Lessons Learned: Researchers' Experiences Conducting Community-Engaged Research During the COVID-19 Pandemic

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Abstract

During the COVID-19 pandemic, conventional research methods for engaging communities, such as in-person focus groups, were impeded by pandemic-related public health measures, including physical distancing and self-isolation mandates. Researchers were forced to adapt their plans and align with measures to protect themselves and their community partners. To learn about their experiences conducting community-engaged research amid the pandemic, we hosted a roundtable with 10 researchers in British Columbia, Canada. We explored their successes, challenges, and ethical considerations to identify lessons learned. From the roundtable, we found that community-engaged researchers faced several barriers to conducting research in partnership with community, including challenges in building sustainable relationships. However, the pandemic required researchers to find innovative ways to engage with community partners, enhance the reach of their partnership, and center the lived and living experiences of priority populations. We conclude with recommendations to support community-engaged research in future health crises.

Keywords: community-engaged research, COVID-19, roundtable discussion, community collaboration, relationship building

The term "community-engaged research" refers to the active and meaningful involvement of communities affected by a problem of interest throughout the entire research process (Brett et al., 2014). This approach centers on authentic relationship building with communities and equitable engagement (Barkin et al., 2013; Mahoney et al., 2021). In practice, the degree of engagement can be viewed along a continuum, aligning with the nature of the research and community members' interest and capacity to engage as partners (Key et al., 2019).

Although the term "community" can be defined as a group of people with common views, interests, or experiences, communities are heterogeneous and incredibly diverse (Barkin et al., 2013). The wide scope of partners involved in community-engaged research can present challenges, particularly as research team members attempt to capture their full range of experiences. These challenges are further complicated by public health emergencies, like the COVID-19 pandemic, in which communities are often bound by remote connections. In fact, the pandemic caused many community-engaged research partnerships to cease (Carson et al., 2020), placing community health projects in a state of vulnerability.

Background

Principles of community-engaged research include community benefit, a commitment to collaboration, and shared ownership and decision-making by all members of the research team, including community partners

(Clinical and Translational Science Awards Consortium, 2011). Methods undertaken in community-engaged research are wide-ranging and are informed by the needs of the community (Mahoney et al., 2021). Community perspectives can enhance the relevance of research and ultimately the impactfulness of its findings (Edwards et al., 2020). Over the past 25 years, there has been an increase in community-engaged research in various health and social science disciplines, given its inherent focus on reducing inequities (Duran et al., 2019). On a global scale, community–academic partnerships, primarily through community-engaged research projects, have garnered widespread attention (Janke et al., 2022; Key et al., 2019). Higher education institutions increasingly recognize the importance of building partnerships with communities (McNall et al., 2009). Such partnerships are often supported by community-engaged research institutes located within post-secondary institutions, aimed at fostering community involvement in research, providing funding, and mobilizing findings. The proliferation of these institutes can aid community–university partnerships in handling disparate systems and processes for conducting research and identifying shared priorities with community organizations (Suarez-Balcazar et al., 2005).

The capacity to conduct community-engaged research was severely challenged by the COVID-19 pandemic because several public health measures implemented to contain the spread of SARS-CoV-2 were focused on reducing social gatherings and physical proximity. These public health measures included but were not limited to travel restrictions, self-isolation requirements, physical distancing, and in-person service closures (Ayouni et al., 2021). Concurrently, higher education institutions across the world initiated shutdowns, promptly followed by transitions to remote teaching and work (Haeck & Larose, 2022; Purewal et al., 2022). Research scholars, teaching faculty, and students thus had to rapidly accommodate online learning and working platforms (Sahu, 2020).

Although many public health measures were effective in reducing transmission of SARS-CoV-2 at a population level, the rapid implementation and removal of measures had secondary consequences on society, including university research (Polisena et al., 2021). For example, self-isolation require-ments due to suspected or actual COVID-19 exposure meant traditional forms of research—such as in-person focus groups or participant observation, which provide rich data on participants' experiences—could not safely take place. Particularly in the first year of the pandemic, researchers' abilities to collect data, recruit participants, and ethically engage with communities were impacted by pandemic-related measures (Morin et al., 2022). Community-engaged researchers were forced to swiftly adapt their methods of research engagement to protect their health and safety, as well as the safety of their community partners.

Academic researchers and community research partners navigated additional ethical considerations in conducting research amid the crisis context imposed by COVID-19. Civil society organizations (CSOs), not-for-profit agencies operating separately from government and business (United Nations, n.d.), are often sought as community partners by academic institutions. Given their positions as service providers and advocates embedded within the communities they serve, CSOs played a crucial role in COVID-19 response efforts, especially for priority populations (i.e., communities at risk of a disproportionate amount of harm; Ontario Agency for Health Protection and Promotion et al., 2015; Suva et al., 2022). Thus, partnering with academic researchers may have had the potential to detract from their frontline support efforts.

The extant literature on community-engaged research highlights methods for fostering engagement in crises. Difficulties encountered in conducting community-engaged research during the pandemic underscore the need to codevelop research plans, maintain transparency, and foster intersectoral collaboration (Du Mont et al., 2022; Edwards et al., 2020). However, researchers' direct perspectives and experiences are largely missing. On July 6, 2023, the Pacific Institute on Pathogens, Pandemics, and Society (PIPPS), based at Simon Fraser University (SFU), convened 10 interdisciplinary researchers for the Community-Engaged Research During the COVID-19 Pandemic Roundtable. This reflective essay summarizes key themes from the discussion, particularly researchers' experiences, challenges, and successes in conducting community-engaged research against the backdrop of the pandemic.

Methods

Community-Engaged Research Roundtable

In July 2023, PIPPS hosted an in-person roundtable discussion with community-engaged researchers affiliated with SFU. The objective of this roundtable was to understand their experiences conducting community-engaged research during the COVID-19 pandemic, including their successes, barriers, and ethical considerations.

Roundtable attendees were invited to participate via email based on their experiences leading community-engaged research projects with CSOs and community members from March 2020 to December 2022. We purposefully invited community-engaged researchers who initiated projects during the pandemic, encouraging them to suggest colleagues or others who might also be interested in attending. Written consent to record the workshop and take notes was obtained from all participants prior to the roundtable. Approval from the SFU Internal Review Board was not required for this roundtable, as we hosted a collaborative discussion with fellow researchers. Participants' contributions are acknowledged as authorship credit in this article.

The discussion was cofacilitated by PIPPS community-engaged researchers (first and second authors of this article). At the outset of the discussion, we asked participants to reflect on prompts related to conducting research during health crises, such as the barriers they encountered, helpful resources and tools, and lessons learned. Participants were prompted to add their preliminary reflections on paper and refer to them throughout the roundtable. Attendees then engaged in a 45-minute in-depth discussion about their experiences conducting community-engaged research amid the COVID-19 pandemic (see Table 1 for discussion prompts). Notetakers were present to capture high-level themes emerging from the conversation.

The roundtable discussion was recorded using Otter AI, a speech-to-text transcription application, which automatically produced a transcript. Members of the project team reviewed the transcript to ensure accuracy. Qualitative analysis software NVivo 12 was used to code the transcript. The research team began by reading through the transcript to identify and assign preliminary codes. Subsequently, we conducted inductive thematic analysis to explore researchers' successes, challenges, and reflections (Braun & Clarke, 2006). Two authors completed an initial open coding process, which was further categorized to explore the codes in depth and identify additional themes. The coding book was compared against notes captured during the discussion. To enhance equitable engagements with community partners for future health crises, particular attention was paid to lessons learned and recommendations raised by attendees. The drafted output was shared with all roundtable participants for review, and participants were offered the opportunity to comment and revise the analyses.

Lessons Learned: Key Findings From the Roundtable Discussion

The roundtable provided researchers with an opportunity to reflect on their experiences conducting community-engaged research during the COVID-19 pandemic, as well as connect to others with shared experiences. Four key themes emerged from the discussion: (1) barriers to conducting community-engaged research during the pandemic, (2) relationship building during the crisis, (3) opportunities emerging from the pandemic,

Table 1. Community-Engaged Research Roundtable Discussion Prompts

1. What were some of the barriers you experienced to conducting community-engaged research during the pandemic? Were there any specific issues related to COVID-19 that made community-engaged research more difficult? How did you attempt to overcome these challenges and barriers?

2. Can you share some of your successes in conducting community-engaged research during the COVID-19 pandemic?

3. Imagine there is another public health crisis and you are conducting community-engaged research; what would you do differently this time? Are there any resources or supports that you would find helpful?

4. How can we conduct more equitable community-engaged research during health crises? Do you have any lessons learned, insights, or recommendations you would like to share?

and (4) lessons learned for conducting community-engaged research in future crises.

Barriers to Conducting Community-Engaged Research During the COVID-19 Pandemic

Conducting Research Remotely

At the outset, attendees called attention to the difficulties of conducting community-engaged research remotely, describing the experience as "[having to] turn everything upside down" (Participant 1); see Table 2 for a list of barriers identified when conducting community-engaged work during COVID-19 and the corresponding strategies suggested to overcome each barrier. Attendees noted disruptions caused by shifting to and "managing multiple forms of online communication" (Participant 3), which made it tough to delineate between their work and their private life. The need to abruptly switch to virtual platforms added a layer of complexity; for instance, one participant recounted that their community-engaged research project was "delayed for more than three months" (Participant 1), as they could not meet with participants in person. Several research studies experienced similar challenges during the pandemic, compelling teams to pivot from in-person data collection to online outreach (Daniel et al., 2022; Rodríguez-Larrad et al., 2021). Researchers also could not rely on networks of community organizations to assist with recruitment. Indeed, given their significant role in the COVID-19 response, community-based organizations had less time, capacity, and resources to support research recruitment (Karasik, 2022).

Facing the Digital Divide

Other attendees described the "performativity of virtual interviews" (Participant 4) and the overreliance on rigid interview scripts that limited interpersonal connection with participants. Roundtable attendees discussed notable differences between in-person and remote interviews. They expressed concerns about guaranteeing participants' safety and privacy, especially when participants lacked a separate, physical space to conduct interviews. Eliciting meaningful responses behind screens and establishing rapport to safely discuss sensitive topics

Table 2. Barriers and Strategies for Conducting Community-Engaged Research During the COVID-19 Pandemic

Barriers	Strategies for overcoming barriers
Unable to conduct in-person recruitment and outreach due to public health measures and protections	Initiated online recruitment campaigns and leveraged social media advertisements to tailor efforts to their intended audience
Trying to reach civil society organizations as research partners, while their resources were stretched thin	Centered projects that emerged from community needs, and aligned research objectives to meet their needs
Creating psychological safety for all members of the research team	Held informal check-ins for members to touch base about mental health and well-being
Changing circumstances and priorities of community members	Remained responsive and flexible to emerging needs
Unanticipated changes to data collection methods arising from the pandemic	Paused, or pivoted, research plans to adapt to new and emerging needs
Limited opportunities for personal connection through virtual interviews	Opted for online platforms that community partners and members were familiar with and comfortable using
Dealing with immense emotional labor involved in working during a global health crisis	Offered space to process feelings, grief, and emotions among the research team through the support of a clinical counselor

was also challenging. Additionally, several people spoke about the barriers to "overcoming the digital divide" (Participant 8), referring to the gap between communities that can and cannot access information and communication technologies (Li, 2022). Attendees noted that this gap was more pronounced among community partners in rural and remote communities with infrastructure constraints, thereby limiting the inclusivity of their projects. Some of the priority populations they engaged with, namely people in rural and northern areas and resource-constrained settings in the Global South (Statistics Canada, 2020), had restricted access to high-speed internet and, in turn, less confidence in using virtual communication tools necessary for research (Freeman et al., 2022).

Challenges With Ethics Applications

Many participants identified challenges concerning ethics applications as institutional review boards attempted to balance the urgency of COVID-19 with the full range of risks and benefits associated with projects (Burgess et al., 2023). A number of roundtable participants were forced to frequently revise their applications to fit the rapidly evolving health crisis context, causing setbacks to their research processes. Others identified challenges with review committees; although formal ethics committees expedited reviews, they did not anticipate the unique considerations and vulnerabilities of engaging communities during a public health crisis. Similarly, postsecondary institutions did not provide guidance or protocols specific to community-engaged research amid the pandemic, meaning the onus for protecting community partners often fell onto the researchers. Many participants also worked with priority populations that have experienced distrust of both the health care system and health research more broadly (Hermesh et al., 2020), circumstances that researchers felt were not appropriately considered by ethics governance boards.

Funding Challenges

In addition to ethical challenges, participants found it difficult to obtain grants to support community-engaged research on topics not directly related to COVID-19. They discussed their "desire to centre community-identified needs" (Participant 5), but could not conduct research or compensate communities due to the prioritization of COVID-19 funding at institutional, provincial, and national levels. Research unrelated to the pandemic slowed down significantly, with potential consequences for projects prioritizing other pressing community health needs (Omary et al., 2021).

Psychologically Unsafe Environments

Throughout the pandemic, researchers felt immense "pressure to perform" (Participant 6). They were expected to continue publishing, teaching, and researching while suppressing personal challenges. The unanticipated shift to remote learning and research caused stress among many academics (Rashid & Yadav, 2020). Participants disclosed the "emotional labour involved in helping students complete research projects, as well as [their] community partners" (Participant 8). They also discussed the emotional toll of conducting COVID-19 research during the pandemic, alluding to difficulties of separating themselves from the crisis. Attendees highlighted a lack of psychological safety, referring to the degree to which people perceive a work environment as supportive of interpersonally risky behaviours like speaking up, asking for help, and raising concerns (Edmondson, 1999). Amid the crisis context, community-engaged researchers and partners "collectively dealt with grief, hardship, and loss" (Participant 3). They struggled to create psychologically safe environments within their research teams, contending with a "lack of transparency" and inadequate protection against "harmful communication from outsiders" (Participant 6). For example, many researchers were on the frontline of COVID-19 communications, as media personnel often relied on their expertise. However, they lacked protection against the spread of misinformation and disinformation and its associated harm, including direct attacks from members of the public. Although researchers prioritized principles of community engagement, including clear communication and transparency, they mentioned this was missing at the institutional level (Han et al., 2021). While recognizing that administrative leadership across higher education institutions worked hard to remain up-to-date with emerging knowledge and guidelines (Papp & Cottrell, 2022), researchers identified a disconnect between guidance and their on-the-ground work with communities.

Relationship Building in Times of Crisis

In crisis contexts, CSOs and researchers

frequently report collaboration challenges (Huang et al., 2022). The COVID-19 pandemic strained the resources required for successful research partnerships (Couillou et al., 2022). Global collaborations and in-field data collection, in particular, were hampered by international travel restrictions and extended stay-at-home orders (Cai et al., 2021). Roundtable attendees discussed several difficulties in building and sustaining relationships amidst the pandemic. One participant noted how their inability to gather in person and find common ground through the practice of sharing food impacted relationship building, as such gatherings also support networking and knowledge sharing (Rose et al., 2022). Additionally, researchers were cognizant of CSOs' frontline efforts to support priority populations and did not want to impede their work through research partnerships. These competing demands, which forced researchers to remain flexible and adjust their timelines to work collaboratively with community partners, occurred when there was an urgent need to support community partners' research projects and document the effects of the pandemic.

The COVID-19 pandemic exacerbated social and health inequities experienced by priority populations, including Indigenous and racialized communities, people with disabilities, and immigrants (Paremoer et al., 2021). For instance, these population groups experienced inequitable access to COVID-19 vaccinations (Whitehead et al., 2022). The pandemic also disproportionately impacted many priority populations involved in equity-based research partnerships (Wieland et al., 2020). Moreover, community research partners faced increased demand for services and support as they transitioned to working remotely, experienced staffing reductions, and had to tailor their programming to address immediate priorities. As a result, CSOs had little bandwidth for community collaborations, making it difficult to build relationships with the communities that may have required the most support.

Similarly, many participants experienced challenges maintaining partnerships. As a result of the economic fallout caused by the pandemic, millions of people lost their jobs (Gulyas & Pytka, 2020). Several attendees described how the relationships they spent years investing in were strained as community partners from CSOs were laid off. The economic challenges faced by many CSOs also made it more difficult to find the "right research partners" (Participant 2), namely those who were interested in research and were able to balance their frontline work with research engagement. Researchers' long-term relationships with CSOs immersed within the communities they serve were further constrained by the crisis response marked by time-pressed, top-down decisions (Wilson et al., 2021). In the crisis context, participants found it difficult to maintain trustworthy and meaningful relationships with "community navigators" (Participant 6), who facilitate connections with community organizations and members. Attendees nonetheless reiterated that building long-term trust is a crucial component of ethical community-engaged research (Han et al., 2021).

Despite these challenges, attendees highlighted that the pandemic offered an opportunity to "be creative" (Participant 4) in their partnerships. In response to the switch to remote research, they learned how to use technology in novel ways. Researchers leveraged tools that community partners and members were familiar with, like WhatsApp, to conduct interviews. Additionally, they utilized social media advertisements to tailor their recruitment efforts. Some participants explained how they used interactive features on Zoom to implement alternate, low-barrier modes of participation. Previous studies have also exemplified how using such online tools was particularly helpful for participants who were keen to be involved but sought other means of participation (Dolamore, 2021). Many participants noted that they continue to use these tools, even beyond the immediate crisis context, to meet the accessibility needs of team members.

The transition to online modalities, coupled with shifting community needs, also enabled researchers to be reflexive in how they conduct their research. Several were forced to pause, or even stop, their research plans to meet the emerging priorities of their community partners. They discussed the harms of parachute research, an extractive process of taking data from communities without mutual benefit and collaboration (Bockarie et al., 2018). To mitigate these harms, researchers prioritized trust and transparency and attempted to sustain partnerships beyond the pandemic. Researchers' alignment with community needs also underscores the role of community en-

gagement in crisis response. As demonstrated by past infectious disease outbreaks, community-engaged response approaches can increase the uptake of health interventions and strengthen health advocacy efforts (Gilmore et al., 2016, 2020). Thus, community-engaged research partnerships have the potential to identify and respond to priority populations' crisis-related needs. The COVID-19 pandemic illustrated how authentic community-engaged research partnerships can bolster responses to health crises because this approach prioritizes accountability to community members and can help address their unmet needs (Wieland et al., 2020).

Overcoming Barriers: Opportunities That Emerged During the Pandemic

In the roundtable, participants brought forward opportunities and strategies that emerged as a result of the pandemic. They emphasized the wider scope and reach of their projects since virtual communication tools enabled them to connect with geographically isolated communities. Similarly, as more people became familiar with technology, researchers could connect with community partners and research participants across more platforms. They noted that once their research teams and partners were comfortable using online platforms, their engagement processes were considerably more efficient. However, roundtable attendees also acknowledged limitations, as virtual platforms "unintentionally overlooked people who are not online" (Participant 3) or with limited access to the internet.

Participants expressed that the diverse realities of the pandemic allowed for the "professional veneers [to] slip away" (Participant 7) in their partnerships. They experienced a deep sense of vulnerability and humility with community partners as everyone attempted to get through the pandemic. Attendees noted how people began to focus more on developing meaningful connections and the importance of community, reinforcing their commitment to community benefit. During the pandemic, researchers prioritized managing the conflicting emotions and experiences of the research team in favor of their outputs. Their experiences reflect how partnerships formed through community-engaged research can support communities in times of crisis through social networks, enhancing technical capacity, and empowering community decision-making (Wieland et al., 2020). In return, it was hoped that university-community research partnerships benefited communities as they gained access to social and political capital required for emergency response (Ohmer et al., 2022). Through such partnerships, communities can be embedded in broader networks of relationships and strengthen their capacity to undertake their own research projects.

The importance of mutual benefit was an underlying theme of the roundtable. Researchers noted how the pandemic enabled them to truly center the lived experiences of priority populations. Amidst the health crisis, community-engaged researchers were forced to further scrutinize their positionality and privilege, and explore how to redistribute power among the team (Livingston, 2023). Thus, some researchers hired members of communities directly impacted by the pandemic to lead research projects, allowing researchers to reflect on questions concerning whose knowledge is considered valuable and how this knowledge can be honored. By "hiring people with lived experience of the research problem" (Participant 7), researchers said their work was strengthened. Bringing lived experience and expertise into academic spaces also fostered a sense of ownership and inclusion in areas where priority populations have been marginalized (Jehangir, 2010). Furthermore, participants affirmed the emergence of "policy and advocacy windows" (Participant 5) arising from COVID-19, forcing alignment between social problems, political factors, and policy options (Mintrom & True, 2022). The pandemic exposed existing systemic social and health inequities, which created urgency in policy spheres (McGrail et al., 2022). Equity-focused community-engaged research projects potentially benefited from changes in policy agendas. Respondents discussed how interest and uptake in these projects may have increased as policymakers learned how the pandemic impacted diverse communities.

Looking Ahead: Conducting Community-Engaged Research in Future Health Crises

At the closing of the roundtable, participants were asked to reflect on changes they would implement when conducting community-engaged research in future health crises. Their responses were wide-ranging—from holding informal check-ins for all team members to ensure psychological safety to setting standards and guiding values for engaging community partners. Many

identified a desire to learn more from other community-engaged researchers and share knowledge across networks. Attendees also discussed the importance of interdisciplinary teams, leveraging the diverse training and expertise of academic researchers, community-engaged scholars, and service providers. Participants noted how support from trained mental health professionals would help create psychological safety when conducting research on sensitive topics during health crises. Several attendees pointed to the need for a trauma-informed approach, which recognizes the impacts of trauma on community members, as an aspect of community-engaged research during crises, to foster social cohesion and well-being (Falkenburger et al., 2018). Participants underscored that following a trauma-informed approach may be especially critical during health crises to ensure researchers are well-equipped to work with priority populations who disproportionately experience socially produced health inequities (Huang et al., 2022; Ontario Agency for Health Protection and Promotion et al., 2015). Trauma-informed research training should be provided to researchers at the institutional level to equip them with the skills necessary for ethical engagement with communities.

Overall, roundtable participants highlighted how community-engaged research must be recognized as fundamental to health crisis responses, and not merely designated as an afterthought. Although the popularity of community-engaged research projects has increased in many disciplines, community–university engagement continues to be treated as a peripheral activity, intended to supplement teaching and learning (Cristofoletti & Pinheiro, 2023). Community-engaged research should be prioritized because the approach centers on respect for community members and supports active knowledge translation (Solomon et al., 2016). Attendees deliberated on the importance of being guided by community partners' experiences, recognizing the significant toll of the COVID-19 pandemic on their service delivery and capacity to engage as research partners. Through their shared projects, they attempted to "connect community needs to research objectives" (Participant 7). This goal was demonstrated, in part, by their dedication to building capacity and infrastructure for CSOs to lead community-initiated research. Attendees also discussed their role in mobilizing re- sources and promoting connections across their networks of community partners, particularly during crises, when CSOs' service demands are high and resources are stretched thin (Dodd et al., 2022).

In addition to creating psychological safety and building capacity, some attendees emphasized the need to continue research on areas of expertise crucial to community health, rather than "abandoning these topics" (Participant 8) in favor of infectious disease research. One participant cautioned against this approach, recounting how research on certain health and social topics was overlooked because many researchers sought COVID-19-related funding. The ongoing emphasis on COVID-19 research topics continues to affect community-engaged partnerships in the "post-pandemic era" (Leach et al., 2021), as research unrelated to the pandemic faces resource challenges (Rashid & Yadav, 2020). Furthermore, many discussed the importance of being flexible when working with communities in crises. To maintain equitable engagements, researchers should pivot plans and processes as communities uncover new needs. This approach must be underpinned by "flexible funding" (Participant 4) that is responsive to the uncertain and evolving nature of crises.

Recommendations

Community-engaged researchers' endeavors were hampered by public health measures aimed at controlling COVID-19 outbreaks. In spite of the barriers encountered, community-engaged researchers effectively adapted their methods of engagement in the crisis context. Based on attendees' contributions, we propose six institutional- and partnership-level recommendations to enhance community-engaged research in future health crises.

Institutional-Level Recommendations

1. Create guidance and frameworks for community–university partnerships during health crises

Community-engaged research projects play an important role in supporting health crisis responses (Cristofoletti & Pinheiro, 2023). In response to COVID-19, the World Health Organization developed ethical standards for community engagement in public health emergencies (WHO, 2021). However, these standards are not always incorporated into ethical review processes. Given higher

education institutions' increasing focus on community–university partnerships, institutions should develop actionable guidance and frameworks to facilitate these partnerships amid health crises. Particular attention should be given to crisis-specific considerations, including funding sources, resource requirements, and ethical challenges. Institutions must also provide community-engaged researchers and CSOs with opportunities to provide input on their needs, reflecting on gaps and barriers from past health crises.

2. Provide CSOs and other community-based organizations with the resources needed to participate in community-engaged research

During the COVID-19 pandemic, many community–university partnerships relied on online communication tools, such as Zoom, to maintain connections (Kalmar et al., 2022). However, such methodologies faced barriers to connectivity and virtual modes of engagement, particularly for those in rural and remote communities, immigrants, older adults, and people with low income (Li, 2022). The pandemic emphasized this digital divide, which presented challenges to conducting equitable community-engaged research and sustaining partnerships. Moreover, access to information and communication tools remains inequitable, beyond the immediate crisis context (Marlowe & Allen, 2023). To address these barriers, institutions should directly provide community partners resources required for community-engaged research, such as licenses for online communication tools and access to crucial knowledge-sharing platforms.

3. Develop targeted funding opportunities to sustain community–university research partnerships

Many community partners struggled with funding during the pandemic, while researchers had to pivot to meet new demands, which often carried significant costs. Emergency funding for community-engaged research during crises could ease these transitions, decreasing the burden of research participation on community partners and facilitating responsive research. Although community engagement plays an important role in responding to immediate emergencies (Carson et al., 2020), higher education institutions should also consider the long-term benefits and applications of community–university partnerships. These partnerships must be proactively supported by funding opportunities at the institutional level, which may provide research partners with honoraria for their time and insights shared, as well as providing affiliated researchers with funding sources to establish a network of partners. Such support also involves acknowledging the complexity of community-engaged research, as trusting relationships take time to develop and are often incongruent with traditional grant cycles and the output-dependent nature of academia (Olvido, 2021).

Partnership-Level Recommendations

1. Identify low-barrier modes of engagement to meet community partners' capacities

At its core, community-engaged research centers on community benefit and equal partnerships (Clinical and Translational Science Awards Consortium, 2011). Academic researchers must meet their partners where they are, which involves identifying low-barrier modes of engagement that are crisis-resistant and accessible to all partners involved. Research partnerships should also allow for different modes of engagement (e.g., virtual connection, phone calls, online discussion boards) to ensure inclusivity.

2. Be responsive to shifting priorities and needs

During health crises, researchers must be mindful of rapidly changing priorities and needs, which may alter the context in which community-engaged research is conducted (Edwards et al., 2020). It is essential to have a clear understanding of a community partner's intended level of commitment and to prioritize adaptability, as their capacity to engage may be hindered as they attend to their constituents' emerging needs. Where possible, community-engaged research should explore mutually beneficial opportunities to align community needs with the research objectives.

3. Center capacity building in the partnership

Researchers frequently realize benefits from projects performed in collaboration with CSOs, such as career advancement, network building, and a sense of fulfillment (Grain, 2020). In practice, however, the benefits to community members are not always guaranteed. Researchers need to center capacity building throughout the entire partnership. Moreover, the duration of partnerships should not be bound by publications or other outputs. Community partners

should benefit equally from projects and be empowered to lead community-driven research. At the outset of projects, community partners and academic researchers should discuss capacity-building opportunities for all members of the research team. For example, community partners may identify training gaps that academic researchers can help address in their partnership.

Conclusion

During crises, meaningful and authentic relationship building is fundamental to addressing disparities and building trust in public health interventions (Kosel & Nash, 2020). Relationship building requires a significant time investment, yet public health crises necessitate urgent responses to contain the spread of infectious diseases (Eisman et al., 2022). As demonstrated by this roundtable discussion, conducting community-engaged research amid the COVID-19 pandemic presented unique challenges.

Researchers faced barriers, including ethical considerations, funding constraints, and continued pressure to perform in environments perceived as psychologically unsafe. The digital divide and restrictions imposed on in-person gatherings also impacted their relationships with community partners. However, the pandemic also enabled researchers to explore new, innovative forms of engagement and adapt their research plans to better align with community needs. They prioritized capacity building, reflexivity, and reciprocity in their partnerships by remaining responsive to communities' emerging priorities. Through our roundtable discussion, researchers elucidated the value of community-engaged research amidst health crises, signaling a need to continue these conversations to better prepare researchers for engagement with communities during unprecedented public health emergencies.

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