Ethical Considerations for Qualitative Research Methods During the COVID-19 Pandemic and Other Emergency Situations: Navigating the Virtual Field

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Abstract
Qualitative research is integral to the pandemic response. Qualitative methods are ideally suited to generating evidence to inform tailored, culturally appropriate approaches to COVID-19, and to meaningfully engaging diverse individuals and communities in response to the pandemic. In this paper, we discuss core ethical and methodological considerations in the design and implementation of qualitative research in the COVID-19 era, and in pivoting to virtual methods—online interviews and focus groups; internet-based archival research and netnography, including social media; participatory video methods, including photo elicitation and digital storytelling; collaborative autoethnography; and community-based participatory research. We identify, describe, and critically evaluate measures to address core ethical challenges around informed consent, privacy and confidentiality, compensation, online access to research participation, and access to resources during a pandemic. Online methods need not be considered unilaterally riskier than in-person data collection; however, they are clearly not the same as in-person engagement and require thoughtful, reflexive, and deliberative approaches in order to identify and mitigate potential and dynamically evolving risks. Ensuring the ethical conduct of research with marginalized and vulnerable populations is foundational to building evidence and developing culturally competent and structurally informed approaches to promote equity, health, and well-being during and after the pandemic. Our analysis offers methodological, ethical, and practical guidance in the COVID-19 pandemic and considerations for research conducted amid future pandemics and emergency situations.

Keywords
research ethics, online research methods, COVID-19, qualitative research, data collection, social media, informed consent, marginalized populations

Introduction
Qualitative modes of inquiry are essential to designing and implementing effective and inclusive responses to the COVID-19 pandemic and future emergency situations. As public health recommended (PHR) behavioral measures remain essential to controlling the pandemic amid emerging virus variants of concern (WHO, 2021), investigations that aim to explore and understand knowledge, attitudes, beliefs, and structural factors that impede support these measures are crucial. Importantly, the ability to implement PHR behaviors (e.g., physical distancing and working from home) is impacted by a host of individual, social, and structural vulnerabilities (Drabble & Eliason, 2021; Wrigley-Field, 2020; Yancy, 2020)—as is access to COVID-19 vaccination (Burgess et al., 2021). These vulnerabilities and related adverse social determinants of health place marginalized populations,
such as ethnic and racial minorities (Wrigley-Field, 2020; Yancy, 2020), LGBTQ+ populations (Drabble & Eliason, 2021), particularly transgender and gender non-binary individuals (Chakrapani et al., 2021; Kidd et al., 2021), and those with intersectional marginalized identities (e.g., Black and transgender) (Kline, 2020; Linnemayr et al., 2020), at heightened risk in the pandemic.

Qualitative modes of inquiry are especially valuable for understanding and promoting health and well-being, and mitigating risk, among populations most vulnerable in the pandemic (Teti et al., 2020). However, the implementation of qualitative studies, as with any social research (Doerr & Wagner, 2020), demands careful planning and continuous evaluation in the context of research ethics in a pandemic. In response to broad restrictions on social and behavioral health research during lockdowns, this paper considers the imperative of qualitative research in a pandemic and offers practical guidance for ethically pivoting to and implementing online methods in response to changing realities. Our approach recognizes the need to learn lessons from the current COVID-19 pandemic for use in future pandemics and other emergencies anticipated in relation to climate change (O’Callaghan-Gordo & Antó, 2020).

In this article, we draw on our decades of collective experience conducting social and behavioral research with marginalized and vulnerable communities, with a focus on sexual-, gender-, and racialized-minority status and their intersections. Our analysis is informed by our expertise in clinical, public health, and research ethics, and experiences conducting qualitative and mixed methods research throughout the pandemic. In what follows, we first provide background on the imperative of qualitative research in the pandemic, followed by a discussion of pandemic-related ethical regulations, and core research ethics considerations around informed consent and confidentiality in pivoting to online research.

The Imperative of Qualitative Research in the Pandemic—A Public Health Ethics and Social Justice View

Pandemic response planning tends to be conducted and normed on dominant/majority populations without input from those who may be differentially impacted by COVID-19 (Newman & Guta, 2020; O’Sullivan & Phillips, 2019). An approach rooted in public health ethics and social justice considers individual needs in relation to communal needs and the disproportionate impact of public health measures on marginalized and vulnerable communities (Bayer et al., 2006; Kass, 2001). This perspective has attained a new urgency in the context of COVID-19 (French et al., 2020).

We understand marginalization as systemic processes through which certain populations are excluded or relegated to the periphery of political and socioeconomic resources (Baah et al., 2019; Sharma, 2014)—not an inherent feature of a population. Marginalization, perpetuated by ideologies such as racism, sexism, and heterosexism, is associated with structural and social inequalities (e.g., residential segregation, disparities in employment and income, and lack of access to affordable healthcare), which increase vulnerability to poor health outcomes (Baah et al., 2019). From the perspective of research ethics, certain populations may also be inherently vulnerable, such as children or older adults, though not necessarily subject to marginalization (CIOMS, 2016; ten Have, 2015).

Qualitative investigations can uniquely delve into the lived experiences of adverse social determinants of health among ethnорacially, sexually, and/or gender diverse communities and their intersections (Abrams et al., 2020; Reid & Ritholtz, 2020). Qualitative studies can explore the impact of risk, as well as culturally situated resources and resiliencies that protect individuals, families, and communities, such as among Black COVID-19 patients in the US (Aliyu et al., 2021). Qualitative approaches can also catalyze individual and community resilience and effective social and public health responses during the pandemic (Bateman et al., 2021). Meaningful engagement with marginalized and vulnerable communities is essential to the development of culturally competent approaches to promote prevention and provide support amid the pandemic.

Qualitative methods enable in-depth exploration of individual and community experiences and perspectives. Recent work has used exploratory interviews to elicit experiences of older transgender adults in India (Banerjee & Rao, 2021), and Latinx trans women and sexual minority men in the United States (US) (Linnemayr et al., 2020) during the pandemic. Qualitative studies can serve as local standalone projects, pilot work for larger national qualitative studies, first steps in mixed methods designs to inform a survey or post-survey explorations to better understand findings, components of an intervention or implementation study, or as the social science arm of longitudinal surveys or large-scale clinical trials.

A further advantage of many qualitative methods is their congruence with community-based and participatory approaches. For example, a community-based participatory research project to promote sexual and reproductive health with youth from low-income Black and Latinx families in a US community disproportionally impacted by COVID-19, pivoted online during the pandemic to maintain community engagement, continuing community advisory board meetings and individual interviews via Zoom (Valdez & Gubrium, 2020). In addition to supporting culturally appropriate knowledge and outcomes, these collaborative processes can themselves exert salutogenic effects. Qualitative modes of inquiry can be used to mobilize “expert” and community knowledge in “evidence-making” practices wherein evidence and interventions are approached as “engaged and relational processes” (Lancaster & Rhodes, 2020). Researchers can integrate such collaborative practices in approaching qualitative research, particularly with
marginalized populations, as a transformative process; this promotes “catalytic validity” by empowering participants and advancing knowledge mobilization (Baines, 2007; Pillow, 2003).

Following our discussion and examples of the importance of qualitative research in a pandemic, we next consider how researchers can ethically pivot to online research to meet complex and sometimes competing ethical concerns.

**Ethical Regulations in a Pandemic**

In highlighting the importance of qualitative research in a pandemic, it is crucial to foreground and anticipate potential risks and appropriate responses in order to support safe and ethical practices with research participants. These considerations can also assist investigators in developing ethics protocols and navigating ethics reviews. The International Compilation of Human Research Standards (U.S. Department of Health and Human Services, 2020, p. 1) “enumerates over 1,000 laws, regulations, and guidelines (collectively referred to as ‘standards’) that govern human subject protections in 133 countries, as well as standards from a number of international and regional organizations.” As researchers working or funded in the Canadian context, and subject to the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (CIHR, 2018), we have been asked to consider new risks which have emerged as a result of the pandemic. These include risks from moving research online and “changes in risk levels arising from changes to the participant’s personal circumstances” (Government of Canada, 2020, Article 6.21).

In the initial response to COVID-19, many research institutions, including our respective universities, paused social and behavioral research deemed non-essential in response to PHR measures. To our knowledge, there is no unilateral definition of “essential research” in a pandemic; and this is even less well-defined in the domain of social and behavioral health. In our experience, some non-COVID-19 research was permitted to continue due to funder requirements, and if the data could be collected safely. However, existing research relying on traditional face-to-face methods could not be implemented or had to be suspended, and new protocols would not be reviewed. This required many researchers, including ourselves, to pivot online to meet public health recommendations for physical distancing requirements.

Qualitative research, both research in process and new projects, requires careful ethical evaluation of procedures, risks, and benefits in the pandemic (e.g., site selection, sampling, recruitment, data collection, interventions, and knowledge translation). Moreover, this is a dynamic process. As described in the context of disaster-related research projects (Browne & Peek, 2014), one can only anticipate with a modicum of certainty the ethical concerns that may arise throughout the lifecycle of a pandemic. Beyond initial protocols for gaining Institutional Review Board (IRB)/Research Ethics Board (REB) approvals, researchers are advised to engage in thoughtful and principled consideration as the pandemic evolves. For example, various cities and states/provinces in the US and Canada, as well as in Asia, have experienced multiple waves of lockdowns due to resurgences in new COVID-19 cases. Resumed or newly started research activities again became subject to sometimes immediate discontinuation of face-to-face activities.

Nevertheless, to reflexively deem all qualitative research non-essential or low-priority due to pandemic-related risks entails other perhaps more profound risks. By eliding diverse community perspectives and eschewing community engagement, we risk abdicating local needs and evidence, participatory processes, and knowledge mobilization, which are hallmarks of qualitative research. Collectively, these are crucial to expanding and diversifying culturally situated pandemic responses—during COVID-19 and for future pandemics and other emergencies.

**Research Ethics in a Pandemic**

Several recent studies and commentaries have described virtual modes of research and data collection that may move forward in the pandemic; to a limited extent, these have included qualitative methodologies (Lobe et al., 2020; Marhefka et al., 2020). Research conducted in a pandemic needs to consider alternate site and participant recruitment procedures, with many people remaining at home, workplaces sparsely attended, and schools closed, as well as demands on people’s time amid life stressors and responsibilities in the pandemic (Ravitch, 2020). Data collection methods generally aligned with qualitative approaches require thoughtful and intentional planning to support validity and transferability when undertaken online (Ravitch & Carl, 2020). Traditional expectations and approaches to methodological rigor and trustworthiness (Guba & Lincoln, 1989; Mays & Pope, 1995)—such as extended contact in ethnography or prolonged engagement (Padgett, 2014)—may need to be suspended or adapted to privilege safety considerations and mitigate risks in a pandemic. Various studies, including in-process doctoral research, may need to be redesigned, and faculty supervisors, funders, and reviewers will need to be flexible in response to deviations from initial research protocols.

The implementation of qualitative data collection methods online has been explored and described well before COVID-19. This includes online interviews and focus groups, both synchronous and asynchronous (Clark, 2017; Morgan & Lobe, 2010); archival research, including the use of social media (“netnography,” internet content analysis) and other forms of ethnography for the internet (Hine, 2015; Kozinets, 2015; Roy & Uekusa, 2020); and participatory visual methodologies, such as photovoice, digital storytelling, and “cellphilm” (MacEntee et al., 2021; Mitchell & Sommer, 2016). These varied online methods provide opportunities for conducting new research and revising existing projects. The effectiveness of platforms like Zoom, Microsoft Teams, and others for conducting interviews or focus groups has been described in several publications (e.g., Archibald et al., 2019;
Daniels et al., 2019), along with initial considerations about associated risks (Lobe, et al., 2020). Some researchers have suggested that online platforms can nearly replicate in-person interactions, sometimes providing more substantial engagement than in-person data collection (Marhefka et al., 2020). In the context of numerous possibilities and even advantages to using online platforms, along with potential risks, virtual field research methods need to be carefully considered and planned, both from ethical and logistical standpoints.

Informed Consent

Informed consent is an internationally recognized ethical requirement, necessitating that research participants are advised of all relevant aspects of the research—especially any potential risks to them—as a pre-condition of providing consent to participate (CIOMS, 2016). Considerable debate surrounds what constitutes adequate information, who is capable of providing consent (e.g., people under the influence of drugs and prisoners), and how consent should be obtained and comprehension assessed (e.g., checklists and open-ended measures), including in research conducted across cultures (Lindegger et al., 2006; Wynn & Israel, 2018). Some ethics boards, including those with which the authors have worked, have eliminated requirements for signed consent forms in certain situations, mainly to protect participants. This serves to mitigate risks to individuals who may be speaking about sensitive issues or proscribed behaviors, such as illicit drug use or HIV risk, which are criminalized in many settings (Newman, 2006). Yet, signed consent forms remain the “gold standard” for social and behavioral research in many jurisdictions (Lindegger et al., 2006; Marshall, 2006; Wynn & Israel, 2018).

Contractual approaches to obtaining consent (i.e., “please sign here”) have been criticized for being antithetical to the relational and emergent nature of qualitative research (Kaiser, 2009; Richards & Schwartz, 2002; Wynn & Israel, 2018). For example, interviews may unfold in directions which neither the researcher nor participant expected (“I did not think I’d share this”), and interpersonal dynamics in focus groups can create unexpected synergies and conflicts (Wynn & Israel, 2018). Contractual approaches may also be socio-culturally inappropriate. For example, some Indigenous peoples and other exploited populations have oral and practice-based customs for engagement and painful histories vis-a-vis contracts (Newman et al., 2015; Slack et al., 2016; von der Porten, 2012).

Informed Consent in a Pandemic Context

Pandemic situations raise further questions about the need for written consent, which may create additional risks for research participants. Requiring forms to be printed and signed may increase the chances of an individual’s participation being discovered by family or roommates (CIOMS, 2016). For example, LGBTQ+ youth who are not out to their parents have been forced to move back into sometimes hostile family homes due to pandemic-related job loss (The Trevor Project, 2021). A signed consent form creates a paper trail that increases the chances of unintended disclosure, which may exacerbate their risks of harassment and violence (Salerno et al., 2020). Such requirements may also pose barriers for those who do not own a home computer—disproportionately people of color (Perrin & Turner, 2017). Most participants also will not have e-signatures outside of professional settings, and some will not want to use them. Digital signed consent creates an unnecessary data trail that can be used to link participants back to the researcher and to their work setting.

Clearly, informed consent remains paramount during a pandemic. However, we propose an approach that reflects the nature and risks of the research, the methods, data collection platform—such as telephone, digital audio, or digital video—and the emergency context.

Amid a global pandemic, we recognize all potential participants as vulnerable, more so those impacted by egregious disparities due to marginalization. Various forms of marginalization on the basis of race/ethnicity and sexual and gender minority status, and their intersections, have been amplified in the context of COVID-19 (Drabble & Elias, 2021; Wrigley-Field, 2020; Yancy, 2020). Researchers should remain cognizant of the negative psychological and social impacts of the pandemic when assessing capacity to provide informed consent. Nevertheless, participants who reach out to a researcher based on recruitment materials posted online, and are willing and able to participate through synchronous and/or asynchronous email, phone, or video data collection (such as logging in on-time as negotiated), should typically be viewed as capable of providing consent. An exception would be if an individual is unable to communicate within reasonable written and verbal parameters. In fact, asynchronous modes of communication may be preferred in some cases because of the ways people typically communicate online through “text speech”.

Role of Technology

Technology has the potential to improve the informed consent process for researchers and participants (Anderson et al., 2017). We extend consideration of some of these benefits to the pandemic context. For one, participants may take the opportunity to look up the researcher online, before or even during the research, if only to ensure they are who they claim to be. Individuals who may require additional supports, such as adolescents and persons with reduced capacity to consent, can also consult with trusted sources about whether they should participate. Additionally, researchers may wish to use technology to circulate information and consent forms in advance by email, and then be willing to answer questions over email/phone/chat/videoconferencing. Presenting information in written and picture form (e.g., infographics), or by
sharing a video with participants (McInroy, 2017), such as on a free online platform, may help to introduce the study and the researcher. Participants can view these at their leisure, including offline, to gain familiarity with study procedures absent time pressures and perceived interpersonal pressures that may occur, particularly in the presence of the researcher, immediately preceding data collection. Participants can verbally consent when recording has started, by being asked to confirm if they know they are participating in a study and have had their questions answered (Marshall, 2006; Wynn & Israel, 2018).

Nevertheless, some individuals, more so from marginalized and vulnerable communities, may not use email or social media, suggesting researchers provide alternate means for informed consent. This can include a verbal consent process by phone or collaborations with local community-based organizations or public libraries that can support online access (Perrin & Turner, 2017).

Finally, pivoting to online research may have benefits in terms of addressing longstanding concerns about individuals feeling pressured to participate, such as once they have arrived for an interview or focus group. This can occur despite researchers’ assurances that potential participants do not have to proceed. By shifting the consent process away from signing a form in person, this may reduce some of the perceived power differentials between researchers and participants. Participants can simply not reply to emails or end video calls more easily than walking out of a university lab or faculty office.

**Privacy and Confidentiality**

In the context of a pandemic, traditional expectations about conducting interviews or focus groups in a private setting may need to be considered on a case-by-case basis. Participants should be encouraged to find a private space. However, researchers should anticipate interruptions, such as a family member walking in during an interview. This could entail developing an agreement with the participant in advance about an exit plan, such as whether to terminate, change the subject, or continue with the research. Some scenarios may involve more protracted risk, such as among children, or LGBTQ+ youth, in precarious home situations, requiring very careful consideration of contingencies.

In the case of focus groups, participants may need to be warned about possible disruptions and others being in the room, which may or may not be an issue depending on the topic and setting. For example, participants in a study about wellness and parenting during the pandemic may be sympathetic to disruptions from other participants’ children, but less so if the topic is sexuality or drug use. Researchers need to recognize that many individuals lack recourse to private rooms in already constrained household settings, more so amid job and wage loss during the pandemic. This indicates the importance of anticipating potential incursions on privacy in the online research process and planning for different contingencies.

In considering potential risks, online platforms also have the potential to provide a false sense of privacy and security to participants, and to researchers, who might otherwise be more mindful in face-to-face settings. Whether focus groups are synchronous or asynchronous, participants should be reminded to adopt a pseudonym/nickname and not to use any other person’s full name or surname in their own responses. For online groups, participants should be instructed before they login to change their display name to a non-identifying name/pseudonym. Participants can also be informed about the option in several videoconferencing tools to use a virtual background, which may reduce potential discomfort in having other participants and researchers peer into one’s personal space at home (Lobe et al., 2020). Participants can further be cautioned in consent forms and again at the onset of focus groups that online interactions may “feel” anonymous, sometimes leading people to over-disclose—that is, to reveal more information than they would feel comfortable with afterward. Young people may be more prone to such over-disclosure in focus groups than adults due to peer dynamics (Morgan & Krueger, 1993; Newman et al., 2017). Facilitators should be mindful and indirect discussions from overly personal revelations, especially those unrelated to the research.

Collaborative autoethnography has been described by some researchers as a viable and meaningful form of social inquiry during the pandemic. It may reduce risk by engaging with academic peers or other researchers rather than external research participants (Roy & Uekusa, 2020). However, it may be helpful to consider the opposite: professional colleagues too may risk over-disclosure in ways that have the potential to strengthen but also to disrupt collegial social bonds. Critical reflexivity remains a core ethical practice with research participants as well as participating researchers (Pillow, 2003; Roy & Uekusa, 2020), obliging researchers to maintain active awareness about disclosure, privacy, and broader relational power dynamics (Tufford & Newman, 2012). These challenges may be amplified during a pandemic, reinforcing the importance of a reflexive stance.

**Digital Media**

Confidentiality concerns are elevated with the use of digital media, such as photos and videos captured on iPhones/smartphones and digital cameras. With the proliferation of these devices, and the seemingly easy access they provide for both participants’ use and investigators’ data collection, a number of concerns have arisen pre-pandemic. These issues may be more challenging in the context of constraints to face-to-face contact. In the age of social media, individuals may have a false sense of security given the ubiquity of Facebook, Instagram, TikTok, etc. Outside of legal-ethical scholars’ challenges to business practices and privacy in social media, many research participants may not adequately consider the risks of having their images, and moreover those of others who have not even consented, used, circulated, and re-circulated in
perpetuity. Once photos or videos are made public, they are nearly impossible to retract. As a result, agreement to take part in participatory video methods, such as digital storytelling, must consider broad individual and community risks around representation, including the subsequent formats and contexts in which images may be screened (Clark et al., 2010).

An illustrative example is provided by a study using photo-elicitation interviews with people living in rural Alabama who use methamphetamine (Copes et al., 2018). The project combined intermittent face-to-face interviews with researcher-solicited and participant-volunteered photographs, which were transmitted digitally to the researchers. Copes et al. (2018, p. 477) describe powerful opportunities in enhanced communication, rapport building, participant empowerment, creativity, and engagement as stakeholders in research—a “moving away from researcher-derived content”—that were made possible by combining researcher-driven and participant-driven content. However, they also discuss significant risks, including the discovery of images by police, as well as the broader potential for stereotyped (mis)interpretations by observers. In aiming to mitigate these risks, the researchers describe a detailed, reflexive, and iterative informed consent process and careful consideration of compensation—only for formal interviews, not for photographs (Copes et al., 2018). Many photo-elicitation methods, already semi-virtual, may be entirely reproducible online. However, they demand heightened awareness and sensitivity on the part of researchers in discerning participants’ comfort levels, emotional reactions, and comprehension of informed consent in the absence of face-to-face engagement.

More broadly, digital video and photography can be assembled, manipulated, and reused via social media (Adami & Jewitt, 2016). This entails the possibility of multiple perspectives and (mis)interpretations of images by various audiences (Pollard, 2015) in ways not initially envisioned by the participant or the researcher. Importantly, the ease with which video and audio data can be collected through platforms like Zoom, when in-person interviews are not possible, should be weighed against the need for such data. That is, many researchers who did not have filmed their participants prior to the pandemic may now generate video data regardless of whether intended for analysis or not. We suggest that absent an explicit rationale and purpose, video data should not be collected.

Traditional analog phone interviews also remain an option but may require additional technology, such as an in-ear mic attached to an external recorder, and necessitate specific consent. Researchers should generally provide participants with the option to not be visible via online platforms, at least during the data collection phase following introductions and obtaining informed consent.

Ethical conduct of research, particularly in the context of decisions to pivot to online methods due to the pandemic, demands an ongoing reflexive process on the part of the researcher. Researchers should prepare to address ethical challenges in online research, but need to remain aware that all considerations cannot be anticipated in advance (Hine, 2015), more so in the pandemic context. This includes addressing the public versus private fallacy—a false sense of security that one’s online data are anonymous and “safe” from external audiences—and broader concerns about participants’ privacy and confidentiality (Hetland & Mørch, 2016; Kozinets, 2015; Schuman et al., 2021). It is important to recognize the potential of internet-based research to do harm as well as to enlighten (Kozinets, 2010; Schuman et al., 2021); this in turn enables thoughtful consideration of measures to mitigate risk.

While not strictly an ethical concern, video and other media technologies, rather than promoting communication, have been described as potentially distancing the researcher and participant through an observer effect—an intrusive triangulation with the device as the third character” (Gregory, 2020, p. 4). This can elicit performative behavior and place emphasis on a “visual end product” that is “aesthetically acceptable” (Gregory, 2020). Online research may contribute to this distancing as it reduces the researcher’s ability to monitor and respond to participants’ contexts, facial expressions, and body language. Nevertheless, the presumed negative association between online data collection and “authenticity” remains a contested issue (Hetland & Mørch, 2016; Kozinets, 2015). Some researchers have questioned the premise that virtual ethnography, for example, is necessarily partial or less “real” than traditional in-person participant observation (i.e., “there is no really real ethnography”) (Kozinets, 2010, p. 62; Kozinets, 2015).

In our own international work, we have had to address divergent challenges posed in research with sexual and gender minority communities in a large Canadian city versus in Bangladesh, amid news reports of violence and murder of people “outed” online or in the press. Our Bangladeshi colleagues use video sparingly, with utmost caution— routinely masking eyes and/or faces, disguising voices, and scrubbing any metadata. By using ethnification (Sjöberg, 2008), an innovative method in which participant stories are redacted and portrayed by actors through fictionalized accounts (and described as such), our case studies portray deep meaning while mitigating risks to confidentiality and privacy. Importantly, it is the responsibility of researchers to envision and sufficiently explain risks that participants themselves may not consider or even find concerning; and this is particularly true with marginalized and vulnerable populations, including young people.

**Digital Data Protection**

In relation to the specific challenges of audio- and particularly video-recordings, researchers should remain mindful of the need to carefully protect these data. A participant could plausibly audio- or video-record an entire focus group conversation and post it on social media (Morgan & Lobe, 2010). Security measures should be explored beforehand and implemented on online platforms to try to prevent others besides the “host” from recording the session. Nevertheless, researchers...
cannot guarantee the effectiveness of such measures as there are several modes of recording that participants can employ. Consent forms should explicitly advise participants not to take pictures or video during an online focus group; however, they should also be reminded that, as in any focus group, the facilitator cannot guarantee confidentiality. Additionally, some online media include a chat function. Researchers should consider disabling chat functionality between participants—though it could be preserved between participants and the group as a whole, including the facilitator—or save a copy of any chat if used as data and delete it immediately after the focus group.

Further risks are posed by metadata (i.e., data that provide information about other data). Multiple forms of metadata are generated along with text files, digital photographs, and videos that we create every day, as well as with email, instant messages, and in accessing websites. This can include information about the date, time, location, author/photographer name or initials, equipment used, keywords, etc. Such data are typically considered benign but can have serious legal implications. For example, a photo taken for the purposes of research, such as a secret site where people congregate to use illicit drugs, could be identified through the metadata associated with the image file and compromise participant privacy and safety. Researchers should explore options for not collecting metadata, such as participant Internet Protocol [IP] addresses, removing metadata after it is generated, and advising participants of related risks and mitigation strategies (Reisner et al., 2018). Participants should be provided with information about how to facilitate online safety, such as advising LGBTQ+ youth engaged in participatory research projects on how to delete their browsing history or on using private browsers to reduce the risks of being outed by others in their offline life (McInroy, 2016).

Videoconferencing platforms also make various claims about their purported levels of encryption. We recommend that researchers seek out guidance about specific platforms, and weigh the benefits, such as popularity and ease of use, with the level of risk of the research being conducted (e.g., discussions of criminalized behavior). Many IRBs/REBs identify specific platforms that they permit, and qualitative researchers have also described various preferences (Lobe et al., 2020).

Researchers should also consider where and for how long any recordings will be stored. A rationale to this effect should be described in the ethics protocol and reflected in informed consent documents. Zoom presents options to “save” on a memory key or in the cloud, both of which entail ethical risks to be considered and mitigated. Cloud storage platforms both large and small are subject to national policies, as well as human rights statutes, that may differ based on the physical locations of servers. It is therefore incumbent on researchers to explore the jurisdiction of various platforms, more so when storing data about populations vulnerable to legal abuses. For example, researchers in Canada and Europe are typically requested not to use US-based servers to avoid the Patriot Act (which expanded surveillance abilities of law enforcement); but this can be challenging given the reach of major web hosting services. However, some web hosting companies have servers in multiple locations across different countries and allow the researcher to select among these. In the case of our multi-country project on LGBTQ+ inclusion and human rights, we use such a web hosting service and strategically avoid servers located in the countries of some of our research partners, which are among the 69 nations that continue to criminalize consensual same-sex activity between adults (ILGA, 2020).

Compensation

Conducting research online requires consideration for how to provide compensation and mitigate related risks (Riggle et al., 2005). Compensating research participants is a longstanding area of interdisciplinary tension, with researchers in some fields, such as anthropology, arguing against providing compensation because of how that might impact the relationship between researcher and participant. Concerns have also been raised about the ethical implications of compensating marginalized and vulnerable persons whose economic circumstances might be so dire that they would consent to participate in any research for the purpose of compensation (Gelinas et al., 2020), such as agreeing to answer questions that are likely to cause distress. Locating ourselves within public health and social work research, we align with those who argue that research participants should be fairly compensated for their time, and to offset the costs of research participation, such as loss of income due to missed hours of work (Collins et al., 2017; Gelinas et al., 2020) or childcare costs.

In order to provide compensation in research conducted online, one could use the same email address for a consent form, or an online messenger with end-to-end encryption, to follow-up with e-gift cards (Saberi, 2020), e-vouchers, or online certificates for groceries, books, or music downloads. Compensation should also be thought through in the pandemic context, in providing fair payment but not undue inducement (Largent & Fernandez Lynch, 2017), and in regard to its form. These considerations can be helpfully addressed by consulting with communities prior to launching research. In the pandemic context, researchers should be advised to deviate from otherwise popular incentives, such as tickets for movies or sporting events, which may not align with recommended public health measures.

Addressing Broader Issues of Accessibility, Resources, and Justice

Online platforms have been described as having the potential to “overcome any geographical limitation” (Daniels et al., 2019). However, broadband (high-speed) internet access, identified as a social determinant of health amid the pandemic (Benda et al., 2020), is neither uniformly available nor accessible. Online platforms can enhance opportunities in many circumstances. However, they can also lead to exclusion, for example, of those...

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without IoT (internet of things) devices, such as laptops, tablets, or smartphones, or reliable broadband internet or cellular data service. This applies in North America, such as to low-income persons and Indigenous communities living on reserve, as well as more broadly in low- and middle-income countries.

Researchers should think about who may be excluded and, where possible, partner with organizations serving marginalized communities, some of which provide free internet access or smartphones under the organization’s COVID-19 policies. For example, our ongoing mixed methods project, a multi-site COVID-19 eHealth intervention including LGBTQ+ Black and other people of color in Toronto, partnered with local community-based organizations to provide onsite PCs with broadband internet access for individuals who do not have a PC or laptop, or connectivity, at home. We also deployed cross-platform programming with responsive web design to ensure online content and eHealth sessions function and display correctly on a variety of devices, platforms, and screen sizes, including tablets and smartphones (https://mfarr-canada.com/project.php?id=2). Expanding functionality to mobile devices increases research access for individuals from marginalized communities, such as Black and Latinx populations in the US, who are less likely to own a home computer than whites, but twice as likely to access the internet through a smartphone (Perrin & Turner, 2017). In the Canadian context, the government gave tablet devices to First Nations children in care to provide online access to schools and other resources, acknowledging the importance of internet connectivity during the pandemic.

In addition to disparities in internet access and home computer ownership, lack of digital literacy has been identified as more pervasive among marginalized communities (Perrin, 2015). More than merely reading online content, digital literacy includes the requisite cognitive and technical skills to use information and communication technologies to find, critically evaluate, create, and communicate information (American Library Association, 2021). Lack of digital literacy results in exclusion from many economic, social, and cultural opportunities, including research participation. Successful efforts to increase digital literacy have included classes led by culturally competent instructors in partnership with local community organizations to support knowledge, skill-building, and peer support among older, low-income African Americans (Seo et al., 2019). Nevertheless, onsite access to computers and technical support at community sites is constrained during pandemic outbreaks and remains contingent on stages of community lockdowns.

Beyond online access to research participation, constraints in access to resources and referrals provided to participants need to be considered in a pandemic context. Similar to procedures in face-to-face qualitative research, researchers should provide all participants with a list of relevant and accessible online resources during the pandemic, such as for information, counseling, and concrete support. As many popular helplines may become overwhelmed, rendering them largely inaccessible, alternate and locally-based resources should be explored and considered before providing information. This includes newly available resources in some settings via telemedicine and eHealth.

It is also imperative that investigators provide a convenient way for participants to interact with the researcher/research staff, as needed, after research involvement. Yet, with research in many settings transitioning from on campus to home, investigators too should be mindful, such as not giving out a home phone number or street address and masking their IP address. Setting up research/project-specific email accounts and online phone access may be helpful. However, these too do not guarantee privacy and confidentiality, and researchers should limit the amount of participant information solicited in email communications.

Finally, we have largely focused on the benefits of conducting or pivoting to online methods as a strategy to pursue qualitative research in pandemic situations, while mitigating potential risks. Future discussions should consider further what is lost and gained, particularly in pivoting to online research from planned face-to-face engagement. Additional consideration should also be afforded to what is owed to participants in terms of helping them to protect themselves during and after virtual research encounters, such as cleaning up their digital trail. The implications of the diversity of digital and virtual methods, and the ethical considerations we have addressed, remain a work in progress for participants, researchers, and knowledge production.

Conclusions

The tremendous threats to health, mental health, and safety posed by COVID-19, especially for marginalized and vulnerable communities, demand qualitative inquiry that generates insights on lived experiences and community needs, on the impact and embodiment of social-structural inequities, and research that promotes human rights and inclusion (Gostin et al., 2020; Teti et al., 2020). Virtual qualitative methods can offer solutions during a pandemic that enable ongoing studies to continue and new social and behavioral research to be safely initiated.

While online methods need not be considered unilaterally riskier than in-person data collection, including for qualitative research with vulnerable populations (Morgan & Lobe, 2010; Thomas, 2004), they are clearly not the same as in-person engagement. Online research methods require thoughtful and deliberative approaches on the part of researchers in order to identify additional methodological and ethical risks and challenges. In this article, we have described ethical concerns that may arise in regard to voluntariness, informed consent, confidentiality, compensation, access to research participation, and availability of resources, in conducting or pivoting to online research. We illustrate concerns in each of these domains, along with examples, and outline measures that researchers can take to mitigate associated risks during the COVID-19 pandemic and in other emergency situations.

We hope this article will spark discussion about the importance of qualitative research, its ethical parameters, and how its methods can be adapted to support in depth and culturally situated inquiry while minimizing pandemic-associated risks. While we are optimistic that the COVID-19 pandemic will end...
through a combination of vaccination and public health interventions, profound and ongoing inequities in global COVID-19 vaccine distribution and availability (Beyrer et al., 2021) have resulted in a new pandemic stage characterized by the World Health Organization as "vaccine apartheid" (Byanyima, 2021; Reuters, 2021). A "my country first" approach (Bollyky & Bown, 2020) predicts substantial delays in resolution of the pandemic, exacerbated by new and more highly infectious variants of the virus that causes COVID-19 (CDC, 2021), fueled in part by inequitable vaccine distribution. This "vaccine nationalism" also portends expanding divides in the impact of the pandemic between high-income and low- and middle-income countries (Bollyky & Bown, 2020), with further repercussions among marginalized communities within countries (Chakrapani et al., 2021; Moodley & Rossouw, 2021; Newman & Guta, 2020).

The unfolding era of vaccine apartheid and divergent pandemic timelines, along with emerging variants of concern, suggests that qualitative research will need to continue online, at least in part, for the foreseeable future. This is especially the case in research with marginalized populations and in low- and middle-income country settings. The expanding inequities in the face of COVID-19 and public health responses highlight the continuing imperative of qualitative inquiry that explores and examines culturally situated and structurally grounded risks and resiliencies in the pandemic context. Engaging and mobilizing affected communities in the development of program and policy solutions is crucial to ensuring valuable lessons are coaxed out of global trauma—to promote equity, health, and well-being in the context of COVID-19, and in future pandemics and emergency situations.

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