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Lessons from Two Latino Communities Working with Academic Partners to Increase Access to COVID-19 Testing

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Abstract

Objective: We sought to examine the experiences of community partners in a community–academic partnership to promote COVID-19 testing in two majority Latino communities.

Methods: We conducted semistructured, in-depth interviews in English and Spanish with community-based organization leaders and community health workers/*promotoras* (n = 10) from June to July 2021. Interviews focused on identifying partner roles in planning and testing implementation and evaluating communication among partners. Interviews were transcribed and analyzed in ATLAS.ti version 8.4.5. Analyses involved deductive and inductive approaches to identify key themes.

Results: Participants described both strengths and challenges to the collaborative approach within each of three core themes: building relationships in the time of COVID-19; uplifting existing community leadership; and commitment of the academic partners and community-based organizations to conduct partnership activities in Spanish.

Conclusion: Community–academic partnerships that invest in strong relationships, community leadership, and a commitment to the community's preferred language offer a promising approach to addressing COVID-19 testing barriers. Findings provide direction for future research on how community members and academic partners can come together to inform strategies to continue addressing the COVID-19 pandemic.

Keywords

Community–Academic Partnership; COVID-19; Testing; Latino

Testing has been a critical strategy in slowing the spread of SARS-COV-2.[1] Throughout the pandemic, however, racial/ethnic disparities in access to testing have persisted in the United States. Latino,* compared with White, communities, have had less access to testing sites and treatment services due to a range of factors.[2] Latino communities have high uninsurance rates and lack linguistically and culturally responsive health providers, especially in rural areas with provider shortages.[3-7] Latino persons are also more likely to live in multigenerational households, which makes it difficult to self-isolate while infected.[8] As the COVID-19 pandemic continues to unfold and the state of the emergency ends, there is a need to reflect on what strategies overcame testing barriers and what strategies should continue to address the ongoing COVID-19 testing needs within Latino communities. A greater understanding of testing strategies to overcome barriers can inform the design of interventions that advance the reach and uptake of COVID-19 strategies throughout the United States.

Community–academic partnerships (CAPs) that include Latino communities and community-based organizations (CBOs) in informing and shaping COVID-19 testing and other interventions offer a promising strategy. CAPs are a recognized model for developing community-centered, feasible, and promising interventions.[9] The CAP model has been implemented in a range of health interventions in Latino communities, including vaccination programs.[10-12] These studies indicated how partnerships with community members and the selection of staff with personal knowledge of neighborhoods, contributed to the success of the intervention.[10,11]

In the CAP model, community stakeholders (e.g., residents and service providers) offer knowledge and insight to identify critical public health concerns and, with the support of academic partners, lead the design and implementation of projects.[13,14] By involving community stakeholders as partners, public health researchers and practitioners center the experiences of those who historically have had a limited voice in health interventions.[15,16]

Despite the promise of CAPs, much of the literature promoting the use of CAPS with underserved communities is written from the perspective of the researchers and not from the perspective of community partners.[17] As a result, lessons learned from CAPs largely apply to an academic audience and do not reflect the insights of community partners.[17] Particularly in the pandemic context, it is critical to understand the insights of community-based partners involved in establishing and maintaining a CAP. Numerous studies on COVID-19 have described related disparities[18,19] and identified barriers to testing among structurally marginalized communities through the perspective of community health workers or *promotoras* (lay health workers who work in Spanish-speaking communities [CHW/Ps]).[20,21]

The objective of this study was to understand community partners' experiences and process of engagement in a CAP that implemented COVID-19 testing and access in two majority Latino communities. Community partners' perspectives offer a critical lens to

*Individuals of Latin American origin or descent are described by and self-identify with numerous terms, including Hispanic, Latinx, and Latine. In this paper, we use the term *Latino* to describe this population, as this is the term used within the study populations.

assess the resources and strategies needed for community partnerships to effectively address COVID-19 testing and other interventions, as well as barriers to developing partnerships in the context of the pandemic.

METHODS

The Latino COVID-19 Collaborative

In January 2021, the authors formed a CAP, the Latino COVID-19 Collaborative (LCC), between residents, CBOs, and university-based researchers to address and overcome barriers to COVID-19 testing faced by two Latino communities in California. The lead university initiated the project after connecting with the lead CBOs, Canal Alliance and United Way of Merced County. They are nonprofit entities working with underserved populations. Canal Alliance is an immigrant advocacy organization offering legal, educational, social, and health services to Latino immigrants in San Rafael, Marin County. United Way of Merced County offers programs and services that improve the health, education, and financial stability of Merced County residents. The community sites were the Canal neighborhood in Marin County and the town of Planada in Merced County, both large Latino communities with disproportionately high rates of Latino COVID-19 infections and mortality.[22,23]

The academic partners and lead CBOs were responsible for recruiting community participants, convening monthly meetings, and coordinating COVID-19 testing events.[24] Community members included residents, CHW/Ps, staff from other CBOs, institutional leaders (e.g., schools), business owners (e.g., an independent pharmacy), and county government staff (e.g., health department, board of supervisors). A total of 55 community residents and CBO staff from both counties were initially recruited and enrolled, 23 were CBO staff, and 32 were community residents.[24] Community members were involved in monthly LCC meetings and participated in testing events. An additional academic partner from a local university was brought into the partnership to conduct observations and assessments regarding the partnership's processes and outcomes. Researchers from this university lead the data collection and analysis for this study in consultation with CAP members.

The LCC members worked together to plan and implement rapid, low-barrier, community-wide testing campaigns in Canal and Planada. To do so, they engaged in activities (Table 1), including fostering relationships, assessing barriers to testing, increasing community knowledge, and coordinating/reporting on testing outcomes.

Study Design

To examine the LCC community partners' experiences as they participated in these activities toward advancing testing access in their communities, we conducted in-depth interviews with CBO staff and community residents who had contributed to partnership activities. The study was not guided by a single qualitative research framework but aimed to capture authentic interpretations of the CAP approach from the communities perspective.[25] Research was approved by the University of California, San Francisco Institutional Review Board (Study No. 20-32308).

Recruitment

We used referrals to recruit and enroll a random selection of LCC participants in the study. CBO leaders from each site invited LCC participants to sign up to participate in an interview. From this list, we randomly selected the same number of participants from each site and contacted each to participate in an interview. This approach allowed for participant confidentiality, given the small and close-knit nature of the LCC. LCC members were eligible to participate if they had attended at least two monthly meetings before the interview and spoke English and/or Spanish.

Data Collection

We developed an interview guide in English and Spanish, including questions about roles in the LCC, relationships between sites, LCC meetings, planning and implementation of testing events, and use of technology (i.e., videoconferencing) for LCC activities. The in-depth qualitative interviews lasted 35–70 minutes, were audio-recorded, and transcribed in their original language. To maintain confidentiality, interviewees were given pseudonyms. Following each interview, the interviewer wrote a memo reflecting emerging themes, and the research team met to debrief. Interviews were conducted until reaching saturation, fully eliciting all variations of participants' experiences across emerging themes.[26]

Data Analysis

We developed initial codes based on themes identified through the memos. The team applied the initial codes to two transcripts to refine their definitions and add additional codes. We organized the final set of codes around the following topics: cross-collaboration between sites, relationship with researchers, power dynamics, time, motivations for participation, professional and skill development, LCC meetings, and language. We used ATLAS.ti version 8.4.5 to analyze transcripts. After coding was completed, we synthesized excerpts within each topic to identify relationships across each. The final analysis identified three core factors that we discuss in depth below. After these steps, we conducted member checking with a selection of community and academic partners to triangulate findings and provide recommendations for ongoing LCC activities.

Member Checking

After completing the preliminary interview analysis, one set of academic partners (KKG, AD, IHY, and MEY) presented the themes to the lead university researchers and CBO leaders to assess the alignment of findings with their perceptions of the partnership. Key recommendations were noted and included below. They reflected that many suggestions from the interviews had been implemented. They also generated recommendations to other challenges, such as having cross-site visits, retreats and sending presentations to interpreters in advance to assist with interpretation.

RESULTS

In total, we interviewed 10 LCC members (six from Planada and four from Canal), representing the complete range of community partner roles: CBO leaders and staff, CHW/Ps, and community residents. The key themes that emerged from their experience in

a CAP to increase access to COVID-19 testing were 1) building relationships in the time of COVID-19, 2) uplifting existing community leadership, and 3) commitment of the academic partners and CBOs to conduct partnership activities in Spanish, the language preferred by community partners. Within each of these themes, participants described the strengths of the LCC, providing insights into the aspects of the CAP approach that were perceived to be successful and challenges that reflected the limitations of the COVID-19 context and partnership design.

Building Relationships in the Time of COVID-19

At the core of the LCC were the relationships among the diverse range of community partners from the two sites. Participants identified that having community partners from another site provided an essential source of support as they developed plans for their COVID-19 testing events. CBO leaders described the importance of connecting with other leaders passionate about addressing health disparities. For example, one CBO leader stated:

> It has been very valuable to have different communities collaborating, so you learn about what's happening … If you only focused on more urban areas, you would miss out on some of the challenges, maybe experienced by a more isolated conservative county and again there's various benefits and challenges.

Their relationships allowed them to share new strategies, apply what they learned to their site, and receive support as they grappled with the pandemics' circumstances unique to their communities. As a result, each site was able to hone engagement strategies tailored to their community context. For example, the Canal recruited local faith leaders to share testing messages. In contrast, in Planada, community partners did not encounter the same reception from faith leaders and discussed approaches to involve them. Planada, however, identified sources of financial assistance for their community members who tested positive for COVID-19, whereas Canal found it difficult to navigate, as this assistance was only available to individuals during the infection period. In addition, both sites supported one another by attending and working at each other's testing events.

When it came to the academic partners, participants identified numerous actions by them that fostered trusting and mutually supportive relationships. For example, CBO leaders felt empowered to make on-the-ground decisions, while academic partners provided updated scientific information about COVID-19, shared testing reports (e.g., positive cases, variants), and responded to the community's questions and concerns. CBO leaders felt included in all decision-making and collectively planned and led the LCC meetings with the academic partners. One CBO leader noted:

> It's a wonderful team of people who complement each other, our abilities, and the way we share power and privilege, and we take turns to lead. I feel that I'm heard, a lot of my thoughts and suggestions are implemented.

Participants described that the academic partners practiced cultural humility by being flexible and allowing them to define the details of the LCC. Although both communities were facing similar inequities with COVID-19 testing, the academic partner's prioritized strategies that fit each community best. In addition, participants reported that the academic

partners invested significant time connecting with community partners on a personal level and gained the community's trust at LCC meetings and testing events. One CBO leader said:

> The academic partners oriented us during the planning of the project and provided training necessary to prepare us for testing. For the testing events, they've been on the ground with us and made a connection with our community members. This created a connection with our community and gave us more credibility in the sense that people will trust us.

Although participants enjoyed and benefited from the relationships in the LCC, time limitations posed a barrier to more robust partner relationships. Participants felt there was not enough time to fully collaborate with the other site during the LCC meetings. In monthly Zoom meetings, each site met in separate breakout rooms to discuss local issues. A CBO leader suggested that the LCC would benefit if the breakout rooms were mixed to allow more interaction and sharing. Due to issues around timing, the two sites could not attend each other's training, leaving CHW/Ps wanting to collaborate with the other site more often. One CBO leader suggested:

> [I recommend] integrating the groups and doing smaller groups of both communities, so that we can get different ideas. Our community members are very like-minded, but it would be good to get outside perspectives as well. So hopefully we [do this] in upcoming meetings, so we can integrate more and feel more connected.

Participants' descriptions of the LCC structure emphasized the need for direct communication and dissemination of project updates among all partners. They described the LCC as a tiered structure, where CHW/Ps and community residents met with and reported on their activities, challenges, and successes to the CBO leaders who, in turn, met with the academic partners. CHW/Ps and community residents were uncertain of the extent to which their updates were shared with the academic partners. Participants were grateful for the opportunities to connect with the academic partners at the monthly meetings, but also felt they did not have a direct connection and wanted more time with them. A CHW/P from Planada suggested that having a Spanish-speaking doctor, in addition to health-focused researchers, involved from each community would benefit the partnership. She noted:

> We need a [local] doctor here who understands a little more local, because I know that right now [the academic partners] are working here, but we don't have a [local] doctor here in Merced County [who is a part of the CAP].

A CBO leader from Planada commented that CHW/Ps should have been given more leadership opportunities early in the LCC:

> This was an opportunity for CHW/Ps to take the floor and I hope that we could do more. I think it would be very easy for some of CHW/Ps to facilitate the LCC and do some of the things that you see [CBO Leaders] do easily.

Uplifting Existing Community Leadership

Both CBO leaders and CHW/Ps shared that the LCC strategies tapped into leadership and activities that were present in the sites prior to COVID-19. All reported that the success of

their efforts was dependent on the existing health promotion and outreach skills of CHW/Ps. Participants said that a strength of the LCC was that, during a time of crisis, it tapped into their previous investments in community leadership. CHW/Ps at both sites were engaged in community outreach and health education before the LCC and felt their contributions to the LCC stemmed from skills attained from prior community health promotion. They also used their ties to their community and leadership qualities to provide appropriate COVID-19 materials that could speak across language, literacy levels, and cultural norms. One CBO leader mentioned:

> They already had been I think tapped into civic engagement training because they have natural leadership qualities or because they have worked in professional and community settings in their countries of origin.

New capacity building was also critical, specifically related to knowledge of COVID-19 and the use of technology. The CHW/Ps learned how to use Zoom, received training on the Health Insurance Portability and Accountability Act and survey collection, developed resources with reliable COVID-19 information, and learned to administer COVID-19 tests. For example, a CHW/P from Canal shared how she learned to develop flyers and educate her community about COVID-19 through social media:

> because people also use social media, we are even taking classes from Google. They were giving us classes here locally. I have also taken a class on how to make flyers … One also becomes a leader and organizer there, not just a promotora.

Other CHW/Ps expressed that working with others challenged them to grow their professional and personal skills. A CHW/P expressed:

> When all of COVID happened in March, that's when I got involved with them, with Canal Alliance… . it was easy for me to get involved because they all have the same connection, that we are looking for the same thing. They are people who support you a lot personally, so I liked that.

By tapping into existing community lay health workers, however, the LCC experienced a mismatch between the place of residence of some CHW/Ps and the location of the LCC testing activities. Few of the CHW/Ps were Planada residents. They were from nearby towns and cities and wanted to see the COVID-19 testing efforts implemented in their communities. Further, many CHW/Ps did not have existing connections with residents. CBO leaders reported that this was a challenge, limiting direct contact with Planada residents:

> Most of our *promotoras* are from outside Planada. That's both a challenge and an advantage. They don't know the people or the dynamics.

Leading with the Community's Language

Community partners reflected on how holding study activities in Spanish contributed to the relationships and capacity building of LCC partners. At the inception of the partnership, it was agreed that activities must be led in the communities' preferred language. One CBO leader mentioned:

> [The partners] decided because Spanish was the majority language, it would make sense to conduct all meetings in Spanish to bridge that gap. Spanish speakers usually get third-hand information. And our desire and intention was to focus on Spanish-speaking Latinos in this research, so we started conducting the meetings in Spanish.

Although participants appreciated that meetings were held in Spanish, language barriers persisted. This included losing meaning and emotion, inaccurate interpretation of technical terms, and constraints of Zoom. For instance, English was the primary language for scientific presentations on COVID-19. The interpreters translated from English to Spanish when the academic partners spoke and Spanish to English when the community volunteers spoke. A CBO leader from Planada mentioned the importance of sharing knowledge in one's language and how their perspective may be unheard when one worked through an interpreter:

> I noticed that when people are able to share their knowledge, opinions, or perspectives in the language that they're most comfortable in, they have a lot to say; when they work through an interpreter or there are no interpreters or ways of communicating back or sharing their perspectives they are truly unheard.

The CHW/Ps expressed concern that interpretation lost meaning and accuracy when they were speaking to the academic partners and that they were not understanding their concerns. One CHW/P shared:

> [T]he vast majority [of the academic partners] do not speak Spanish. We have a very good interpreter … [but] we feel that they do not feel that passion that one can access in a comment, in an opinion when it is translated. It doesn't make the same impact.

The academic team dedicated time during monthly meetings to present updated information about COVID testing and vaccines and report back on testing activities. Participants reported that technical terms were not always interpreted correctly. They suggested that terms be given to interpreters before the LCC meetings. Some of the CHW/Ps could understand English but not speak it; they wanted to hear what was being said first in English and then in Spanish, rather than simultaneous interpretation. CBO leaders with limited Spanish proficiency appreciated that meetings were in Spanish, but because Zoom does not have a feature for simultaneous interpretation in breakout rooms, they missed out on parts of the discussions. A CBO staff member noted:

> translation has been a bit of a challenge and I know LCC coordinators are doing their best to really be inclusive, my Spanish is not good enough to follow, and so what happens is that in the breakout rooms there isn't translation.

DISCUSSION

This study sought to offer insight into the experiences of community partners in a CAP to address COVID-19 testing inequities in two Latino communities in California. Too often, strategies for best practices in CAP are from the voices of university-based researchers and not from the community partner.[17,27] Our findings indicate that relationship-building across

communities and academic partners can provide unique support for Latino communities struggling with barriers to COVID-19 testing and related intervention strategies. They also highlight the importance of tapping into existing community capacity and strengths, all while considering communities' primary language.

At the core of the LCC were relationships, leadership, and communication. Community partners reported that promoting relationship building within community partners was a core strength of the project. This theme speaks to the importance of ensuring that there is time for all community partners to establish a relationship with one another, not solely with academic partners. As the relationships among the community partners themselves led to unique and important insights into the challenges and opportunities faced by residents in accessing COVID-19 testing and maximized engagement in the development and implementation of testing activities. Moreover, it generated trust among community members toward academic partners as community organization leaders led the LCC meetings and developed the discussion questions. Intentionally choosing the CBOs to facilitate the LCC meetings disrupted power inequities by giving a voice to a group that is not traditionally given one.[12] By meeting virtually, the team was able to connect, strengthen, and maintain relationships with each other and our communities during a time of crisis.

In addition to relationship building, the community partners shared that the LCC built on individual and community strengths, abilities, and potential because community partners had existing capacity for health promotion interventions. In an environment where information was changing rapidly, community partners committed time to adapt their skills to the pandemic. This theme represents the benefit of involving CBOs with CHW/Ps and a cadre of engaged residents and stakeholders with prior skills and personal knowledge of the communities, as this ultimately contributed to the success of the approach. Similar to the research literature, the CAP recognized the strengths and capacity of each partner.[17,28] It emphasizes the importance of new community capacity building to ensure that community members have the technical skills and understanding of health issues specific to the pandemic context.

Finally, in conducting these activities primarily in Spanish, the community partners stressed the benefits of honoring and creating a bilingual space. This theme highlights the importance of having a community and academic partner open to collaboration and can dedicate the staff, time, and financial resources to conducting bilingual activities. Prior studies utilizing a community-engaged approach involving Latino communities have relied on translation from English to Spanish. Our study was unique in that meetings were in Spanish primarily with English translation available and by CBO leaders rather than academic partners. Similar to the research literature, having community partners lead meetings in their preferred language creates a space where researchers were challenged by community partners and where researchers, rather than community members, are vulnerable.[12] This CAP took an extra step forward by having the community members lead the meetings in their preferred language.

This study's findings point to the unexpected downside of a CAP approach. In large, multi-site partnerships such as the LCC, time constraints created challenges to fully

realizing relationships among all partnership members. This is consistent with other studies that highlight how limited resources, usually funding, can hamper or limit the types of and reach of CAPs activities.[29,30] Community partners expressed a need to have a medical provider from Planada be involved in the LCC. However, because Planada is in a rural under resourced area with a provider shortage, having outside physicians was still beneficial. While tapping into existing community leadership is an effective strategy, not all trained CHW/Ps are from the community intervention sites, highlighting the gaps that can emerge when existing community leadership programs do not align with the geographic focus of a CAP's interventions. In addition, efforts to ensure inclusion for Spanish speakers continued to result in concerns about limitations of translation, functionality of Zoom interpretation, and effective and clear communication between Spanish and English speakers.[31] The community's perspective on such challenges add important nuance to language consideration for future CAPs. First, it is critical to foster opportunities for further cross-collaboration among community partners, including new partner relationships across communities and strengthening longstanding ones. Second, while CAPs should uplift existing community capacity, ongoing leadership development is critical, particularly in geographically based interventions. Finally, all aspects of community engagement must be aware of, recognize, and respect the languages, cultures, and diversity of the community.[32] These must be paramount in planning, designing, and implementing approaches to engaging a community.[32] The LCC demonstrates the potential for existing CAPs to respond to community health emergencies by leveraging culture-rich, community-centered organizations to partner with academic institutions to collectively address structural inequities.

Our study is not without limitations. While our findings highlight the unique perspectives of community partners, the evaluation of CAPs as a COVID-19 testing strategy is also needed to inform future collaborations. An additional limitation is that the scope of the CAP project is limited to California. However, the project covers both rural and suburban areas within the state; therefore, the findings are relevant to a diverse range of communities.

The study's results provide direction for future interventions and research focused on how community members and academic partners can collaborate to reduce barriers to COVID-19 testing. Future development and implementation of testing, vaccine, and outpatient treatment strategies should consider moving beyond traditional approaches to engaging community partners—from residents to CBOs.[33]

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1.

Key LCC Activities to Establish a Community–Academic Partnership and Promote Low-Barrier, Community-Based COVID-19 Testing

Fostering relationships
Weekly meetings with lead CBOs and academic partners
Monthly Zoom meetings for all LCC members
Identifying barriers to COVID-19 testing
Discussions during monthly meetings to identify testing barriers (e.g., How do you think we can increase interest in COVID-19 testing? Do you think lower interest in testing is due to challenges/hurdles in getting tested or is it for other reasons? Are there any results from the testing event that you find surprising … ? How do you educate parents about the importance of testing children … ?)
Increasing COVID-19-related knowledge in community partners
“Doctor’s Corner” during monthly meetings for community partners to ask academic partners (medical doctors) about the latest research on COVID-19
Coordinate brief reports by local health experts, including the County Health Officer
Planning testing efforts
Participating in testing events in the sites
Report back at monthly meetings on numbers tested, positivity rate, other testing efforts, etc.
Exploring potential collaborations with other CBOs, schools, and business

CBOs = community-based organizations; LCC = Latino COVID-19 Collaborative.