes is desirable, in the present report we resorted to a more fundamental platform: assembling perspectives by community members/advocates and academic allies about the impact of two CER projects. We propose this step as a strong foundation for more formal assessments in future projects of our ongoing partnerships. One tool indicated for characterizing such perceptions are key informant interviews – in the recent literature, they have been used to obtain perspectives and impressions about medical research, as based on personal experiences or stories (Rodriguez et al., 2013); about priorities for cancer education and outreach, and suggestions for sustaining academic/clinical allies efforts (Simmons et al, 2015); enabling community partners to reflect on the successes and challenges of the partnership through addressing themes related to the process, quality, challenges and value of the partnership, including navigating and defining equitable roles, relationships, and expectations of the partnership (Stacey et al., 2014); measure the extent and impact of environmental change in various community-level obesity-prevention initiatives that included coalition functioning (Cheadle et al., 2010); and joint (allies and community) appraisal of the success at meeting partnership objectives, setting and describing major accomplishments, barriers, challenges and recommendations as well as tangible for partner organizations (Israel et al., 2012).

The present research used key informant interviews to estimate impact of two CER partnerships developed between Hispanic community groups and one group of academic allies in Indiana. The approach followed did not constitute a formal evaluation of the CER outcomes but rather an examination of the perspectives about them by both community partners and academic allies. We envision impact as a collective measure of relationships between organizations and their progress toward shared objectives.

Methods

Data collection was covered by the Indiana University IRB (#1703740862, #1709401236); study participants in the initiatives did receive monetary compensation in gift cards for their time. Key informant interview participants in the present study did not receive financial compensation for their collaboration.

Choice of Assessment Strategies

Our approach was simpler than a full-fledged evaluation of CER projects (Nash, 2016). We aimed to incorporate a wider perspective of CER between long-standing community partners and academic allies that encompassed two projects carried out between 2016 and 2021 (with one still ongoing). The CER projects have focused on oral health, oral health knowledge, perspectives on dental care and access to dental treatment; general health and mental well-being; food/drinks/snacks choices; the architecture and evolution of social networks in well-established and in recent Hispanic immigrants to Indiana; various aspects of acculturation and integration, such as use of language, adherence to new and old social and cultural traditions, and psychosocial interpretation of the world; and socio-economic-demographic variables. To estimate the perceptions of impact of such CER collaborations we resorted to qualitative methods.

Description of Context

According to the U.S. Census, in 2017 Hispanics made up 6.8% of the Indiana population (U.S. Census, 2018). The Hispanics population is currently estimated at 7.3% or approximately 473,336 residents (U.S. Census Quick Facts, 2019). Our recruitment efforts have taken place in several counties; with slightly higher immigration than other counties (U.S. Census, 2018), Marion County served as the hub for CER collaborations. Indiana ranks as the 21st most populated state by Hispanic residents (Stats Indiana, 2018). The Midwest USA contrasts with other regions that have a long-standing high, Hispanic population density; it is one of the fastest expanding gateway locations for Hispanic immigration (Capps et al., 2010; McConnell, 2004). Most large-scale studies on Hispanic health have been conducted in Southwest and West USA, with long-standing high Hispanic population density (Beck et al., 2014; Sanders et al. 2014; U.S. Department of Health and Human Services, 2013).

When selecting community partners, we were intentional in engaging direct service providers who have an intimate knowledge of the Hispanic community. One of the primary community stakeholders we engaged in Central Indiana, La Plaza, Inc., is a longstanding and trusted community center that provides direct services in the areas of access to health, social services, and education to Latinos. We partnered with this community center to design the projects, and they accrued their extensive network to engage community members in both research projects; for example, through participating in several focus groups at the community center's headquarters, helping to clarify research questions, and making recommendations to research staff. Staff members from La Plaza, Inc. helped disseminate an informational dental manual to community members.

Description of Partnerships

The two CER collaborations had six general features. Namely,

1. The academic allies maintained a fluid exchange and collaborations on non-CER related aspects, e.g., sharing information about funding resources that might be attractive to community groups. The flow of information also included pieces relayed in the opposite, complementary direction, i.e., from community groups to academic allies.
2. Community groups encompassed multiple entities. Specifically, Hispanic businesses, employers with large Hispanic populations, parishes and temples with substantial Hispanic congregations, parochial schools affiliated with such parishes; community advocacy groups; informal and formal networks targeting recent immigrant families, with community workers and volunteers being charged with supporting assimilation of children to American education systems (academic level, remedial efforts, and language acquisition).
3. Community members participated in either CER projects over the years.
4. Community members were always compensated for their time (with gift cards), with child minding and refreshments often being available.
5. Formative research always preceded the creation of final CER protocols and instruments, with substantive input from community members and academic allies making up advisory boards.
6. Community members had substantive input in the creation of scholarly products, and chose to be part of their authors' line up or not.

Explicit efforts were always present to engage community groups on an equal footing for research design with academic allies.

Study Design and Population

The key informant interview questions were developed based on a literature review and discussions with the team of community groups and academic allies. An interview script was created, and translated to Spanish (Appendix). The Spanish version allowed for terminology familiar to all four nationalities of origin included in the projects: Hispanic communities from Mexico, El Salvador, Guatemala, and Honduras, which make up ~80% of Hispanics in Indiana. The script encompassed three domains: perceived value of research for the community, capacity building strategies to further engage community (capacity building meaning enhancing individuals and organizations abilities to perform at a more positive level), and preferred research format for working with Hispanics.

Data collection and variables

To collect data, two university students were trained to complete key informant interviews. The interviews were conducted over the phone in either English or Spanish. Eligibility criteria for interviewees were to a) be a leader in the Hispanic community or an academic ally, b) be of Hispanic ancestry, and/or c) having participated in either of the CER projects. Twelve key informants were targeted for recruitment through an email invitation, identified from a list of community partners and academic allies. The phone interviews took place over a two-week period following the email invitation. If no response was received, a

follow-up call was made to make sure questions or concerns were addressed. The original number of planned interviews was 12, and 10 were conducted. Interviews lasted 25 to 30 minutes and were audio recorded; responses were transcribed.

Interviews

Key informant interview consent was obtained at the beginning of the interview. No personal identifiers were collected. Key informants were informed that the interview would be recorded to ensure the collection of accurate information. While most interviews were conducted in English a few key informants preferred conduct their interviews in Spanish. Starting with a prepared script (Appendix), participants were encouraged to expand on their responses and provide details when appropriate. They were allowed time to think about the questions and responses. Each key informant was interviewed individually.

A number of the questions were met with a “*Do not know*” answer”, or “*I have no information specific to this question*”. Rather than considering these categories as equivocal, those categories pertained to perceptions deemed unfeasible. For example, one study still being ongoing, and thus an unequivocal answer was uncertain. The remainder of opinions did in fact signify first-hand experience, or carefully weighed responses to the standardized questions. Respondents were encouraged to speak about their experiences and recollections of the projects, and they were told to omit answers for any reason they felt appropriate (e.g., respondents were not involved in that aspect of the project, or did not know about it).

Data Analysis

Transcribed interviews were thematically analyzed by the interviewers, with supervision and cross-checking by the senior author. Narrative data were analyzed and coded by three investigators using the primary phases of grounded theory (Strauss and Corbin, 1990; 1994). Analyses were carried out in either English or Spanish, as originally obtained from the informant. During the open coding, responses were grouped into similar clusters, giving an initial set of categories. Coding was undertaken by allocating discrete segments of text to an individual category when the theme was explicitly stated, or when the context and the meaning of text made it sufficiently unequivocal to allow certainty in the classification. Categories were refined until better grounded themes emerged (axial coding), while crosschecking fit within other categories. Finally, through selective coding, all the items, categories and themes were re-assessed, seeking consistency and coherence among the resulting structure. Based on such structure derived from the narratives, we undertook simple statistical assessments: frequencies and proportions of categories were calculated from the aggregated collection of categories across all respondents. Note that “*Do not know*” answer”, or “*I have no information specific to this question*” account for seemingly missing percentages or frequencies in Results.

Results

A total of ten participants took part in the impact assessment study (seven were female). Five had directly worked as partners with the CER team, and all reported that they enjoyed working with the team.

Most positive aspects of project. Forty percent of respondents stated that the CER studies served to connect community with educational information about dental resources. Another 40% of respondents stated that the CER projects increased knowledge about dental care and the Hispanic public's knowledge of dental care.

Project Success. The CER projects had a positive impact among the Hispanic community in Indiana, according to 40% of key informants.

Feedback from community members. Forty percent of respondents indicated they received positive feedback from community regarding CER experiences. In fact, two respondents shared stories of clinicians making use of educational material in an oral health navigation manual created through one project.

Contribution to building capacity. When asked if the CER studies contributed to building capacity in the Hispanic community, 60% of respondents confirmed they did. Specifically, two key informants indicated that community members shared that the CER experiences helped to educate and connect community to free or low-cost dental care services.

Local assets and resources. Key informants pointed to the potential to collaborate with other projects or groups who have similar goals of advancing health education among the Hispanic community. Others indicated that concrete dental care resources were most helpful.

Activities you believe have increased a community's knowledge of health topics. Informants shared that the oral health manual was helpful to increasing community's knowledge of health topics. Additionally, community partners recognized that the CER team has done strong work in outreach, promotion of findings from the studies, and recruitment of individual CER study participants.

Improved process of building capacity. Key informants had various suggestions for how the research team could continue to build capacity in the Hispanic community. In fact, 40% stated that the CER team could continue working closely with community partners, and 50% stated that the best way to conduct CER data collection was face-to-face. It was reassuring to find that 60% of participants thought that community interests have been represented throughout the CER projects.

Community partners would like to receive more information about the status of current CER projects: it is clear that community members see value in the approach and initiatives, thus supporting this involvement. Suggested ways to further involved community include providing updates and information about the events the CER team will attend: 40% of informants shared they would like to receive updates about the progress of CER projects.

Education and knowledge. Increasing access to dental health education was identified as vital by many key informants. Forty percent of respondents shared that through the CER projects listed, the community was able to receive educational information about dental care. Specifically, the navigation manual was utilized by community: clinicians provided examples of how patients used this resource to advocate for themselves during dental visits. The value of having resources that speak to targeted Hispanic communities has proven effective, rather than attempting to provide 'one-size-fits-all' resources meant to address concerns across all Hispanic communities. In the case of the navigation manual, this resource focused on newcomers from Central American countries (Guatemala, El Salvador, and Honduras), utilizing language and cultural nuances specific to these population groups.

Another common theme gathered from the key informant interviews is that in order to continue making a difference for patients in dental care, Hispanic communities need to learn about dental care options. By collaborating with partners throughout the state, the CER team has compiled a list of low-cost or free dental care resources. This list is periodically updated, openly disseminated, and provided also to community members as requested. Key informants verified that this resource has been invaluable to increase the agency of individuals to have greater knowledge and advocacy tools to negotiate their way around dental care challenges.

Discussion

We learned that community groups and academic allies are aligned in their perceptions of the process of CER knowledge and resource creation for dental health education and clinical resources. In this case, the CER partnerships have led to more Hispanics living in Indiana gaining greater understanding about access and awareness of dental care. Through shared CER involvement, community groups may take part in the decision-making and shaping of research agendas, and academic allies may gain greater clarity to guide future directions and engagement opportunities with community. CER partnerships therefore may facilitate further engagement opportunities as directed by community leaders. Additionally, engagement should be sustainable through simple and accessible communication with community stakeholders, facilitated through paper and e-newsletters, open forums, or roundtables, as suggested by community partners.

However important our estimates may be, some methodological considerations apply to the straightforward design we created. While key informant interviews provide rich information and contribute to an enhanced understanding of perceptions about community-academic partnerships, they are labor and time intensive (Patton, 2002; Israel et al., 2012). Considering such potential burden, we chose semi-structured interviews; this approach may have left out perspectives that could have arisen with more comprehensive qualitative designs. These could have added challenges, including time constraints for partners' schedules, and whether data collection should have been led by an external team without a vested interest in the partnership (Israel et al., 2012). Perhaps of greater importance is the need to recognize that the questions asked in partnership and impact estimation need to develop over time as a CER partnership evolves. Tolma et al. (2009) described how community-academic partnerships go through different phases or stages and the perceptions also change over time. These projects had a strong CER component but were not designed to be full-fledged CBPR initiatives. We reiterate that the approach followed did not constitute a formal evaluation of the CER outcomes in the two initiatives but rather an examination of the perspectives about them by both community partners and academic allies.

Despite the constraints in our approach, it appears that shared power and capacity building can be estimated through assessment efforts such as the present analysis of perceptions of impact. CER lessons may be used to support the implementation of actionable processes where new knowledge can be generated by both academic allies and community members, leading to aligned and improved partner practices that support better health access and equity. Future research should encompass the design of objective evaluation strategies to strengthen partnerships, and to further support a framework for integrating findings into ongoing research projects.

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Appendix

Key Informant Interview Guide

Informant Code:

Interviewer Name:

Date:

Location of Interview:

Interview Start Time:

Interview End Time:

Introduction

Hello. Thank you for agreeing to participate in this interview to help us understand your partnership with a community-engaged research (CER) project. You are being asked to participate because you are a valued member of the community or an academic ally in current or past CER projects. The purpose of this interview is to facilitate a reflection of the CER project and your partnership. We are asking these questions to learn about your experiences, so that we can better understand how the projects perform, and how it can be improved to better meet its mission.

Everything you say will be strictly confidential and anonymous. We value your insight and expertise, so we'd like you to share, in your own words, the successes, any challenges, as well as any outcomes that you feel may have come from this CER project and your role. There is no right or wrong answer to any of the questions that I will be asking today. The interviews will be audio-recorded and transcribed by a member of our research team.

Let's begin.

Demographics

1. Please describe your role in the community or the academic organization.

Perceptions of the CER projects.

1. Could you briefly describe your knowledge of or role in the CER projects you have collaborated with?
2. What were the most positive aspects of your involvement with the CER project?
3. In your opinion, how successful was the CER project in the community? Did it add to the Hispanic community's knowledge of health issues?
4. In what ways is the CER project benefiting the community, or has benefitted it?

Probe: How could the CER project improve its benefits to or value in the community?

5. What feedback, if any, did you receive from community members regarding the CER project?

Capacity Building

1. Do you believe that this CER project contributed to building capacity in the Hispanic community? (capacity building meaning enhancing individuals and organizations abilities to perform at a more positive level)

Yes/No

Probe: Please explain. E.g. Increase knowledge

2. To what extent and how has the CER project helped community organizations and members recognize and work with their assets and local resources?
3. If applicable, which activities do you believe have increased a community's knowledge of health topics as a result of the CER project?
4. Looking forward, what suggestions do you have to improve the process of building capacity within your community?

Research

1. What do you believe is the best way to do CER with the Hispanic community?
2. Do you think that community interests have been represented and assured in the CER project?

Probe: Please explain why or why not.

Overall Impression

1. Given your experience with the CER project, what advice do you have for us in the future?
2. Do you have any other comments and/or questions you feel are important to you as a key informant of this impact assessment?

Probe: If yes, please describe.