Community-Based Participatory Research Within the Latino Health for All Coalition

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Despite widespread recognition that Latinos and other minorities are at higher risk for diabetes and cardiovascular diseases, much less is known about how to create conditions for health and health equity. This report presents information about implementation of the Health for All Model in accordance with principles of community-based participatory research (CBPR). Using an empirical case study design, we reported on community changes (i.e., new or modified programs, policies, or practices) facilitated by the coalition and their distribution among primary goal areas (i.e., healthy nutrition, physical activity, and access to health services) and in different community sectors and ecological levels. Qualitative information suggested that the community and scientific partners shared decision making and control, as well as adherence to other principles of community-based participatory research.
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Such systematic efforts contribute to our understanding of how collaborative action can achieve the changes in conditions necessary to assure health for all.

KEYWORDS access to health services, collaborative action, community-based participatory research (CBPR), health disparities, Health for All Model, healthy nutrition, Latino health, physical activity

Health disparities—important and modifiable differences in health outcomes related to social disadvantage (Braveman, 2006)—are particularly noticeable for chronic diseases such as diabetes and cardiovascular diseases. A recent report found that 12.9% of Latino Americans have diabetes, nearly twice the rate for non-Latino Whites (Agency for Healthcare Research and Quality, 2009). Although rates of cardiovascular diseases (CVD) are similar among Latino Americans and non-Latino Whites of a similar age (5.2% compared to 6.6%) (Centers for Disease Control and Prevention, 2010), Latinos are less likely to be screened (or control) for risk factors such as high cholesterol (Agency for Healthcare Research and Quality, 2009).

Latinos are more likely to experience risk factors for chronic diseases including being overweight or obese, and less likely to participate in regular physical activity compared to Whites (National Center for Health Statistics, 2010). Obesity rates are higher among second- and third-generation Latinos than those newer to the United States, a risk that is associated with exposure to unhealthy foods, acculturation, and associated changes in diet (Popkin & Udry, 1998). Latinos, especially recent immigrants, may remain relatively isolated both in terms of language and eligibility for health services, further limiting access to screenings and health care and associated unequal consequences of poor health.

Collaborative partnerships represent a primary strategy for changing conditions related to health and health equity (Fawcett, Schultz, Watson-Thompson, Fox, & Bremby, 2010). They engage individuals and organizations from multiple sectors, such as health and human service organizations, in working together to create an environment that supports widespread behavior change and improvement in population health. For instance, in an earlier test of the Health for All Model, Collie-Akers and colleagues (2007) examined the effects of a coalition’s efforts to bring about community programs and policies to reduce risk for CVD and diabetes among those experiencing health disparities. These collaborative partnerships often involve co-learning among academic and community partners, consistent with methods of community-based participatory research (CBPR) (Israel, Schultz, Parker, & Becker, 1998; Minkler & Wallerstein, 2003).

This study examines implementation of the Health for All Model within the context of the Latino Health for All Coalition in Kansas City, Kansas. We systematically documented and scored instances of community changes,
such as a new program or policy, facilitated by the coalition and related to its primary goals of promoting healthy nutrition, physical activity, and access to health services. We used qualitative methods to examine whether implementation of the model was consistent with principles of CBPR. The discussion considers implications of the findings for using the Model and related CBPR methods to create more equitable conditions for health.

METHOD

Context and Setting

Formed in 2008, the Latino Health for All (LHFA) Coalition has the mission: To reduce diabetes and cardiovascular disease among Latinos in Kansas City/Wyandotte County through a collaborative partnership to promote healthy nutrition, physical activity, and access to health services. The three primary goal areas and related objectives of LHFA are to promote: (a) healthy nutrition (e.g., increased consumption of fruits and vegetables); (b) physical activity (e.g., regular walking or other forms of moderate to vigorous physical activity); and (c) access to health services (e.g., % of residents receiving needed health screenings and services).

The Latino Health for All Coalition focuses its efforts on the 66101 zip code, a primarily low-income and first-generation Latino community in Kansas City (Wyandotte County), Kansas. 26.3% of Wyandotte County, Kansas residents are Latino (United States Census Bureau, 2010). The overwhelming majority (81%) of Latinos living in Kansas City, Missouri and Kansas City, Kansas are of Mexican descent. Over half of Latinos live below 200% of the federal poverty level, and one in three is uninsured. Nearly half (48%) of Latinos 25 years or older who live in Kansas City (Missouri and Kansas) have not completed high school.

Latinos living in Kansas City (Kansas/Missouri) have an average life expectancy 11 years shorter than Whites (Farakhan & Thompson, 2000). They are nearly 1½ times more likely to die from diabetes compared to Whites (Farakhan & Thompson, 2000), and diabetes was the second leading cause of death for Latinos in Kansas City, Missouri (Kansas City Missouri Department of Health, 2004). Mortality rates due to CVD are rising among Latinos, as contrasted with a decrease in CVD among Whites and African Americans in Kansas City between 1994 and 2003 (Kansas City Missouri Department of Health, 2004). The U.S. Centers for Disease Control and Prevention’s REACH 2010 Risk Factor Survey, conducted by ABT Inc. in the urban core of Kansas City in 2005, found that only 45.8% of Latinos had their cholesterol checked compared to 79.9% among African Americans (Centers for Disease Control and Prevention, 2006).

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Community Health and Development, the recipient of the original NIH grant, and the Juntos Center for Advancing Latino Health at the Kansas University Medical Center. The principal community partner, El Centro, has been serving members of the Latino community in Kansas City, Kansas since 1976. The Coalition has over 40 community partners including individuals and organizations working in health organizations and safety net clinics, agricultural extension services, faith communities, youth and sports organizations, and Latino media. Primary grant funding to support LHFA came initially from the National Institute on Minority Health and Health Disparities of the National Institutes of Health (5R24MD002780-05). The LHFA Coalition also benefitted from funding provided by the Health Care Foundation of Greater Kansas City.

Logic Model Guiding Implementation of the Health for All Model With the LHFA Coalition

Figure 1 displays the logic model or framework for action of the LHFA Coalition. This incorporates five key elements of the Health for All Model (Collie-Akers
et al., 2007) within the Institute of Medicine’s five-phase framework for collaborative public health action (Institute of Medicine, 2003):

1. **Collaborative planning and capacity-building.** The LHFA Coalition formed an organizational structure that featured action committees for each primary goal area—Nutrition, Physical Activity, and Access to Health Services—and two support committees, Media and Community. In late 2008 (updated in 2009), the Coalition’s action plan identified 29 priority strategies to bring about community changes for: (a) Healthy nutrition \( (n = 15) \), for instance, Promote home vegetable gardening and gardening in large public places through training and support; Promote healthy food at tiendas or healthy corner stores; (b) Physical activity \( (n = 7) \), for example, Implement Latin dance clubs/tournaments in the 66101 zip code that will promote physical activity through dance; Modify softball fields (and other public field space) in the 66101 zip code to enable community residents to play soccer; and (c) Access to health services \( (n = 7) \), for instance, Improve access to screening and follow-up health services for diabetes in the Latino community; Assure access to interpreter services and language/literacy-appropriate educational materials in organizations providing health services.

2. **Targeted action and intervention.** The Health for All Model includes a paid community mobilizer to help stimulate engagement of community residents and coalition partners and to support collaborative action to implement these community-determined strategies. For instance, between monthly action committee meetings, the community mobilizer facilitated communication about actions to be taken to establish community gardens or engaged the parks and recreation department in establishing a soccer field on public land. She also contacted new potential partners who could help implement change efforts such as for a new zumba class in a faith community or a healthy tiendas program. In addition, a mini-grants program allocated resources (typically $1,000–10,000) to collaborating partners taking responsibility for implementing community-determined strategies; for instance, providing interpreter services at a safety net clinic or building a soccer field.

3. **Community and systems change.** Community/systems change, the primary intermediate outcome, is defined as new or modified programs, policies, and practices facilitated by the coalition and related to its mission (Fawcett et al., 1995). Table 1 provides a list of illustrative community changes facilitated by the LHFA Coalition during its first 3 years of operation, organized by primary goal area.

4. **Widespread behavior change.** The intended outcome is changes in behavior of residents of the 66101 community related to risk for CVD and diabetes. Not reported in this study, these data were collected using an annual behavioral survey conducted door-to-door with a random sample of
households. Patterned after CDC’s Behavior Risk Factor Surveillance System (BRFSS), survey questions focused on reported behavior in the three primary goal areas: (a) Healthy nutrition (e.g., “How often do you eat green salad?”); (b) Physical activity (e.g., “How many days per week do you do moderate physical activities—e.g., brisk walking, vacuuming, gardening—for at least 10 minutes at a time?”); and (c) Access to health services (e.g., “About how long has it been since you last had your blood cholesterol checked?”).

5. Improving community health outcomes. The ultimate outcome, not examined in this study, is reduced incidence and prevalence of CVD and diabetes among residents of the 66101 community.

Measurement of Community Change

A field-tested documentation system was used to identify and score discrete instances of community changes (Fawcett & Schultz, 2008). Community change was defined as new or modified programs, policies, and practices
facilitated by the LHFA Coalition and related to its mission. The measurement system used semi-structured interviews of coalition members and scientific partners, coding by members of the scientific team, and an online data platform to capture discrete instances of community change. Illustrative community changes included creation of community gardens (healthy nutrition), a new soccer program for youth (physical activity), and an expanded health fair with screening for diabetes and referrals to safety net clinics (access to health services).

First-level scoring by a member of the scientific team identified discrete instances of community changes (i.e., programs, policies, and practices). Observers used a codebook with definitions, examples/non-examples, and scoring instructions; training and opportunities to practice scoring until achieving mastery; and reliability assessments among independent observers to assure data quality. Second-level scoring by a scientific partner involved characterizing each documented community change by key dimensions such as primary goal addressed (e.g., nutrition, physical activity, access to health services) or sector in which the change occurred (e.g., health organization, government, faith community).

Qualitative Assessment of Implementation of LHFA Model According to CBPR Principles

Israel et al. (1998) identified nine principles to guide a more equitable engagement of community and scientific partners. Qualitative methods, including review of documented activities and theme identification, were used to examine whether implementation of the Latino Health for All (LHFA) Coalition’s framework was guided by methods of CBPR.

RESULTS

Documented Community Changes Facilitated by the LHFA Coalition

During its first three years, the LFHA Coalition facilitated 41 community changes related to its three primary goal areas within the geographic community (66101 zip code). This included 14 discrete community changes related to promoting healthy nutrition; 14 for physical activity; 7 for both nutrition and physical activity; and 6 for access to health services. The distribution suggests a somewhat comparable number of changes in conditions related to nutrition and physical activity with fewer related to access.

Table 1 displays illustrative community changes facilitated by the Latino Health for All Coalition in its first three years, from its inception in October
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2008 through October 2011. The examples convey how the documented changes relate to community-determined strategies; for instance, the new community gardens program is consistent with an LHFA-identified healthy nutrition strategy: “Promote home vegetable gardening and gardening in large public places through training and support.” The examples communicate that the LFHA is changing conditions in multiple sectors in which people live (e.g., interpreter services in health organizations), worship (e.g., nutrition classes in faith communities), and play (e.g., park spaces maintained by the government). They also suggest that changes are occurring at multiple ecological levels; that is, at the levels of individuals, families, organizations, and the whole community.

Consistent with a CBPR approach (Fawcett & Schultz, 2008), graphs of these data were presented to members of the Community Advisory Board (CAB) and full Coalition to set an occasion for systematic reflection or sense-making about the Coalition’s work: (a) What are we seeing? (e.g., when we review pie charts showing the distribution of community changes by goal addressed or sector in which the change occurred); (b) What does it mean? (e.g., is this the amount and pattern we need to achieve our objectives); and (c) Implications for adjustment (e.g., do we need to bring about more changes related to the goal of healthy nutrition or within the health organizations’ sector).

Qualitative Information on Implementation of LHFA Model Using CBPR Principles

Community and scientific partners collaborated to implement the LHFA Coalition’s framework in accordance with methods of CBPR. The nine CBPR principles outlined by Israel et al. (1998) and related activities used to implement the LHFA Model include:

1. **Acknowledging community as the unit of identity.** The LHFA Coalition focused its efforts on changing conditions within the Latino community of Kansas City, Kansas, with a particular emphasis on the Strawberry Hill Neighborhood (66101 zip code). Coalition strategies, such as promoting community gardens (nutrition) and Latin dance (physical activity), were designed to reflect a shared cultural identity (primarily of Mexican descent, mostly first-generation Latino). Development and implementation of community programs and policies emphasized adaptation to the linguistic and cultural context shared by members of the Latino community.

2. **Building on strengths and resources within the community.** The Coalition sought to assure participation of members of the community with deep experiential knowledge of local concerns and assets. Simultaneous translation during all meetings, and use of bilingual materials and Web sites, were intended to assure opportunities for full and respectful communication.
LHFA also engaged representatives of organizations from a variety relevant community sectors; including health organizations and safety net clinics, human service organizations, youth-serving organizations, county extension services, faith communities, and schools. Within allowable categories set by the Request for Applications (RFA), scientific partners secured funding from the National Institutes of Health (NIH) for this collaborative partnership to address the community health concern of preventing diabetes and cardiovascular diseases in the Latino community.

3. **Facilitating a collaborative partnership with shared decision making and control in all phases of research.** Scientific partners took the lead in defining the primary research questions in the successful NIH grant proposal; that is, what are the effects of implementing the LHFA Model on community changes and are these changes associated with improvements in health-related behaviors. The LHFA Coalition (community partners) developed a strategic plan to address priority goals; including its own vision, mission, and objectives. The Coalition identified and voted on priority action strategies for the three primary goal areas: Nutrition, Physical Activity, and Access to Health Services. In this organizational structure, responsibility for implementation of priority strategies rests with the related Action Committee (e.g., Nutrition, Physical Activity, Access to Health Services). Scientific and community partners’ established a mini-grant program (approximately $100,000 per year) to support partners’ activities to change conditions related to these three areas. The Community Advisory Board (CAB) set policies and provided stewardship for the overall LHFA Coalition. The CAB is composed of coalition-elected chairs of Action Committees and several at-large members. The CAB (not scientific partners) made decisions on all mini-grants (i.e., $1,000–$10,000 grants) awarded to Coalition partners to implement LHFA priority strategies.

4. **Fostering co-learning and capacity-building among all partners.** The LHFA Model incorporates shared learning among all community and scientific partners. For instance, during strategic and action planning, scientific partners offered their knowledge of evidence-based strategies for promoting healthy nutrition or other goals. Yet, Coalition members (not scientific partners) made all final decisions about priority strategies and related mini-grants for implementation, sharing their knowledge of the local context including existing assets and barriers and related efforts. Capacity-building is another focus of the LHFA Model. This includes periodic training (e.g., quarterly workshops on advocacy, grant writing, or planning for sustainability). It also consists of technical support for implementing components of the LHFA Model (e.g., facilitation of action planning or support in documenting community change).

5. **Balancing knowledge generation and interventions for mutual benefit of all partners.** This NIH-funded project aims to expand the evidence base
for how community partnerships can change conditions related to its goals. This test of the LHFA Model also involves the implementation of interventions to promote healthy nutrition, physical activity, and access to health services. There was occasional tension between scientific partners’ recommendations of evidence-based approaches and community partners’ concern for services needed by the community. Documentation of community-determined interventions helps tell both the scientific account and the community story of empowerment.

6. **Focusing on problems/goals of local relevance using an ecological perspective and attention to multiple determinants of health.** Coalition/community members engaged in an annual door-to-door survey that involved assessments of health-related behaviors. Community assessment data showed a high prevalence of diabetes and cardiovascular diseases and related risk factors of unhealthy diets, physical inactivity, and limited access to health services. The LHFA Coalition’s priority strategies and funded mini-grants were targeted at multiple ecological levels: (a) individuals (e.g., nutrition education), (b) families (e.g., church-based dance classes for adults and children), (c) organizations (e.g., support for health screenings and services), and (d) community (e.g., establishing community gardens and new soccer fields). They also aimed to address multiple determinants of health such as social exclusion/isolation (e.g., through interpreter services and Zumba classes), vulnerabilities (e.g., through educational and training programs), and limited access to health care (e.g., through health fairs and linkages with safety net clinics).

7. **Developing the partnership through a cyclical and iterative process.** The LHFA Model aims to strengthen the functioning of the partnership through iterative processes of: (a) assessment and planning (e.g., developing an organizational structure and action plans), (b) implementing targeted action (e.g., community mobilization), (c) changing community conditions and systems (e.g., assuring technical assistance, documenting progress and using feedback), and (d) achieving change in behavior and population-level outcomes (e.g., changes in healthy eating, physical activity, and access to health screenings) (Fawcett et al., 2010).

8. **Disseminating results to all partners and involves them in wider dissemination of results.** Coalition members and scientific partners documented community programs/policies brought about by the coalition (e.g., soccer program, new community gardens, expanded health fair). Periodic sense-making occurred among scientific and community partners to reflect systematically about the data: what we are seeing, what it means, and implications for improvement. The Coalition’s Media Committee planned and implemented media communications to tell the story of the coalition and its effects (e.g., through Latino radio, newspapers, magazines, Univision). The LHFA Web site served both a collaborative workspace and hub for external communications. Success stories are posted on the Web
site to disseminate information about activities to partners, the broader community, and funders and other stakeholders interested in the work of the Coalition.

9. Engaging in a longer-term process and commitment to sustainability. Coalition members honored efforts to bring about community change related to the community-determined action plan (e.g., through communications during monthly action committee meetings, annual honoring ceremonies). Scientific and community partners are engaged in long-term planning for sustainability (e.g., through grants, becoming a line item in existing budgets, incorporating priority activities into partner organizations).

DISCUSSION

This study used quantitative and qualitative methods to examine implementation of the Health for All Model within the context of the Latino Health for All Coalition. Systematic documentation of community changes (primary intermediate outcome) revealed an emerging pattern of the Coalition’s efforts. Community changes were rather evenly distributed among the LFHA’s primary goal areas of promoting healthy nutrition, physical activity and access to health services. Their distribution among different sectors and levels of intervention suggests an ecological approach to changing conditions for health. Future research will help clarity the amount and intensity (i.e., strength of change strategy, duration, reach) necessary to achieve widespread change in healthy behaviors and associate improvements in population health.

We used qualitative methods to examine whether implementation of the model was consistent with principles of community-based participatory research. This study’s primary focus on risk factors for chronic diseases, although responsive to the RFA and interests of LHFA Coalition partners, may not have been the primary need of community residents. For instance, in this primarily low-income and first-generation Latino community, other more basic issues such as jobs, housing, and discrimination were of more immediate importance to many residents. In addition, although planning efforts are underway, sustainability of the coalition and its priority strategies have not yet been assured.

There are some important strengths of this approach. Shared decision making and control are critical features of the Latino Health for All Model. The LHFA Coalition determined priority action strategies through the votes of Coalition members (not scientific partners). Through its Community Advisory Board, the LHFA selected and provided oversight for approximately $100,000 per year in mini-grants. The LHFA Coalition’s priority strategies were implemented at multiple ecological levels—from individuals and
families, such as nutrition education and dance classes, to the community level including community gardens, soccer field, and community-wide health fairs.

The overarching aim of the Health for All Model is to assure conditions for health and well-being for all those in the community. To address health disparities and related social determinants in the Latino community, the LHFA Coalition worked to address differential: (a) exposures, such as to unhealthy foods, through community gardens; (b) vulnerabilities, related to limited education and social exclusion/isolation, through interpreter services and community events; and (c) consequences related to limited access to health care, such as through health fairs and linkages with safety net clinics. This test of the LHFA Model puts faith in collaborative action—among both community and scientific partners—to help understand and improve conditions that affect health behaviors. Social justice demands such efforts, and community-based participatory research methods can help guide the way.

REFERENCES


