



Presenting Methodological Resilience for Conducting Research with Vulnerable Populations During Current and Future Pandemics: A Case Study with IPV Shelters and Survivors in the United States

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Abstract

Purpose In this brief report, we highlight the challenges that we experienced while attempting to conduct primary data collection with intimate partner violence (IPV) survivors living in an IPV emergency shelter throughout the prolonged COVID-19 pandemic and our strategies to overcome them.

Method In the summer of 2021, we began collecting data on a study investigating maternal-child bonding while living in IPV emergency shelters. We proposed a 14-day electronic daily diary methodology with follow-up semi-structured interview. The purpose of the study was to understand what factors affect maternal-child bonding to support survivors' relationships with their children while living in an emergency shelter.

Results We encountered two global obstacles to study implementation: the Institutional Review Board (IRB) pausing in-person data collection and low IPV shelter utilization. In what we term methodological resilience, we engaged in innovative and flexible team work to overcome these barriers. Specific strategies centered on creating an entirely remote data collection process and expanding our geographic area and participant eligibility criteria.

Conclusions Implications for researchers include greater communication with IRB offices, planning for multi-state recruitment, triangulated recruitment methods, reminder texts for participants and incremental incentives to ensure continued engagement with the study.

Keywords Intimate partner violence · IPV · Participant recruitment · Research methods · COVID-19

The COVID-19 pandemic, which began at the end of 2019, has now become a prolonged public health crisis, and over one million people have died from COVID-19 in the U.S. (Johns Hopkins University and Medicine Coronavirus Resource, 2022). Research conducted during the start of the COVID-19 pandemic found an escalation in violence, with some fatal outcomes for people whose lives were entrenched with intimate partner violence (IPV) (Boserup et al., 2020). Scholars have referred to the increase in IPV during the COVID-19 pandemic as a “pandemic within a pandemic” (Evans et al., 2020), while other researchers have coined the phrase “twin pandemics” to reference IPV and COVID-19 (Dlamini, 2021).

IPV is conceptualized as any sexual or physical violent act including psychological aggression with coercive behavior and stalking by a former or present dating partner, boyfriend or girlfriend, current sexual partner, or spouse (Breiding et al., 2015). Past research on the prevalence of IPV during public health emergencies and disasters indicate that IPV risk increases (First et al., 2022; Medzhitova et al., 2022). Based on evidence from the local, state, and national official reports, research indicates an increase in rates of IPV due to the initial lockdown and stay-at-home orders that were implemented at the start of the pandemic (Boserup et al., 2020; McNeil et al., 2022; Piquero et al., 2021).

The COVID-19 pandemic has prompted higher unemployment rates, lack of income, low social support, isolation, and changes in childcare and school, which are all stressors associated with a higher likelihood of IPV (Campbell, 2020; Davis et al., 2020; Moreira & Pinto de Costa, 2020; Ravi et al., 2021). Peitzmeier and colleagues (2022) identified possible factors related to an increase in

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IPV cases during the pandemic as economic insecurity and unemployment as this could create financial hardships which have been associated with IPV. Similarly, McNeil et al. (2022) found preliminary results revealed a correlation between COVID-19-related stressors, pre-existing vulnerabilities, and IPV.

Methods utilized to control the spread of COVID-19 during the pandemic may be related to higher rates of IPV (Peitzmeier et al., 2022). Furthermore, the lockdown orders might have also created new obstacles for IPV survivors to leave their abusive partners, as residing under the same roof during a mandatory stay at home order may have narrowed the opportunities for survivors to seek help due to abusers monitoring their daily interactions (Peitzmeier et al., 2022). It is important to emphasize that despite correlations between IPV and COVID-19 related stressors, IPV is rooted in power and control and the use of coercive tactics by abusive partners (Stark, 2009). Further, research also demonstrates that some abusive partners may have used the COVID-19 pandemic as a form of coercion or control (Godin, 2020).

Existing studies found a dramatic increase in IPV service calls to police departments and sheriff's offices in the U.S. (Boserup et al., Nix & Richards, 2021). In addition to an increase in 911 calls for IPV, Sorenson and colleagues (Sorenson et al., 2021) found that the stay-at-home orders were correlated with a progressive increase in IPV hotline calls (Sorenson et al., 2021). Other studies have indicated a decrease in IPV service utilization (McLay, 2021; Nix & Richards, 2021). Extant research has examined potential reasons for the decrease in service utilization, including that IPV survivors avoided seeking shelter due to the fear of themselves or their children contacting COVID-19 (Campbell et al., 2022; Godin, 2022). Social distancing requirements on public transportation early in the pandemic also contributed to survivors' challenges with seeking IPV services (Engleton et al., 2022; Gkiotsalitis & Cats, 2021; Voth Schrag et al., 2021). Additionally, researchers have noted that during the COVID-19 pandemic several IPV shelters closed or restricted the number of shelter residents they would accept in order to adhere to social distancing guidelines, which influenced the amount of safe housing and access to resources for help seeking available to IPV survivors (Campbell et al., 2022; Wood et al., 2022).

Existing empirical information about the impact of COVID-19 on IPV survivors and survivors is complicated by altered regulatory and compliance conditions during the pandemic (FDA, 2020; NIH, 2020; Office of Human Research Protections, 2020; Stiles et al., 2022). Lock-down orders in the U.S. starting in March 2020 meant that all in-person human subjects research was immediately halted, and changes to existing research protocols were stymied by foundational research ethics related to confidentiality

and privacy of participants (Lynch et al., 2020; Meagher et al., 2020). Institutional Review Board (IRB) offices and regulatory bodies were grappling with how to balance the protection of human subjects with the public health exigencies of COVID-19 (Lynch et al., 2020), and there was a call to accelerate pandemic-related research and trials that had maximum impact on public health while pausing research with less immediate benefit or direct implications (Meagher et al., 2020). In addition, the process of initiating studies and recruiting subjects was unclear as IRB offices in the United States faced new realities and unclear protocols such as what was considered to be a "direct benefit for participants" which is a subjective assessment with the potential to change over the duration of the study (Stiles et al., 2022, p.52). As Lynch and colleagues (Lynch et al., 2020) note, vulnerable populations in research, e.g., persons incarcerated and women who are pregnant, were at heightened risk for infection, as well as severity and negative consequences, in the context of COVID-19 research disruptions.

Researchers quickly identified a new regulatory for flexibility in these altered conditions (Lynch et al., 2020), and some institutions within the United States adapted by hosting more frequent IRB meetings to streamline reviews, coordinating with federal funding agencies, facilitating administrative extensions and supplements for researchers, and prioritizing communication about the emerging regulatory conditions (Stiles et al., 2022). Other provisions, such as FDA guidance (2020) on remote informed consent through newly created apps when in-person is not possible, have also helped. Ironically, though, COVID-19 disrupted biomedical clinical trial research for individuals experiencing health disparities and underlying conditions, and potentially exacerbated social and economic disparities in long-term knowledge accumulation, as well as undermined public trust in medicine and science (Meagher et al., 2020). The above factors may be particularly relevant to research with IPV survivors and agencies serving them who have a long history of being highly protective of their clients, even before the pandemic due to concerns that researchers will re-traumatize their clients or compromise their safety (Gandolf et al., 1997; Edleson & Bible, 2001). To our knowledge, no IPV-related publications have researched the impact of COVID-19 on recruitment and in-person data collection within the context of IPV emergency shelters in the United States.

In this brief report, we use a case study based on our experiences conducting research among IPV survivors living in IPV emergency shelters during COVID-19. We highlight the challenges that we encountered while attempting to conduct primary data collection with this population, and our strategies to overcome the challenges. We characterize our example as methodological resilience in that we encountered obstacles and overcame them. We encountered two global obstacles: the IRB pausing in-person data collection and low

IPV shelter utilization. We discuss four strategies that we implemented to address the challenges we experienced. We conclude with implications for social work research.

Overview of the Case Study

The referenced study was designed to explore maternal-child bonding while living in an IPV emergency shelter, using a 14-day daily diary methodology based on an ecological momentary assessment (EMA) design (Bolger & Laurenceau, 2013). The study was designed to answer the following primary research questions: “What activities within the daily environment of a DV emergency shelter affect maternal-child bonding?” and “How can shelter staff best to support survivors’ relationships with their children in this context?” While the research team recognized that longitudinal daily data collection is more challenging than cross-sectional designs, even outside of pandemic situations, they determined that EMA was the most appropriate design to answer the research questions, and thus persevered with this approach. EMA is unique in that it generates daily data from participants in natural settings, thereby reducing recall bias while showing variability in daily behaviors over time. Daily diaries are common method for collecting EMA data, and in order to streamline data collection and storage, the research team administered the daily diaries via an online survey accessed via a tablet or a link texted directly to participants’ cell phones.

After obtaining IRB approval, we recruited mothers from an IPV emergency shelter in the Southeastern United States. English speaking mothers who were 18 and older with children between the ages of 2–17 living with them in the emergency shelter were eligible to participate. Mothers received a \$10 Walmart e-gift card for each day they completed their daily diary as a “thank you” for their time and had the opportunity to complete a follow-up phone or Zoom interview for which they were provided an additional \$20 Walmart e-gift card.

Challenges and Solutions

Challenge: IRB Paused In-person Recruitment We began the IRB approval process in January 2021. During this time, the IRB was still prohibiting in-person recruitment. The denial of in-person recruitment provided a challenge since, before COVID-19, it was common to recruit participants and collect data in person.

Strategy 1: Create a Fully Remote Consent and Data Collection Process To address this challenge, we created an IRB-approved fully remote consent and data collection process

through tablets. We established this data collection procedure in collaboration with the shelter leadership and direct staff to ensure feasibility and the least burden on the shelter staff. A master’s level graduate research assistant (GRA) worked with the principal investigator (PI; first author) to configure the Kindle Fire tablets. The GRA set up two profiles on the tablet. One to be used by the study participant and one by the research team to control the settings. The PI loaded the Qualtrics links to the informed consent survey, background survey, and daily diary onto each tablet. Each profile had a separate password, and participants only had access to the participant profile.

The informed consent process consisted of shelter advocates providing the study flyers to mothers and instructing them to call or text the PI to express their interest in participating in the research study. The PI asked mothers who sent a text to provide a time when they were available for a brief phone call to discuss the study. During the call, the PI or another member of the research team spoke with each mother, briefly explained the study, and screened the mother for eligibility. If the mother was eligible to participate, the research team scheduled a Zoom meeting with the mother. The mother was asked to obtain a tablet and a copy of the informed consent document from the shelter’s front desk before the Zoom meeting. The mothers were informed that they and their children could use any of the pre-downloaded apps but could not download any additional content or access the camera to ensure the safety and privacy of the shelter’s residents. During the Zoom meeting, mothers completed the informed consent process and a background survey and were provided training on using the tablet for the study.

After the research team member showed the participant how to access the informed consent survey on the tablet, she then reviewed the informed consent document with the mother and answered any questions. The research team created a separate Qualtrics survey for the informed consent document that required the participants to sign their names and complete the question that asked them if they agreed to participate. The informed consent survey included a question that asked the participant to provide their phone number and email address along with their assigned research identification number.

After the research team member confirmed that the consent form survey was saved in Qualtrics, the participant opened the background survey on the tablet. The background survey included questions related to types of IPV participants experienced, physical health and mental health questions, social support, and feelings about parenting. Participants completed the background survey independently while the research team member waited on Zoom and was available for any questions the participant had during the survey completion.

Once the participant completed the background survey, the research team member informed the participant that the third icon on the tablet was the link to the daily diary that would be completed daily. The participant was told by the research team member that if she agreed in the consent form to receive daily reminder texts, a member of the research team would text her that evening to remind her to complete her daily diary.

Qualitative Interviews

The study included the opportunity for participants to complete a voluntary semi-structured follow-up interview upon completion of the daily diary surveys over the course of 14 days. The interviews were conducted over Zoom through a Health Insurance Portability and Accountability Act (HIPAA) compliant Zoom website link through the university. Participants received a \$20 Walmart gift card as a “thank you”. Each of the interviews were audio recorded and saved to a secure and encrypted location to generate a recording and transcription. Once the recordings and transcriptions were collected, the previously saved recording was deleted in an effort to protect the confidentiality and privacy of participants. The interview guide included a total of six main questions with 2–3 prompts and probing questions for each focus question. These topics included daily routine changes, children’s school or virtual learning, errands, relationship and interactions with children, interactions with shelter staff, stressors, daily activities, feeling supported, connections with family or friends, COVID-19 or the pandemic, and stress and well-being outcomes.

In general, each of the interviews lasted about 20 min or more in length. Upon completion of the interview, once the Zoom recording was stopped, each participant was allowed the opportunity to debrief or discuss anything they may have felt was necessary from the interview. The debriefing process allowed each participant and the researcher to engage in discussion to ensure that nothing in the interview process caused undue psychological, emotional, or physical harm for the participant (Creswell & Poth, 2018).

Challenge: Low Shelter Utilization

Throughout the recruitment process the PI relied on community relationships to recruit participants. The PI emailed the shelter leadership to thank them for their ongoing support and inquire if any additional mothers were in the shelter. The shelter leadership conveyed to the research team that fewer mothers with children were utilizing the shelter than before the COVID-19 pandemic. The leadership team also

informed the research team that they had several Spanish-speaking mothers with children at the shelter.

Strategy 2: Expand to Transitional Housing As stated previously, our study was limited to mothers living in an emergency shelter. Upon the IRB approval, we expanded the eligibility criteria to include mothers in the transitional housing program at the IPV agency. We recognized the benefit of expanding the study to mothers in the transitional housing program. Including mothers in the transitional housing program provided a larger sample and potential variation in the experiences based on whether the mother is living at the emergency shelter or in transitional housing. Recognizing the potential for different experiences of mothers related to the context of transitional housing compared to emergency shelters, we coded the data collected from mothers in transitional housing uniquely so that we are able to conduct both within and between site analyses which is central in multisite case studies (Jenkins et al., 2018; Yin, 1994).

Strategy 3: Expand Across and Outside of the State In addition to expanding the transitional housing program locally, we also expanded to include mothers across the state and another southern state who resided in an IPV emergency shelter or transitional housing. The first author had prior experience collaborating with the IPV agencies in the different states during COVID-19 and the COVID-19 policies were similar in each state. When engaging in multisite research, scholars must consider how public health and other policies may vary by state and county.

To expand locally, we provided information about the study in the local IPV community crisis response (CCR) e-newsletter circulated to IPV providers in the county. Additionally, we presented the study at a monthly CCR meeting attended by IPV service providers across the county. As a result of these efforts, we connected with another IPV agency to serve as a recruitment partner. We also contacted the state IPV coalition and asked that they disseminate information about the study statewide.

Since our research was tablet-based, we amended the procedures, which were approved by the IRB. Participants in the off-site transitional housing program or receiving services through the additional IPV agency would access the study materials through an electronic link provided by the study team. The rest of the procedures remained the same, with the mothers contacting the research team and attending a Zoom call to enroll in the study. To our knowledge, this study modification did not create a barrier for women who wanted to participate but lacked access to an electronic device.

Strategy 4: Broaden Eligibility for Spanish-Speaking Mothers We received feedback from one of our community partners that they had several Spanish-speaking mothers

living at the emergency shelter. We expanded our eligibility criteria to include Spanish-speaking mothers with children living in the shelter with IRB approval. To include Spanish-speaking mothers, we began by hiring a Spanish-speaking social work practitioner and two Spanish-speaking social work students to aid in translation of all study materials. As is often typical in research with immigrant communities, each document was translated into Spanish by one individual, then back-translated into English by a second translator (Sousa & Rojjanasrirat, 2011; Tyupa, 2011). The back-translation process is completed to ensure that the Spanish version retains the original meaning when reviewed by a second translator. All materials were then reviewed by a certified Spanish medical interpreter (one of the social work students) for accuracy. This third translator suggested a small number of revisions to wording. Because the translators in this study were not native Spanish speakers, a research team member contacted two native speakers to provide input on the suggested changes, so that a native speaker could select the final wording. We employed this iterative process toward the goal of ensuring that all study materials would be understood by participants from various Spanish-speaking nations among which terms and phrases can differ (Kamla & Komori, 2018; Pena, 2007; Regmi et al., 2010).

Discussion

Our experiences highlight broader recommendations for social scientists recruiting hard-to-reach and vulnerable populations (e.g., lower-income older adults, persons experiencing homelessness, formerly incarcerated individuals, and youth aging out of the foster care system) in the context of socially disruptive events like pandemics or natural or manmade disasters, which lead to breakdowns of infrastructure and social systems. Common characteristics such as the digital divide (Blomberg et al., 2021; Rhoades et al., 2017), limited mobility (Fields et al., 2019; Hustlage et al., 2022), and fewer social networks (Watson et al., 2016), as well as a desire to eschew traditional social service systems (Cronley, 2020), have always posed challenges to participant recruitment and engagement with vulnerable populations, but COVID-19 exacerbated the challenges. Vulnerable populations were less accessible via electronic communications, while also experiencing disparately poor health outcomes due to COVID-19 (Connolly et al., 2022). Therefore, it was more important than ever to maintain and expand research with vulnerable populations (Webber-Ritchey et al., 2020), but the CDC guidelines around social distancing created additional policy and practice barriers. Unfortunately, these barriers could have had unintended consequences of perpetuating the under-representation of vulnerable populations

in samples and a tendency to avoid these populations in scientific endeavors, solely for practical purposes.

Within higher education and research oversight bodies, the focus during COVID-19 shifted to how to support non-in-person recruitment while maintaining regulatory compliance. While IRB offices and federal compliance rules showed some flexibility, they focused on vulnerabilities for biomedical research and COVID-19 patients (Meagher et al., 2020; U.S. Department of Health and Human Services, 2020). In our experience, while the IRB erred on the side of caution as a means of protecting participants and maintaining public health best practices, scant attention was paid to non-COVID-19 subjects and how some of the policies implemented to protect public health actually blocked access to populations hard-to-reach populations.

Globally, the need for researchers to develop methodological resilience may be critical for human-subjects research success in this new era of more frequent socially disruptive events. Methodological resilience means that researchers and institutions have plans for such events and can overcome future challenges through nimble thinking and innovation, and enhanced communication and cooperation. One implication of our experience is that for social science to withstand future pandemics, we need greater communication and education with IRB offices about vulnerable populations. Advocacy from unit-level researcher administrators, such as associate deans for research, may help IRB offices to plan for future scenarios and have flexible policies in place in the context of widespread disruptive events, such as pandemics or natural or man-made disasters. Specifically, one critical recommendation is that IRB offices utilize equity-driven policy making and understand that different populations will have different levels of accessibility. Mitigation plans could help maintain access to populations out-of-reach through virtual communications. As we note below, working with community partners may be essential to accessing vulnerable populations, and doing so requires flexibility around protocol and implementation.

For example, we found that we had to triangulate recruitment methods. We were only able to recruit through in-person events at limited times at local agencies, and not at all with our out-of-state partners, and so, more importantly in the context of COVID-19 and social distancing, we relied heavily on case managers to pass along the information. When disruptive events occur and social distancing or other mechanisms make research participant access more difficult, leveraging strong relationships with community partners enables researchers to rely on the non-university entities to disseminate the research. However, for this to work well, IRB offices need to recognize that community partners may not always follow approved scripts verbatim and cannot offer predictable timing for when communications may occur. Trusting community

partners and building robust communication across community partners, research PIs, and IRB offices is a highly recommended strategy for methodological resilience as societies face future disruptions.

Moreover, when considering how to recruit, we encourage researchers to plan for more inclusive strategies that will support participation among Spanish-speaking individuals (and other persons with limited English proficiency, as applicable to the study site) and plan, to the extent possible, to offer the same in-person recruitment through Spanish-speaking team members. Also, survivors may not have access to electronic devices in transitional housing (Ravi et al., 2021); it is imperative to query case managers to assess for survivor connectivity.

In our experience, another strategy for methodological resilience is to plan for multi-site recruitment. Not only does this approach maximize recruitment numbers, but it also assists in generating more generalizable research. We recommend this approach with some caution, though. It is important to consider how different sites may affect data and whether implementing statistical or other methodological controls is necessary. Taking this step could be as simple as adding a variable for each site to statistical models, employing randomized, quota sample designs, or utilizing multi-level models to account for shared variance across subjects within sites.

For qualitative studies, a multiple case study method could be beneficial since this approach includes both within and between site analysis (Jenkins et al., 2018). Moreover, other qualitative methodologists have offered strategies for conducting research in the context of social disruptions that include, more variability in interview structure, acknowledging researcher emotion, tracking thoughts and emotions, pacing work, and engaging in self-care (Webber-Ritchey et al., 2020).

Finally, we found that all participants, and probably most mothers leaving abusive relationships, were busy dealing with very complicated life situations, and it is possible that COVID-19 introduced new stressors to their lives. Given our research experience in this area, we anticipated that mothers could easily forget to complete the daily diary, even with knowledge of the compensation. Thus, we had planned a priori for the daily text reminders, but observed ad hoc that the daily text messages to the participants and incremental daily incentives seemed essential to engaging and retaining the participants in the study and ensuring minimally missing data. This recommendation is based on our anecdotal experiences as researchers, but also poses an interesting empirical question that could be explored more systematically. Specifically, testing the extent to which the daily text messages and incremental compensation affected study engagement and data quality and how frequently such engagement is necessary would be worthwhile. For example, would it have made

a difference if we texted participants weekly or bi-weekly rather than daily?

Limitations

Several limitations must be considered. First, we conducted our study in the Southeastern United States which limits knowledge of experiences outside of this region. The state and local COVID-19 policies of the Southeastern U.S. that impacted our research may not be generalizable to other areas of the U.S. and countries with differing COVID-19 policies. Thus, it is possible that other areas of the U.S. and other countries may have had different experiences conducting research with survivors of IPV during the COVID-19. Second, our experience was limited to one university IRB. Researchers located within various academic institutions across the U.S. and internationally may report different experiences conducting IPV research during the COVID-19 pandemic. As such, it is possible that the strategies we suggested may not be effective in other contexts because the barriers may be different in other areas of the U.S. and in different countries. Similarly, since our experiences are limited to one IRB in a U.S. academic institution in the Southeast, there is a possibility that our experiences are not generalizable to other IRBs domestically or internationally. Future research should include experiences and recommendations from other geographic locations and academic institutions within the U.S. and internationally.

Conclusion

Although we experienced new and exacerbated challenges conducting research with survivors of IPV due to COVID-19, we were able to implement strategies to continue meaningful research. Our strategies included consistent engagement with community partners, triangulating recruitment methods, and expanding our eligibility criteria to include mothers in transitional housing and Spanish speaking mothers. We hope that this discussion of methodological resilience and these strategies will be beneficial for other scholars who are engaging in research with survivors of IPV and other vulnerable populations during the COVID-19 pandemic and future disruptive events.

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Declarations

Conflicts of Interest We do not have any conflicts of interest to disclose.

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