

University of Massachusetts Amherst

ScholarWorks@UMass Amherst

Health Promotion and Policy Faculty
Publication Series

Health Promotion and Policy

2020

Shifting to Virtual CBPR Protocols in the Time of Corona Virus/ COVID-19

Elizabeth Salerno Valdez
University of Massachusetts Amherst

Aline Gubrium
University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/hpp_faculty_pubs



Part of the [Health Policy Commons](#), and the [Public Health Education and Promotion Commons](#)

Recommended Citation

Valdez, Elizabeth Salerno and Gubrium, Aline, "Shifting to Virtual CBPR Protocols in the Time of Corona Virus/COVID-19" (2020). *International Journal of Qualitative Methods*. 6.
<https://doi.org/10.1177%2F1609406920977315>

This Article is brought to you for free and open access by the Health Promotion and Policy at ScholarWorks@UMass Amherst. It has been accepted for inclusion in Health Promotion and Policy Faculty Publication Series by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

Shifting to Virtual CBPR Protocols in the Time of Corona Virus/COVID-19

Elizabeth Salerno Valdez¹ and Aline Gubrium¹

Abstract

COVID-19 has upended community based participatory research (CBPR) projects across the United States and globally. COVID-19 disproportionately impacts historically disenfranchised communities and communities of color, the very communities that CBPR is meant to engage, elevate, and support. In-person activities that help develop rapport and research protocols, build capacity, conduct collaborative data collection and analysis, disseminate findings to the community, and engage in sustainability planning are an impossible practice during the COVID-19 pandemic. The purpose of this article is to describe the challenges and facilitators of shifting to a virtual/online CBPR protocol with a Massachusetts community disproportionately affected by COVID-19, as a means to keep them engaged in the research process and to elevate their experiences, perspectives, and voices during this critical time. We include insights about how to facilitate recruitment and compensate community members, form a community advisory board (CAB), hold CAB meetings, and transition participatory qualitative data collection, analysis, and dissemination to a virtual/online framework.

Keywords

action research, arts based methods, community based research, methods in qualitative inquiry, narrative analysis, narrative inquiry, narrative research, photovoice, social justice

Background

Community based participatory research (CBPR) is at an impasse with COVID-19. SARS-CoV-2, known as the novel corona virus and COVID-19, has caused a worldwide pandemic of respiratory illness, infecting more than 22 million, and killing 781,756 at the time of this writing (Johns Hopkins Medicine, 2020). COVID-19 disproportionately impacts marginalized communities and communities of color, the very communities that CBPR is meant to engage, elevate, and support (Oppel et al., 2020; Wallerstein & Duran, 2006). Low income and communities of color have higher infection and mortality rates, are more likely to be employed in “front-line” service or production jobs that cannot be done remotely, face challenges related to the digital divide, and live in high-density, urban locations hardest hit in the first months of the pandemic (Cowger et al., 2020; Oppel et al., 2020; Turner Lee, 2020). These emerging issues are compounded by existing barriers to participation in research by marginalized communities, which CBPR is meant to ameliorate, including lack of trust of research due to a history of extractive research procedures, historical trauma, issues of documentation and other negative experiences with the criminal justice system, experiences of

racism and discrimination in healthcare settings, and language and cultural barriers (Bradley et al., 2019; Wallerstein & Duran, 2006). CBPR is of particular importance now, given the increased public attention to the deep-rooted effects of structural inequities experienced by marginalized populations caused by an unjust social structural system, laid bare by the pandemic (Bailey et al., 2017).

CBPR is an approach to scientific inquiry that optimizes community engagement in research with partnership between community members, organizational representatives, and researchers (Wallerstein & Duran, 2006). Partners contribute their expertise and share responsibilities and ownership of the research (Wallerstein & Duran, 2006). This collaborative process increases the understanding of a given phenomenon,

¹ Department of Health Promotion and Policy, School of Public Health and Health Sciences, University of Massachusetts Amherst, MA, USA

Corresponding Author:

Elizabeth Salerno Valdez, Department of Health Promotion and Policy, School of Public Health and Health Sciences, University of Massachusetts Amherst, 305 Arnold House, 715 North Pleasant Street, Amherst, MA 01003, USA.
Email: esalernovald@umass.edu



which can be incorporated into action to enhance the health and well-being of community members (Wallerstein & Duran, 2006). CBPR relies heavily on frequent and consistent personal interaction between academics, community members, and organizations to develop rapport and research protocols, build capacity via research training and skills development, conduct collaborative data collection and analysis, disseminate findings to the community, and engage in sustainability planning and initiatives (Wallerstein & Duran, 2006). Such in-person activities are an impossible practice during the COVID-19 pandemic as public health experts, including the World Health Organization (WHO), have issued guidelines that encourage community members to stay home and limit social interactions (WHO, 2020).

Literature documenting research protocols in the age of COVID-19 is emerging. Palmer and colleagues (2020) conducted a study during the pandemic of predominantly low-income women enrolled in a community-based diabetes prevention intervention. A survey of participants during the pandemic revealed that they preferred flexible online, virtual programming, and that this format also reduces risk of exposures for participants and staff (Palmer et al., 2020). In their article, Vindrola-Padros and colleagues (2020) share their lessons learned with regard to setting up research teams, obtaining ethical approval, collecting and analyzing rapid qualitative data, and sharing actionable findings during the pandemic. Beyond the conduct of research, academic researchers continue to navigate fiscal cuts to university and state funding, interrupted research timelines, job instability, and staff cuts as a result of the economic fallout of the pandemic (Corbera et al., 2020; Wigginton et al., 2020; Woolston, 2020). Early studies show the pandemic has greater impacts on women, faculty with primary caregiving responsibilities, along with Black, Indigenous and Latinx faculty who are supporting the health of their communities in this time (Kent et al., 2020; Malisch et al., 2020). For those studies in proposal stages, at the cusp of initiation, or underway, CBPR researchers and their community partners are rapidly negotiating whether and how to conduct their research for the foreseeable future.

The purpose of this article is to describe the challenges and facilitators of shifting to a virtual/online CBPR protocol with a Massachusetts community disproportionately affected by COVID-19, as a means to keep participants engaged in the research process and to elevate their experiences, perspectives, and voices during this critical time. We include insights about how to facilitate recruitment and compensate community members, form a community advisory board (CAB), hold CAB meetings, and transition participatory qualitative data collection, analysis, and dissemination to a virtual/online framework.

Explanation and Justification of Method

Beginning in early 2020, the two researchers from a state university in Massachusetts began a 4-year CBPR project, funded by the Massachusetts Department of Public Health (MDPH), Office of Sexual Health and Youth Development in the Bureau

of Community Health and Prevention, in partnership with a community-based organization in Springfield, Massachusetts. The health services organization serves marginalized youth, including low-income and youth of color (Black, Latinx), pregnant and parenting youth, unaccompanied/recent immigrant youth, homeless youth, and youth experiencing behavioral health issues. Together with project partners, the team has engaged key stakeholders in a CAB. The CAB consists of eight members, including staff from youth-serving organizations, community members, emerging adults (ages 18–24), and policymakers in adolescent health promotion and advocacy in the region. As originally conceived, CAB members were to attend quarterly meetings in person to: (1) inform the development of a Youth Participatory Action Research project based in Springfield using Photovoice and digital storytelling to understand root causes of adolescent sexual and reproductive health (ASRH) inequities; (2) assess appropriateness of current frameworks used by the youth-serving organizations to address ASRH outcomes; (3) identify the role of evidence-based curricula and complementary activities/policies; and (4) triangulate these data to frame the potential role of MDPH in addressing ASRH inequities.

Due to the onset of the COVID-19 pandemic and subsequent stay-at-home orders, and economic and school closures, our CBPR project was forced to shift completely online. We spent the first months of the study familiarizing ourselves with a variety of resources to facilitate the continuation in a remote capacity. Table 1 describes the shift from an in-person to virtual/online format.

Study Setting

This study takes place in Springfield, MA. ASRH inequities are directly affected by systemic racism in the Springfield Metropolitan Area and informed by structural inequities, including lack of access to transportation, high unemployment, housing, food insecurity, a weak tax base to support quality public education, lack of political representation, police brutality, and inadequate access to reproductive health care. According to the Community Needs Assessment of Hampden County conducted by Baystate Medical Center (2019), Black families make less than 70% and Latinx families make less than 50% the income of white families. Black and Latinx families experience the highest level of homelessness and housing insecurity in Western Massachusetts. Approximately 55% of the homeless population is children under the age of 18, and half of them have been involved in the foster and/or justice systems. Many neighborhoods in Springfield experience food insecurity levels of greater than 15% of the neighborhood. More than one third (34.5%) of the Latinx residents and 16.9% of Black residents in Hampden County, where Springfield is located, do not have a high school diploma (Baystate Medical Center, 2019). With regard to residential segregation, minority concentration varies by neighborhood—suburban communities are predominately white, while the concentrated urban core city communities of

Table 1. Shifts in a CBPR Protocol from In-Person to a Virtual Format.

| | Original Protocol | Virtual Protocol |
|-----------------------------|---|--|
| CAB Recruitment and Consent | Email invitation to an in-person informational meeting to provide study information and disclosures, and receive participant consent. | Email was sent to potential individuals with study information and disclosures. Interested individuals sent an email confirming their interest. Upon receipt of interest, participants received a consent form via DocuSign. |
| CAB meetings | In-person quarterly meetings | Quarterly meetings hosted via Zoom |
| Key Stakeholder Interviews | In-person interviews | Interviews hosted via Zoom |
| Participant Compensation | Cash | Tango—Online gift card system |
| YPAR project | In-person | Online |

Springfield are primarily people of color (City of Springfield, 2005).

Such inequities are reflected in ASHR outcomes. Teen pregnancy rates in Hampden County are almost double that of the state (17 vs. 9 per 1,000) with the highest rates in Springfield (25 per 1,000) (MDPH, 2018). The 2018 Massachusetts HIV/AIDS Epidemiologic Profile of Springfield MA, published by MDPH, stated that the average annual HIV rate for Springfield was 24.2 per 100,000, while the state rate was 9.7 per 100,000 (MDPH, 2018). Of those diagnosed with HIV infection from 2014 to 2016 were 40% were LatinX, while 35% were Black (MDPH, 2018). Despite significant state and local investment in reproductive and sexual health curricula and programming to reduce these inequities, very sharp differences exist between racial and ethnic groups.

Corona virus/COVID-19 exacerbates inequities in Massachusetts. At the time of writing this article, Hampden County had 7,637 known infections and 709 deaths (mass.gov, 2020). The Holyoke Soldiers Home, a health care facility for veterans located in the county, made national news when it was investigated for an outbreak that resulted in the deaths of at least 76 veterans and the infection of an additional 84 veterans and over 80 staff members (Staff Reports, NBC Boston, 2020).

Sampling/Recruitment

We have engaged eight key stakeholders that either provide services to youth or are emerging adults that have received services from youth-serving organizations in Springfield, MA. Inclusion criteria for CAB members are the following: 1) age 18 and older; 2) key stakeholder in a community-based organization serving youth; and 3) agree to audio recording of CAB meetings via Zoom. Zoom is an online platform that provides videotelephony and online chat services through a cloud-based peer-to-peer software platform and is used for teleconferencing, telecommuting, distance education, and social relations (www.zoom.us). Zoom was selected because it is the telecommunications interface that is sponsored and supported by the university's information technology department. Zoom also has increasingly improved security measures for participant ensuring safety and confidentiality, including

the option for the host to enable waiting rooms, thus preventing uninvited individuals from participating. We have met our goal to engage a diverse CAB, which includes a majority people of color and an equal number of service providers and emerging adults/service recipients.

CAB Membership

We worked with our community partner and the researchers' established networks to recruit key stakeholders to participate in quarterly CAB meetings. The community organization provided a list of potential CAB members and their contact information. The research team sent emails to potential CAB members with a welcome message, study description and disclosures, and a request for confirmation of interest. All invited individuals confirmed their interest via email. As originally conceived, we had planned to host the first CAB meeting and conduct the consenting process in person. However, in order to facilitate the participant consent process in a necessitated virtual format prior to the first CAB meeting, we sent emails using DocuSign. DocuSign offers eSignature—a way to sign a consent form electronically on different devices, including via cell phone. We reviewed the consent form using screen share on Zoom with CAB members at the beginning of the first CAB meeting. CAB members were then asked to sign and "submit" the form through DocuSign.

CAB Interviews

We also conducted individual semi-structured interviews with CAB members. Recruitment occurred during the first quarterly CAB meeting via Zoom. We described the interview and purpose of the interviews, and followed up with an individual email to all CAB members. All CAB members indicated their interest via email in participating in an interview, with participants completing an informed consent form via DocuSign ahead of the interview. This study received human subject's approval from the University of Massachusetts-Amherst (UMass-Amherst) Institutional Review Board—protocol number 042920.

Data Handling/Analysis

CAB Meetings

As originally conceived, we intended to conduct the CAB meetings in person in order to encourage relationship building among CAB members. However, during the pandemic, we have hosted CAB meetings in a virtual format via Zoom. Meetings are focused on discussing the study process and findings, with CAB members asked to provide their feedback and perspective on the study proceedings. Per CBPR tenets, the CAB collectively agree to a set of norms which emphasize the value of all perspectives and works to create an environment in which differences can be aired constructively (Israel et al., 2012).

CAB meetings are audio-recorded and transcribed verbatim by a research assistant. One research assistant also writes notes during the CAB meetings to capture meeting dynamics not reliably documented by audio recording, as well as to provide reflections on the meetings. CAB members receive compensation for their participation in the meetings. As originally conceived, we planned to compensate participants with cash; however, in the online format compensation (\$25/meeting) is now provided via the Tango online system (www.tangocard.com). We chose to use Tango as it allows research participants to choose among a number of online gift card options, which provides flexibility for them to spend the compensation amount online through a virtual store or in-person at a store. The Tango system allows the research team to create a “bank” account in the system, track participant receipt of compensation and gift card use, and to create a report of this activity, which can then be submitted to the university to reconcile spending.

CAB Member Interviews

We completed individual interviews with all CAB members to: (1) examine systemic racism and other structural inequities as they relate to ASRH outcomes; (2) identify evidence based programs (EBPs) and activities/policies they have experience delivering or receiving; and (3) explore the history of ASRH education in the community (see Supplemental Appendix A for interview guide). Key stakeholder interviews were conducted via Zoom. In the online format, participant compensation (\$25/interview) is provided via the Tango system.

All data are kept in an encrypted UMass-Amherst BOX folder and only accessible to the research team. Transcripts from audio recordings are made in Microsoft Word and stored in BOX. BOX is a file sharing service for businesses and individuals. BOX was selected because it is the cloud sharing interface that is sponsored and supported by the university's information technology department. BOX also has stringent measures for data security. Confidentiality of data is a high priority of project personnel, with unique participant identifiers rigorously protected by the team.

Next steps: Participatory data collection. We will conduct a participatory action research (YPAR) project with youth in Springfield, MA. Youth learn how to conduct research (e.g.,

Photovoice, digital story telling), and use their findings to become stronger advocates for change in their communities (Jason & Glenwick, 2016). YPAR has been used as a research and social justice approach to engage vulnerable and under-represented populations (e.g., youth of color, refugees, survivors of conflict) (Jardine & James, 2012; Maglajlic & Tiffany, 2006, Valdez et al., 2019).

Participants of this phase of the study will include 10 adolescents ages 14–18 who speak/read/write English and/or Spanish. We will strive to engage a diverse sample consisting of hard-to-reach and marginalized populations (e.g., youth of color, LGBTQ youth, housing unstable youth). The YPAR project focuses on conducting a Photovoice and digital storytelling project, now on Zoom with participants, as described below. Participants will be compensated a living wage hourly rate via the Tango system for their participation in the YPAR project. In a previous publication we note the importance of compensating research participants for their valuable time and contributions in a CBPR project (Gubrium et al., 2016). We anticipate that we may need to budget for and provide technology and internet hotspots to participants, particularly for the PV and DST project, to ensure their participation in the project.

Photovoice (PV)

PV is an accepted participatory approach for health promotion research, and has been used successfully with racial/ethnic minority youth in global settings (Le & Yu, 2020; Valdez et al., 2019; Tanjasiri et al., 2011; Wang & Burris, 1994, 1997). Participants in research and intervention activities use photographs and other visible representations of their daily life to present and explain their own experiences, and in the process, they may provide information about topics that may not otherwise be identified by others (Wang & Burris, 1994, 1997). PV provides an opportunity for study participants to voice their opinions about and analyze health issues that may be silenced by certain clinical, community, and family structures, and, thus, is a suitable method to research sensitive and stigma-loaded topics like reproductive health and sexuality.

Our process uses PV as a data collection method in four focused sessions; all taking place on Zoom. The first meeting involves familiarizing the group with the ethical issues involved in photographing others, the potential risks to participants in taking photos and how to minimize these risks, and the practice of giving photos back to the participants (Shimshock, 2008; Wang & Burris, 1994, 1997). At the end of the first session, participants brainstorm and decide on ideas for taking pictures and the research team reviews photography techniques using a cell phone camera.

Between meetings and on their own time, participants take pictures in their own environment (e.g., home, neighborhood) that represent their perspective on bigger/systemic issues that affect young people in their community and their sexual/reproductive health, including transportation, racism [in healthcare], gender identity and sexual orientation oppression, family/culture, disability/ableism, access to healthcare, socioeconomic

status [jobs], policing, housing, food insecurity, education/schooling, political representation [advocacy/organizing], legal status, COVID-19, and the digital divide. The participants will select three to five photographs and reflect on them using the SHOWeD method on a narrative form, available through MSWord online in BOX, to contextualize the photographs (Shimshock, 2008; Wang & Burris, 1994, 1997). The SHOWeD method consists of five questions intended to challenge the photographer to explore the meaning, causes, and potential solutions related to the photographs: (1) What do you See here?; (2) What is really happening here?; (3) How does this relate to your own life?; (4) Why does this situation, concern, or strength exist?; and (5) What can we do about it? (Shimshock, 2008; Wang & Burris, 1994, 1997).

Within each subsequent (second, third, and fourth) meeting, focus group discussions around the photos and narrative forms offer insight into how systemic racism and other forms of structural oppression influence ASRH in the community; the role of schools and community organizations in supporting safer sexual health practices; sources of information about ASRH in the community; how parents might influence their children's reproductive health and sexual decision making and behaviors; and adolescent knowledge and practices around sexuality and reproductive health that may influence their sense of self and community. Participants' perspective on needed policy and curriculum change is prioritized in all sessions.

As originally conceived, the PV project would take place in person in a convenient community setting. In an online/virtual format, all sessions will occur over Zoom. Participants will upload their photos and narratives to an individual folder on BOX.

Digital Storytelling (DST)

We will use DST as a follow-up narrative process for analyzing the ways in which participants specify and produce a digitized artifact based on their *own*, community-based understandings of positive and healthy sexual and reproductive health values and practices. DST engages participants in creating and sharing their own 1–3 minute video account of an important moment or experience (Gubrium, 2009). Building upon the PV sessions, we are conducting one DST workshop with the same 10 youth participants in Springfield. Participants are encouraged to use images created in the PV process in their digital story productions. We have successfully adapted and conducted a digital storytelling workshop over the course of 2 weeks, meeting every other day for six, 2-hour meetings on Zoom. Research assistants write field notes during and after all the digital storytelling workshop proceedings, and key activities in the workshop are audio recorded on Zoom and transcribed verbatim by the research assistants. After each DST session the research team meets by Zoom to debrief on the session, with one research assistant taking notes on the debrief session.

Session one begins with an ice breaker focused on a talking prompt (i.e., “tell a story about your name”) and introduction to DST. Two to three sample digital stories are screened to

familiarize workshop participants with the medium, and story and digital editing techniques discussed in relation to the sample stories. The co-facilitators next lead an expressive writing activity guided by select prompts, which have emerged from youth-identified key themes in the PV sessions and are used to help participants think through, verbally share with the group, and take note of their memories, thoughts, and feelings about their experiences. Participants free write (muting their audio and turning off their video on Zoom) in response to one prompt.

In session two, participants take part in a Story Circle. Each participant is given up to 10 minutes to share their story idea or read their story script and receive supportive feedback from fellow workshop participants and co-facilitators. Feedback from the process is used to revise the stories and finalize a story script.

After session two, each participant is emailed a link to a university-based WeVideo account (wevideo.com), which provides participants with their own account and allows the co-facilitators access to each participant's digital story editing platform to provide virtual feedback and support to participants. WeVideo is an online video editing platform that is readily accessible with an Internet connection and has previously been used successfully in online and in-person DST workshops.

In session three, the co-facilitators present a tutorial on recording a voiceover in WeVideo. Participants are asked to record their voiceover of their final story script before the session four meeting. The co-facilitators next discuss image gathering with participants, encouraging participants to consider using photos they have produced and discussed in the preceding PV workshop in their digital stories. During the second half of session three, co-facilitators hold individual meetings with workshop participants to provide “in-person” feedback on their stories.

In session four, the co-facilitators screen two different versions of a digital story available online to demonstrate the aesthetics of image selection. Next, the co-facilitators present a tutorial on creating a digital story using WeVideo. Session five is devoted entirely to individual 60-minute Zoom meetings between co-facilitator and workshop participant. Participants email a link to their final exported digital story to the co-facilitator ahead of session six and are asked to provide verbal consent to share their digital stories with the workshop group. In session six, the digital stories produced in the workshop are individually screened for the group, with discussion following the digital story screening. Workshop participants are encouraged to discuss their digital stories: to identify and discuss content themes evoked over the course of the workshop and directly in the stories, and to provide their perspectives on the workshop process. The digital story screening is audio recorded on Zoom and transcribed verbatim by a research assistant.

Next steps: Analysis. Our **first level of data analysis** will focus on the emic data—materials that prioritize meanings constructed by the research participants.

CAB Member Check on Interview Findings

Following the transcription of CAB member interviews, the academic research team will present an overview of key themes arising from the data to CAB members during a quarterly meeting via Zoom, which will be audio recorded and transcribed verbatim. The presentation will be structured using a Socratic method, in which the academic research team poses a research question on a PowerPoint slide related to one emergent theme. After the question is posed, the research team will present a brief review of the theme on a second slide, and then present a third slide with empirical materials (i.e., interview extracts) that serve as evidence to support the finding. We will proceed in this fashion until all key themes are presented and discussed. The research question, review of theme, and empirical material will be used to guide discussion with CAB members to check the validity of findings (see Syvertsen, 2020).

Individual Interviews and Community-Based Forum

In the 8 weeks following the PV and DST sessions, the co-facilitators will conduct individual interviews that are audio recorded via Zoom with each project participant, using the photos and digital stories produced in the sessions as visual elicitation devices. The co-facilitators also will guide the group through a debrief session on the PV and DST processes and products, also recorded on Zoom. The co-facilitators then will work with participants to plan and conduct a community-based forum via an audio recorded Zoom session to showcase these products, which will be further used as visual elicitation devices to stimulate community-wide discussions on ASRH and health disparities. Proceedings from the community forum will be recorded on Zoom.

Photovoice and Digital Storytelling

Data sources from the PV workshop include participant-produced narratives on photos selected for presentation in the community forum, participant-produced photos, and transcripts of Zoom-recorded group sessions focused on photo discussion. Data sources from the DST workshop include transcripts of Zoom-recorded story circle and story screening activities and researcher-written fieldnotes from digital storytelling workshop activities and the community forum. We will use an intertextual transcription format to analyze exemplar digital stories, which combines still or screen-shot video images from the digital stories along with transcription of the voiceover recording, notes on affect, features of visual objects, text on screen, music, and special effects, and allows for a verisimilitude of the visual, chronological, aural and oral, emotional, gestural, and textual components found in the digital story, contributing critical detail to our analysis (Gubrium & Turner, 2011).

As a team, the PIs and research assistants will participate in a second-level of data analysis via weekly team meetings on Zoom. Research team members will independently review the corpus of data, all of which will be stored in BOX, and write

notes on generative themes elicited in the photos, digital stories, data transcripts and field notes. The data will be analyzed to explore emerging themes within individual cases, and then across the data sources to consider how identified themes played out across the data as a whole. Based on the set of themes identified by each research team member, we will compose a list of emerging themes. The research team members will then reach consensus on the codes to finalize a codebook with detailed description; inclusion and exclusion criteria; and typical, atypical, and close-but-no exemplars for each code to guide data coding (Bernard & Ryan, 2010). Collectively, and over multiple iterations, we will review the data and test for intercoder reliability, using the codebook to guide further analysis and interpretation. The analytical strategy entails an examination of narrative content and context (Morse & Field, 1995). Content analysis will focus on key themes emerging in the data; context analysis will focus on structural contexts (i.e., historical, political, economic) surrounding these themes.

In our third level of data analysis, we will triangulate findings from the first two levels of data analysis, in collaboration with CAB members, including: 1) emic study findings drawn from CAB meetings, CAB member interviews, PV and DST workshop activities, and community forum presentations of findings; and 2) etic study findings drawn from thematic analysis of the data as guided by the academic research team codebook. Because this is a 4-year project, we hope that the pandemic will have eased in that time and anticipate that these analyses will occur in person with CAB members. Our report on findings will be based on how the two levels of data analysis align or diverge in perspective or approach and will be used to analyze the potential role of MDPH in addressing ASRH inequities at multiple ecological levels.

Ethics

There are some potential, though minimal, risks from this study. The interviews, CAB meetings, and PV and DST projects include discussion of sensitive topics, and there is a possibility that participants may experience distress as a result. If participants indicate feeling distress after having completed any portion of the study, the research team will recommend talking with a qualified clinician or staff member at the partnering community-based organization. The participant will be provided with a list of resources to support services in the area. We will attempt to anticipate and document other ethical implications that may arise from the transition to an online format. For example, participants may not have a safe place to Zoom to participate in project activities. In this case, we would rely on a list of resources (e.g., crisis services) to assist participants.

The following procedures will be used to protect the confidentiality of participant study records: Participants will be assigned an identification number that will be applied to all data and research records for the study. A master key that links names and codes will be kept in a separate and secure location from research records. Audio recordings and transcripts of interviews will be kept in an encrypted BOX folder and only

accessible to the research team. Participant-produced photos and digital stories will only be available to present in community forums (including with CAB members) if participants provide consent to release the materials. A consent-to-release form, with various options for points of release (e.g., community forums, CAB meetings, academic/professional conferences), will be completed by each participant via BOX MSWord Online, after they complete a PV and DST workshop. All of the collected and coded material associated with the project will be shredded or deleted 3 years after the end of the study.

Rigor

Our project is still in progress. We continue to take steps to ensure rigor as we transition from an in-person CBPR protocol to a virtual/online protocol. We are pleasantly surprised to find that the shift of the CBPR protocol to an online platform has had some benefits. The Zoom format presents some affordances in terms of potentially addressing two structural circumstances that often provide barriers to community member consistency in participation—namely lack of adequate public transportation and childcare, especially in the context of COVID-19. Participants joining meetings by Zoom do not need to travel to attend a CAB meeting, individual interview, PV or DST workshop, or arrange childcare. Further, we have found that participants have been comfortable in participating in Zoom interviews—perhaps because some have grown used to the online format, but also because they do not need to perform or present in the same way they might feel inclined to do so in an in-person format. For example, Zoom tends to show a person on screen from the chest up, which may cause comfort for individuals who are unsettled by what to do with their hands or feet during in-person meetings. Life-on-Zoom has also meant that one only needs to look presentable from the chest up. We also propose that talking about sexual and reproductive health experiences “at a distance,” via Zoom, may feel safer than doing so in person, which allows a certain level of intimacy in the interview. Zoom has also allowed us to easily obtain high quality audio-recordings of CAB meetings and interviews.

Through Tango, participants have been able to choose an accessible venue from which to receive compensation for their time. Again, in light of COVID-19, Tango has allowed participants to choose where they spend their money and to do so online. Through the BOX system, we have been able to send Zoom recordings directly to BOX, where CITI-trained research assistants have easily accessed recordings for transcription. Being able to conduct CBPR remotely has eliminated some of the traditional barriers faced by participants, such as transportation, childcare, and costs related to renting rooms/facilities and paying for food during research activities.

However, we have also identified some adverse effects of moving to an online platform. Online-based CBPR removes a sense of solidarity in relationship building that is inherent to attending meetings, chatting over coffee and refreshments, participating in group presentations/meetings, and the networking

that often follows those meetings. This sense of solidarity is critical to building trust between community members and researchers (Christopher et al., 2008)—bolstered social dynamics also inform consistent participation. We found that the first CAB meeting was formal and the online format did not facilitate the desired relationship-building effect. However, the individual CAB member interviews did allow more time for a deeper conversation and to form an in-depth connection with the researchers. Despite the convenience of not having to travel, in discussing participants’ experiences with ASRH and related inequities, the online format may preclude their ability to discuss their experiences in a private/confidential setting. Thus, a desirability effect may shape responses based on one’s surroundings. For example, one of the emerging youth CAB members visibly appeared hesitant to respond when asked a question about how gender identity and sexual orientation discrimination may influence ASRH outcomes. They were on Zoom at home with siblings and parents around, which may have influenced their response. Finally, while we have not yet encountered any challenges related to the digital divide (i.e., lack of access to internet, computers, smartphones), we anticipate that we may need to budget for and provide technology and internet hotspots to participants, particularly for the PV and DST project, to ensure their participation in the project.

Conclusion

Corona virus/COVID-19 will continue to exacerbate inequities in marginalized communities at multiple levels. CBPR elevates the voice of communities, builds capacity, connects community members with resources, and increases understanding of their lived experiences. Consideration must be given to minimizing the risk of exposure to the virus for marginalized and hard-to-reach communities, particularly those disproportionately impacted by the pandemic. Shifting to an online/virtual CBPR protocol reduces risk of exposure for CBPR researchers and community members. Further, an online platform expands access to participation by allowing flexible attendance options and eliminating barriers to transportation and childcare. In these uncertain times, it is critical that we find ways to continue to conduct community engaged research, and the transition to an online format may hold unexpected benefits to CBPR and engaging marginalized communities.

Acknowledgments

The authors thank the members of the STRIVE Community Advisory Board for their commitment to communities of color and social justice in Springfield and dedication to the project.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Research

reported in this publication was supported by the Family and Youth Services Bureau in the Administration for Children and Families of the Department of Health and Human Services, grant #1901MASRAE.

ORCID iD

Elizabeth Salerno Valdez  <https://orcid.org/0000-0001-8160-8138>

Supplemental Material

Supplemental material for this article is available online.

References

- Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: Evidence and interventions. *The Lancet*, 389(10077), 1453–1463.
- Baystate Medical Center. (2019). Community health needs assessment on Hampden county. <https://www.baystatehealth.org/-/media/files/about-us/community-programs/community-benefits/2019-community-health-needs-assessments/bmc-2019-chna-report.pdf?la=en>
- Bernard, H. R., & Gery, W. R. (2010). *Analyzing qualitative data: Systematic approaches*. Sage.
- Bradley, E. L., Lanier, Y., Miller, A. M. U., Brawner, B. M., & Sutton, M. Y. (2019). Successfully recruiting black and Hispanic/Latino adolescents for sexually transmitted infection and HIV prevention research. *Journal of Racial and Ethnic Health Disparities*, 7(1), 36–44.
- Christopher, S., Watts, V., McCormick, A. K. H. G., & Young, S. (2008). Building and maintaining trust in a community-based participatory research partnership. *American Journal of Public Health*, 98(8), 1398–1406.
- City of Springfield. (2005). *Analysis of impediments to fair housing*. https://www.springfieldma.gov/planning/fileadmin/community_dev/Fair%20Housing%20AI%20FINAL.pdf
- Corbera, E., Anguelovski, I., Honey-Rosés, J., & Ruiz-Mallén, I. (2020). Academia in the time of COVID-19: Towards an ethics of care. *Planning Theory & Practice*, 21, 1–9.
- Cowger, T. L., Davis, B. A., Etkins, O. S., Makofane, K., Lawrence, J. A., Bassett, M. T., & Krieger, N. (2020). Comparison of weighted and unweighted population data to assess inequities in Coronavirus Disease 2019 by race/ethnicity reported by the US centers for disease control and prevention. *JAMA Network Open*, 3(7), e2016933. <https://doi.org/10.1001/jamanetworkopen.2020.16933>
- Gubrium, A. (2009). Digital storytelling: An emergent method for health promotion research and practice. *Health Promotion Practice*, 10(2), 186–191.
- Gubrium, A., Fiddian-Green, A., Lowe, S., DiFulvio, G., & Del Toro-Mejias, L. (2016). Measuring down: Evaluating digital storytelling as a process for narrative health promotion. *Qualitative Health Research*, 26(13), 1787–1801.
- Gubrium, A., & Turner, K. C. N. (2011). Digital storytelling as an emergent method for social research and practice. In S. N. Hess-Biber (Ed.), *Handbook of emergent technologies in social research* (pp. 469–491). Oxford University Press.
- Israel, B. A., Eng, E., Schulz, A. J., & Parker, E. A. (Eds.). (2012). *Methods for community-based participatory research for health*. John Wiley & Sons
- Jardine, C. G., & James, A. (2012). Youth researching youth: Benefits, limitations and ethical considerations within a participatory research process. *International Journal of Circumpolar Health*, 71(1), 18415.
- Jason, L., & Glenwick, D. (2016). *Handbook of methodological approaches to community based research: Qualitative, quantitative, and mixed methods*. Oxford University press.
- Johns Hopkins Medicine. (2020). COVID-19 dashboard by the center for systems science and engineering. <https://coronavirus.jhu.edu/map.html>
- Kent, D. G., Knapp, D. J., & Kannan, N. (2020). Survey Says: “COVID-19 lockdown hits young faculty and clinical trials”. *Stem Cell Reports*, 15(1), 1–5.
- Le, T. M., & Yu, N. (2020). Sexual and reproductive health challenges facing minority ethnic girls in Vietnam: A photovoice study. *Culture, Health & Sexuality*, 1–19.
- Maglajlic, R. A., & Tiffany, J. (2006). Participatory action research with youth in Bosnia and Herzegovina. *Journal of Community Practice*, 14(1-2), 163–181.
- Malisch, J. L., Harris, B. N., Sherrer, S. M., Lewis, K. A., Shepherd, S. L., McCarthy, P. C., Spott, J. L., Karam, E. P., Moustaid-Moussa, N., Calarco, J. M., Ramalingam, L., Talley, A. E., Cañas-Carrell, J. E., Ardon-Dryer, K., Weiser, D. A., Bernal, X. E., & Deitloff, J. (2020). Opinion: In the wake of COVID-19, academia needs new solutions to ensure gender equity. *Proceedings of the National Academy of Sciences*, 117(27), 15378–15381.
- Mass.gov. (2020). *COVID-10 response reporting*. <https://www.mass.gov/info-details/covid-19-response-reporting# covid-19-daily-dashboard->
- Massachusetts Department of Public Health Bureau of Infectious Disease and Laboratory Sciences. (2018). *2018 Massachusetts HIV/AIDS epidemiologic profile: Regional HIV/AIDS epidemiologic profile of Springfield, Massachusetts*. <https://www.mass.gov/lists/hiv-aids-epidemiologic-profiles#massachusetts-cities->
- Morse, J., & Field, P. A. (1995). *Qualitative research methods for health professionals*. Sage.
- Oppel, R., Gebeloff, K., Lai, R., Wright, W., & Smith, M. (July 5, 2020). The fullest look yet at the racial inequity of corona virus. *New York Times*. <https://www.nytimes.com/interactive/2020/07/05/us/coronavirus-latino-african-americans-cdc-data.html?referringSource=articleShare>
- Palmer, K. N., Barry, V. E. G., Marrero, D. G., McKinney, B. M., Graves, A. N., Winters, C. K., & Hannon, T. S. (2020). Intervention delivery matters: What mothers at high risk for type 2 diabetes want in a diabetes prevention program—Results from a comparative effectiveness trial. *Diabetes Therapy*, 11(10), 2411–2418.
- Shimshock, K. (2008). *Photovoice project organizer and facilitator manual*. <https://deepblue.lib.umich.edu/handle/2027.42/108548>
- Staff Reports, NBC Boston. (June 24, 2020). ‘Total pandemonium’: Report on COVID-19 outbreak at soldiers’ home says staff made many Errors’. <https://www.nbcboston.com/news/local/investigation-into-deadly-coronavirus-outbreak-at-holyoke-soldiers-home-released/2148260/>

- Syvvertsen, J. L. (2020). Sharing research, building possibility: Reflecting on research with men who have sex with men in Kenya. *Human Organization*, 79(2), 83–94.
- Tanjasiri, S., Lew, R., Kuratani, D., Wong, M., & Fu, L. (2011). Using photovoice to assess and promote environmental approaches to tobacco control in AAPI communities. *Health Promotion Practice*, 12(5), 654–665. <https://doi.org/10.1177/1524839910369987>
- Turner Lee, N., (2020, March 17). *What the coronavirus reveals about the digital divide between schools and communities*. Brookings. <https://www.brookings.edu/blog/techtank/2020/03/17/what-the-coronavirus-reveals-about-the-digital-divide-between-schools-and-communities/>
- Valdez, E. S., Korchmaros, J., Sabo, S., Garcia, D. O., Carvajal, S., & Stevens, S. (2019). How the US-Mexico border influences adolescent substance use: Youth participatory action research using photovoice. *International Journal of Drug Policy*, 73, 146–155.
- Vindrola-Padros, C., Chisnall, G., Cooper, S., Dowrick, A., Djellouli, N., Symmons, S. M., Martin, S., Singleton, G., Vanderslott, S., Vera, N., & Johnson, G. A. (2020). Carrying out rapid qualitative research during a pandemic: Emerging lessons from COVID-19. *Qualitative Health Research*, 1049732320951526.
- Wallerstein, N. B., & Duran, B. (2006). Using community-based participatory research to address health disparities. *Health Promotion Practice*, 7(3), 312–323.
- Wang, C., & Burris, M. A. (1994). Empowerment through photo novella: Portraits of participation. *Health Education Quarterly*, 21(2), 171–186.
- Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior*, 24(3), 369–387.
- Wigginton, N. S., Cunningham, R. M., Katz, R. H., Lidstrom, M. E., Moler, K. A., Wirtz, D., & Zuber, M. T. (2020). Moving academic research forward during COVID-19. *Science*, 368(6496), 1190–1192.
- Woolston, C. (2020). Seeking an ‘exit plan’ for leaving academia amid coronavirus worries. *Nature*, 583(7817), 645–646.
- World Health Organization. (2020). *Coronavirus disease (COVID-19) advice for the public*. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>