Lessons Learned in the Early Stages of a Community-Academic Partnership to Address Health Disparities in a Rural Community

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ABSTRACT

In rural Georgia, African American men are burdened by chronic health diseases such as cancer, diabetes, and cardiovascular disease. Community-academic partnerships that leverage community-based participatory research (CBPR) principles can facilitate the adaptation and translation of multilevel programs to address chronic disease prevention and management in rural areas. The objective of this study was to explore key components of the CBPR process that bolstered the early stages of a partnership established between rural-residing community leaders and academic partners in Georgia. Qualitative methodology was used to collect and assess data regarding the initial engagement between the community and academic partners. Findings indicate that five components supported initial engagement: utilizing the public service and outreach arm of the university to connect with rural communities; creating synergy around identified community health needs; encouraging community members to provide input into the research design to ensure the research goals reflect community values; enhancing the capacity of community partners; and following the lead of the community. Findings provide insights into how to begin engaging rural communities in the southeast in order to strengthen the adaptation and translation of initiatives to improve cancer, diabetes and cardiovascular disease outcomes.

Keywords: Implementation science, rural health, health disparities, community-based participatory research

BACKGROUNDS

The health challenges facing rural communities are daunting. Many rural-residing community members lack access to healthcare services and are challenged by social determinants which impact overall health and well-being (Ricketts, 2000; Iglehart, 2018). Within rural communities, African Americans experience a greater burden of poor health, inaccessible healthcare, and lifestyle challenges in comparison to non-Hispanic whites (James et al., 2017). Community-academic partnerships show promise in reducing rural health disparities when embedded in implementation science frameworks (Lindamer, 2009). Such partnerships can facilitate the adaptation and translation of multilevel programs, but there is limited scientific evidence on how to engage medically-underserved populations, specifically rural communities in the southeastern United States.

Community-Based Participatory Research Partnerships

Community-based participatory research (CBPR) involves communities and researchers in mutually-beneficial, capacity-building relationships to address current and emerging social and public health issues (Israel, 1998; Blumenthal, 2011). CBPR is a philosophical, social, and ethical framework that informs and shapes research design, implementation, data use and dissemination. The core value of CBPR is reciprocity which stipulates that community members and academic partners design, implement, analyze, and interpret results collaboratively—to the mutual benefit of both partners. In addition, CBPR contains core principles which can guide community engagement in the research process which builds and maintains trust and respect among community members (Rivers et al., 2019).
<table>
<thead>
<tr>
<th>Community Based Participatory Research Principles</th>
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<tbody>
<tr>
<td>• Recognizes community as a unit of identity</td>
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<tr>
<td>• Builds on strengths and resources within the community</td>
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<tr>
<td>•Facilitates a collaborative, equitable partnership in all phases of the research, involving an empowering and power-sharing process that attends to social inequalities</td>
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<tr>
<td>• Fosters co-learning and capacity building among all partners</td>
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<td>• Integrates and achieves a balance between knowledge generation and intervention for mutual benefit of all partners</td>
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<td>• Focuses on the local relevance of public problems and ecologic perspectives that recognize and attend to the multiple determinants of health</td>
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<tr>
<td>• Involves systems development using a cyclical and iterative process</td>
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<td>• Disseminate results to all partners and involves them in the dissemination process</td>
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<td>• Involves a long-term process and commitment to sustainability.</td>
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*Note. *CBPR Principles based on Israel, 1998 and Blumenthal, 2011

CBPR is a strengths-based approach to addressing challenging issues in that it brings together community and researcher expertise and skills to assess and meet community needs (Collins et al., 2018) and has potential in addressing health disparities in rural communities (O’Fallon & Deary, 2001). Communities gain scholarly prestige to social change efforts and strengthened capacity to sustain those efforts (Caldwell, Reyes, Weinert, & Israel, 2015; Mosavel, Winship, Liggins, Cox, & Roberts, 2018; Donnelly, Raghallaigh, & Foreman, 2019). In turn, researchers find the promise of translating new scientific discoveries into real-life practice settings attractive (Herbert et al., 2009; Hood et al., 2010). For instance, researchers leverage their relationships established through CBPR to disseminate knowledge and implement interventions.

Unfortunately, there is a dearth of information on how to initiate relationships with rural communities in local, national, and international settings. That is, research questions may be well-suited for a community-academic partnership, but identifying a community, building rapport with community liaisons, and initiating long-term partnerships is not easy. The objective of this study was to explore key components of the CBPR process that bolstered the beginning of engagement with rural communities in an effort to address health concerns. The findings of this study contribute to guidance on how to initiate the engagement of the community in a partnership with academic partners.

**METHODS**

**Study Design**

We used a qualitative design to address the study objective. Specifically, we conducted a thematic analysis of field notes to identify key components of the CBPR process that supported lessons learned resulting from the early stages of a partnership established between rural-residing community leaders and academic partners.

**The Partnership**

The community-academic partnership in this study is a collaborative effort between African American faith leaders in middle Georgia (Ben Hill, Dooly, Houston, Macon, Pulaski, and Sumter counties) and the Integrating Special Populations function (ISP) within the Georgia Clinical & Translational Science Alliance (Georgia CTSA). The faith leaders are members of the Interdenominational Ministerial Alliance (IMA) and Georgia Union Missionary Baptist Association (GUMBA). The IMA is a voluntary alliance of ministers from a variety of denominations that formed a group for fellowship, support, and education. The IMA consists of eight ministers representing eight churches. The GUMBA is a collective of 15 churches in one of the General Missionary Baptist Convention of Georgia districts that
serves middle Georgia. Historically, faith-based organizations (FBOs) have served as cornerstones of African American communities, and faith leaders as trusted gatekeepers (Brand, 2019). In rural communities where hospitals and other healthcare settings lack accessible space, FBOs are ideal meeting places where community members can access health promotion programs (Yearly et al., 2014). In community-engaged research, FBOs have served as a conduit for the implementation and dissemination of health promotion programs with African Americans (Timmons, 2015; Brown & Cowart, 2018). Thus, FBOs were an ideal partner for this endeavor.

The Georgia CTSA is an interdisciplinary, inter-institutional collaborative effort involving Emory University, Morehouse School of Medicine, Georgia Institute of Technology, and the University of Georgia (Georgia Clinical & Translational Science Alliance, 2020). The goal of the ISP function within the Georgia CTSA is to further advance health equity by efficiently and inclusively extending research and discovery to all populations in Georgia, with a specific emphasis on special populations such as rural communities. ISP’s work centers on facilitating special populations’ participation into each stage of the clinical and translational research process, and increasing the volume and quality of high priority special populations clinical and translational research. This collaboration is funded through the National Center for Advancing Translational Sciences, part of the National Institutes of Health’s Clinical and Translational Science Awards. The vision for CTSA Awards is to translate laboratory discoveries into treatments for patients, train the next generation of clinical investigators, and engage communities in clinical research efforts. The partnership employed CBPR principles to foster a positive and fruitful relationship between the community and academic entities (Israel et al, 1998).

The counties in which community members represent are located south of Atlanta. Table 2 provides information about key health indicators in each county as well as the state of Georgia (2020 County Health Rankings data; https://www.countyhealthrankings.org/). Health disparities between county and state level data are evident in many of these indicators. All of the health outcome indicators including premature age-adjusted mortality, poor or fair health, poor physical health days, and poor mental health days are worse in the community members’ representative counties in comparison to Georgia. Also, the majority of counties have worse health factors that contribute to poor health outcomes, specifically diabetes rates, obesity rates, physical inactivity, uninsured adults, and lack of access to primary care providers, in comparison to the state of Georgia. In addition, all of the counties have a greater number of preventable hospital days compared to Georgia. Preventable hospital days are reflective of uncontrolled health conditions that should be managed at the primary care level.

The long-term goal of the study is to adapt and translate a rural, community-based, multilevel intervention to address disparate outcomes among rural African American men with chronic diseases, such as diabetes, cardiovascular disease, and cancer. Multilevel interventions have been shown to be efficacious in addressing health outcomes for patients, given the focus on at least two contextual influences of the individual (Paskett et al., 2016). A key component of intervention adaptation and translation are the utilization of CBPR principles as well as the community health advocates (CHAs), who have been shown to be efficacious in outreach to underserved populations to reduce symptom burden attributable to chronic conditions such as diabetes, cardiovascular disease, and cancer (National Rural Health Association; 2000; Centers for Medicare and Medicaid Services, 2003; Gary et al., 2003). The strategy and strength of the CHAs is to work through their social networks to reach those who have poor access to health services or health information.

**Data Gathering and Analysis**

During the early stages of the partnership, for a period of 12 months, the research team conducted bi-weekly telephone conferences and monthly in-community meetings, and participated in a hospital-sponsored health and wellness event. These interactions consisted of discussions about pervasive health conditions in the community, identifying gaps in healthcare, planning community events, and health advocate trainings with the faith leaders. Also, there were ongoing discussions about the project’s progress and next steps. The ISP faculty generated field notes during each interaction as a method of data collection. Field notes are used to summarize community-based interactions by describing context, participant behavior, and general reflections (Phillippi & Lauderdale, 2018). The field notes were analyzed following steps of thematic analysis which involved open coding to derive themes (Braun & Clark, 2006). The themes were converted into lessons learned.

**RESULTS**

A total of five lessons were identified. They are summarized in Table 3 and linked to a CBPR principle.

**Lesson One: Utilize the community/public outreach arm of the university to connect with rural communities.** The Archway Partnership, created in 2005, is a unit of Public Service and Outreach at the University of Georgia (uga). It serves the University’s land-and sea-grant mission by connecting Georgia communities with higher education resources to address locally-identified community and economic development needs (Garber & Adams, 2017). The Archway Partnership is unique in that this connection is facilitated by the placement of a full-time faculty member, called an Archway Professional, in the community who serves as a neutral, third-party facilitator assisting in the
Table 2
2020 County Health Rankings

<table>
<thead>
<tr>
<th>Health Outcomes</th>
<th>Ben Hill</th>
<th>Dooly</th>
<th>Houston</th>
<th>Macon</th>
<th>Pulaski</th>
<th>Sumter</th>
<th>Georgia</th>
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<tbody>
<tr>
<td>Premature age-adjusted mortality</td>
<td>530</td>
<td>410</td>
<td>390</td>
<td>540</td>
<td>450</td>
<td>580</td>
<td>380</td>
</tr>
<tr>
<td>Poor or fair health</td>
<td>24%</td>
<td>24%</td>
<td>19%</td>
<td>26%</td>
<td>21%</td>
<td>25%</td>
<td>18%</td>
</tr>
<tr>
<td>Poor physical health days</td>
<td>4.3</td>
<td>4.1</td>
<td>3.5</td>
<td>4.3</td>
<td>4.1</td>
<td>4.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Poor mental health days</td>
<td>4.4</td>
<td>4.0</td>
<td>3.9</td>
<td>4.3</td>
<td>4.3</td>
<td>4.5</td>
<td>3.9</td>
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<tr>
<th>Health Factors</th>
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<tbody>
<tr>
<td>Diabetes Prevalence</td>
<td>13%</td>
<td>16%</td>
<td>10%</td>
<td>17%</td>
<td>22%</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Obesity</td>
<td>40%</td>
<td>38%</td>
<td>40%</td>
<td>32%</td>
<td>42%</td>
<td>37%</td>
<td>32%</td>
</tr>
<tr>
<td>Physical Inactivity</td>
<td>39%</td>
<td>33%</td>
<td>28%</td>
<td>35%</td>
<td>38%</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>Uninsured Adults</td>
<td>21%</td>
<td>22%</td>
<td>17%</td>
<td>23%</td>
<td>19%</td>
<td>21%</td>
<td>19%</td>
</tr>
<tr>
<td>Primary Care Providers</td>
<td>2,120:1</td>
<td>13,740:1</td>
<td>1,870:1</td>
<td>13,310:1</td>
<td>1,400:1</td>
<td>1,490:1</td>
<td>1,530:1</td>
</tr>
<tr>
<td>Preventable Hospital Stays</td>
<td>5,991</td>
<td>8,036</td>
<td>5,957</td>
<td>5,956</td>
<td>6,395</td>
<td>5,101</td>
<td>4,930</td>
</tr>
</tbody>
</table>

Table 3
Lessons learned

<table>
<thead>
<tr>
<th>Lesson</th>
<th>CBPR Principle*</th>
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<tbody>
<tr>
<td>1. Utilize the community/public outreach arm of the university to connect with rural communities.</td>
<td>Build on strengths and resources within the community.</td>
</tr>
<tr>
<td>2. Create synergy around identified community health needs.</td>
<td>Emphasize local relevance of public health problems and ecological perspectives that recognize and attend to the multiple determinants of health and disease.</td>
</tr>
<tr>
<td>3. Encourage community members to provide input into the research design to ensure the research goals reflect community values.</td>
<td>Facilitate collaborative, equitable partnership in all phases of research.</td>
</tr>
<tr>
<td>4. Enhance the capacity of community partners.</td>
<td>Build on strengths and resources within the community.</td>
</tr>
<tr>
<td>5. Follow the lead of the community.</td>
<td>Facilitate collaborative, equitable partnership in all phases of research.</td>
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After an extensive public input process facilitated by the Archway Partnership, the Executive Committee develops a list of priority areas of focus for the community. Once these areas are determined, the Executive Committee develops a strategy and work plan that is unique to their community and often involves other community members to implement the work plan through specific issue work groups. The Archway Partnership facilitated mutually-beneficial interactions between the community and academic partners, and provided the team with an opportunity to conduct relevant, rural-based research to address health disparities in Georgia. Further, the Archway Partnership’s presence in the county helped facilitate support for community and academic partners from the county commissioner and local hospital.

Lesson Two: Create synergy around identified community health needs. In alignment with the ISP function’s work, ISP faculty conducted a health needs assessment to assist the local hospital with identifying issues regarding health and healthcare delivery in the surrounding catchment area. The needs assessment involved collecting and analyzing data from secondary sources (i.e., state-level public health data), surveys, and focus group interviews. Details regarding the community needs assessment and specific results are provided elsewhere (Community Health Needs Assessment Taylor Regional Hospital, 2019). Results were triangulated across data sources to provide insight into community health issues. Findings indicated that chronic conditions, such as diabetes, hypertension, and cancer, and access to care (or lack of awareness of resources) were problematic in the community. Results specifically highlighted that these issues were problematic for men in the community. As a part of the needs assessment process, a town hall meeting was held to share the findings with community members. Flyers were used to promote the town hall meeting, and were placed in community locations (e.g., town hall, restaurants, healthcare locations, schools, and churches). The community members who attended the town hall meeting gave reflections and insights into the needs assessment findings and provided suggestions regarding how to address the identified community issues.

Lesson Three: Encourage community members to provide input into the research design to ensure the research goals reflect community values. The ISP faculty followed a shared decision-making process to engage community members in the research process (Elwyn, Edwards, Wensing, Hood, Atwell, & Grøl, 2003). First, we worked with the Archway Professional to identify men in the community who were actively involved in community activities, including men who participated in the town hall meeting (mentioned in Lesson Two). The Archway Professional contacted several men and asked if they were willing to meet with faculty from ISP; several men were willing to meet. The meeting was held in Hawkinsville, GA (Pulaski county). After brief introductions and a discussion about the community needs assessment results, the faculty from ISP asked the meeting attendees if they wanted to address one of the issues identified in the needs assessment process. After the men expressed interest in addressing the community needs (i.e., diabetes, hypertension, and cancer), the ISP faculty reviewed the literature to find evidence-based strategies (i.e., options) that could be used to improve the community issue. Next, the ISP faculty met with the same men and detailed several strategies that could be used, and discussed the pros and cons about each strategy. During that meeting, the men in the community shared their opinions, including their own pros and cons, and preferences regarding each strategy. Third, the ISP faculty and men in the community collaboratively decided on a strategy to implement to address the community issue. Finally, the ISP faculty and men in the community shared the strategy with a broader community audience – in this case the IMA and GUMBA – and obtained their input regarding how to implement the strategy in the target catchment area.

The resulting initiative, Fishers of Men (FOM), a community health advocate program based on the community health worker model. FOM was developed through funding provided by the National Institutes on Minority Health and Health Disparities, Center of Excellence, Interdisciplinary Health Disparities Pilot Research Grant Program (P20MD003375-PI: Rivers). FOM, based on the train-the-trainer model, educates faith leaders about salient health issues that disproportionately burden African American men, then train the faith leaders and other community members to serve as community leaders and others in their faith community to improve the health of the community. FOM is aligned with the four strategic areas identified by the Archway Partnership: health, education, economic development, and community.
health advocates (CHA). Subsequently, CHAs spread knowledge about identification and management of chronic health conditions (e.g., diabetes, hypertension, cancer), as well as how and where to obtain screening. Through an iterative formative research approach, the ISP team with faith leaders adapted and translated FOM for implementation in rural settings.

Lesson Four: Enhance the capacity of community partners. Building the capacity of community partners is important for building strong, trusting relationships. We partnered with hospital and faith leaders to adapt and conduct a training curriculum for our CHAs on the topics they prioritized and tools they suggested were needed. Faith leaders wanted to learn more about various chronic conditions that mostly affect African American men and skills to be able to conduct outreach and discuss them with their community and congregation members. The two-day training consisted of didactics, role playing, and experiential activities emphasizing communication strategies to address common outreach challenges (e.g., trust, decision-making, power-sharing). The research team recruited faith leaders from their existing connections, organized food, and pre-identified a set of next steps that interested training participants could use to implement what they were learning. During the development of the trainings, the ISP faculty was conscientious to provide practical hands-on learning opportunities while still harnessing the existing skills of the faith-based leaders. Critically, the research team structured follow-up activities after each training that surveyed participants’ natural interests and helped create actionable plans for moving forward. The ISP faculty will continue to play a key background role in helping to prepare the CHAs for outreach through webinars, video conferencing, and in-person strategy sessions.

Lesson Five: Follow the lead of the community. The high prevalence of diabetes, cardiovascular disease, and the low screening rates for prostate cancer among African American men (Taylor, Henderson, Abbasi, & Clifford, 2018; U.S. Department of Health and Human Services, 2019; Cooper, Rollins, Slocumb, Rivers, 2019) – and the collective expertise of the FOM interdisciplinary research team – led to the selection of these conditions as foci of the CHA training. The ISP faculty received buy-in to focus on these conditions from community leaders during stakeholder meetings in the spring and summer of 2019, not a hard “sell” given the remarkable disparities in healthcare access in the county. However, after the first CHA training in November 2019, participants reflected and expressed an information overload and a desire to focus on one condition. Diabetes was immediately identified and selected as the target condition. The community partners emphasized that diabetes affects everyone in the community, either themselves or a family member.

DISCUSSION

Building and sustaining community-academic partnerships is challenging, but the principles of CBPR are effective facilitators toward this endeavor. This paper summarized lessons learned for getting started with CBPR methods to address unmet health needs of rural communities in Georgia. The community-academic efforts described here is one step toward addressing pervasive health challenges experienced in rural communities similar to those in Georgia. The five lessons learned – utilize the community/public outreach arm of the university to connect with rural communities; create synergy around identified community health needs; encourage community members to provide input into the research design to ensure the research goals reflect community values; enhance the capacity of community partners; follow the lead of the community – have implications for translational research in rural communities in the southeast where there is a need to disseminate evidence-based health promotion programs that may improve health outcomes and reduce disparities.

To date, FOM has trained nine faith leaders (i.e., pastors, deacons) as CHAs. Moving forward, Phase II will involve a preliminary evaluation of the intervention’s feasibility, acceptability, and efficacy. Also, the role of health-related knowledge, stress and coping strategies, and dyadic communication strategies as potential mediators of intervention efficacy will be examined. This phase will be carried out collaboratively between community members and the ISP faculty representing medicine, pharmacy, social work, public health, and community outreach with a collective expertise in a variety of health- and implementation-related topics. Interdisciplinary approaches to implementing multilevel interventions will become increasingly important for tackling emerging health issues in Georgia where 120 of 159 counties are considered rural (State Office of Rural Health, 2017), and the state ranks 40th in health outcomes and disparities in the U.S. (America’s Health Rankings, 2019). Phase II findings are expected to lay the groundwork for a larger and more definitive study of the impact of the rural-based multilevel intervention. Also, the Archway Partnership will remain an integral partner in this endeavor. It is hoped that this support will contribute to the sustainability of the program in future years, bolstering the CTSA goal of translating science into real-world healthcare settings, and engaging communities in research in the process.

References


