Using Photovoice as a Method for Capturing the Lived Experiences of Caregivers During COVID-19: A Methodological Insight

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Abstract
Although the extant literature identifies photovoice as one of the most innovative and creative research methods that encourage reflection and introspection, few studies have described the use of photovoice with family/informal caregivers. This paper discusses the implementation of photovoice as a novel approach in exploring the experiences of informal caregivers (n = 10) of older adults in long-term care homes during the COVID-19 pandemic. The article describes the four stages of the photovoice process undertaken: (1) preparation; (2) pre-focus group meeting; (3) taking photographs; and (4) reflection and implementation insights, to researchers. The different stages in the research process inspired several key learnings, including the use of co-learning tools, the valuable combination of photographic images and words to provide rich description of participants’ perspectives, and creative ways to engage and support caregivers in sharing their stories. This paper also addresses some practical challenges of using this methodology with informal caregivers and explore issues surrounding research ethics and photographs. Knowledge gained from this case example provides strong support for the use of photovoice as a creative approach to better illuminate and understand the experiences of caregivers and can inform the design of future virtual studies.

Keywords
photovoice, arts-based research, family/informal caregivers, older adults, long-term care, virtual/online study

Introduction
Prior to the COVID-19 pandemic, long-term care (LTC) homes in many developed countries experienced pre-existing challenges that were well recognized by staff, families, and residents (Langins et al., 2020). Across Canada, the LTC sector lacks adequate funding resulting in long waitlists, delayed admission, health complications and poor health outcomes for residents, and chronic staffing issues (Béland & Marier, 2020). Due to widespread underfunding of the sector, there has been an overreliance on unpaid/informal caregivers (e.g., family members, friend) to provide stimulating activities, emotional support, and care coordination (Béland & Marier, 2020). Like Canada, many European countries including the United Kingdom, Germany, Denmark, and Spain have reported limited resources, including inadequate staffing and an overreliance on unpaid caregivers in LTC homes (Langins et al., 2020). Despite these well-known challenges in the LTC sectors worldwide, few system-level changes have been made to address these issues in the face of a growing global aging population.

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COVID-19 coupled with pre-existing challenges in LTC led to detrimental impacts for residents and families. While many countries worldwide experienced significant death tolls among LTC residents (Lau-Ng et al., 2020), Canada reported the highest proportion of all COVID-19-related deaths (nearly 81%) among LTC home residents during the first wave of the pandemic (Canadian Institute for Health Information, 2020). Residents in LTC consist of a large proportion of older adults with multiple chronic conditions and have weaker immune systems making them more susceptible to infections (Yen et al., 2020). Yet, the design of LTC homes, which typically consists of semi-confined spaces facilitating rapid spread of viruses, contributed to death and devastation (Onder et al., 2020; Utsumi et al., 2010). Following provincial guidelines to minimize the spread of COVID-19, many LTC homes limited informal caregivers’ visits and restricted socialization among residents including group dining and recreational activities. Limited social interactions among LTC residents have detrimental effects on residents’ well-being, as studies have reported depressive symptoms, frailty, and cognitive changes (Landeiro et al., 2017; Simard & Volicer, 2020). Lockdowns and physical distancing exacerbating known risk factors for social isolation in LTC (Boamah et al., 2021a) heightened loneliness among residents, and frustration and emotional distress among caregivers (Lau-Ng et al., 2020). During periods of quarantine, caregivers experienced psychological distress, lower levels of general wellbeing, depression, and other mental health issues resulting in increased loneliness and social isolation—a well-known phenomenon described as an epidemic among this population (Jeste et al., 2020; Vahia et al., 2020).

Informal caregivers play an important role in providing physical and emotional support and reassurance to their loved ones (Lau-Ng et al., 2020). A pre-pandemic report claimed that informal caregivers in Ontario spend an average of 11 hours a week providing care, emotional support, companionship, which accounts for 90% of their role (The Change Foundation, 2018). In LTC, informal caregivers are reducing increased pressure on the system by providing up to 30% of care for residents, including bathing, one-on-one stimulation and assistance, social and emotional support, and mobilization (Anshah et al., 2017). Studies found that informal caregivers are poorly involved in care planning, often feel invisible, neglect their own health, and lack psychological and financial support (Dixe et al., 2019; Tupper et al., 2020). Amid the COVID-19 pandemic, many LTC homes have begun recognizing the role of informal caregivers in the healthcare team and some LTC have designated them as ‘essential’ to the provision of quality care (Schlaudecker, 2020). The role of informal caregivers has increasingly been recognized as essential in the circle of care of LTC residents, as they are key partners in coordinating services and providing hands-on care (Schlaudecker, 2020; Tupper et al., 2020). Given the contributions of caregivers to ensuring high-quality resident care, it is important to understand the unique perspectives and experiences of caregivers with loved ones residing in LTC during the COVID-19 crisis, using innovative research methods that encourage reflection and introspection, such as photovoice.

**Photovoice: Methodological Benefits**

Photovoice, (visual) arts-based method, is a creative form of community-based participatory action research strategy that offers a unique opportunity to “see” the relevant issues from participants’ viewpoints (Booth & Booth, 2003). Among the different visual-based approaches, photovoice is unique in that it is based on an established framework that incorporates participatory research principles (Wang & Burris, 1997). Photovoice embeds a health promotion strategy within participatory processes in which people are empowered to identify, represent, and share their realities/experiences through a specific photographic technique to elicit change in the communities to prevent further deterioration of the health and social well-being of vulnerable populations (Rolbiecki et al., 2021; Teti et al., 2012; Wang & Burris, 1997). This method is beneficial in that it draws on the critical consciousness that arise through the powerful visual images generated from photographs (Booth & Booth, 2003), which serves as a catalyst to provide a view into the perspectives of the community and from individuals most affected (Teti et al., 2012). Moreover, it has potential to empower individuals across diverse identities to visualize and represent challenging experiences (Catalani & Minkler, 2010; Sanon et al., 2014; Wang & Burris, 1997). Photovoice method emphasizes that participants are co-researchers who direct the identification of themes, not the primary investigators. Aspects of this visual arts-based method can be tailored to meet the unique needs of diverse individuals and groups. For example, studies have employed adapted photovoice methods to conduct research with people with intellectual disabilities, rural older women (Bryanton et al., 2019), and exited sex trade workers (Barlow & Hurlock, 2013). Additionally, photovoice is increasingly conceptualized and implemented as a transformative, social change-oriented method, offering further benefits to historically marginalized and/or excluded communities (Jarldorn, 2018; Liebenberg, 2018). The process of taking photographs and discussing them in a group of peers allows for an opportunity to connect around shared experiences that may otherwise remain unseen.

**Utilization of Photovoice**

Using photos to tap into verbal or written interpretations of meaning can be enriching and result in “synergistic” insights whereby the combination of words and photos elicits deeper insights than either words or photos alone (Teti et al., 2019). As such, the photovoice method is an innovative storytelling approach for research with individuals, such as informal caregivers, who may feel anxious or nervous to express their thoughts, feelings and reactions, or have complex experiences.
that are difficult to articulate using words alone (Rolbiecki et al., 2021). While this approach to data collection is empowering and privileges the voices of those with lived experience, few studies have employed photovoice method among informal caregivers in the context of the pandemic, and in this a novel/virtual setting (Ottmann & Crosbie, 2013; Teti et al., 2019). Existing studies that incorporated the photovoice method with caregivers have been mostly descriptive, lacking in-depth exploration and analysis of strengths and limitations of the method (Garner & Faucher, 2014). Using this graphical research method in this paper is particularly relevant for the target population as it allows caregivers to become the agents for change – thus highlighting the social and environmental changes required in LTC to improve the care of residents and their caregivers.

**Study Aim.** The aim of this paper is to discuss the implementation of photovoice as a novel approach to better explore and understand the lived experiences of informal caregivers of older adults in LTC homes during the COVID-19 pandemic. Using a directed content analysis of pre-focus group findings, the article identifies some of the methodological strengths and challenges (e.g., facilitating and obstructing factors) that should be considered while using a photovoice method and offers potential solutions from our perspectives as researchers. The processes and successes of this project have uncovered valuable methodological learnings that can be translated to other research with informal caregivers, as well as other qualitative health research taking place in virtual settings. Outcomes from this work can provide logistics, insights, and learnings for other researchers – particularly students and trainees – interested in conducting similar studies in the future.

**Methods**

**Research process**

This article details use of an interpretive descriptive approach and draws on photovoice method to explore the experiences of informal caregivers. This analytical approach was chosen as it aids in gaining deeper understanding and broader perspective of participants’ experiences and can generate knowledge that could inform clinical practice (Thorne, 2016). The various aspects of this design is reflected throughout the study. The following is an account of the different stages in the photovoice research process: (1) preparation; (2) pre-focus group meeting; (3) taking photographs; and (4) reflection and lessons learned.

**Stage 1: Preparation**

This stage involved recruitment of informal caregivers, the consent procedure and information provided to participants about the study, as well as the additional participant training required for the photovoice project. After receiving ethical approval for the study from the Hamilton Integrated Research Ethics Board [#13276], recruitment began. Purposive sampling was used to identify a sample of informal caregivers. The required sample size \( n = 10 \) was determined by saturation of themes with ‘thick’ description of the data (Saunders et al., 2018). Inclusion and exclusion criteria was determined based on caregivers’ literacy level, technological/digital skills (e.g., how to use a tablet or smartphone), and cognitive abilities. Eligible participants included informal caregivers over the age of 18 from all demographics including race/ethnicity, sex, and gender, able to communicate and understand basic English, have no visual or fine motor limitations that would preclude using a tablet-camera, and able to provide own consent to participate. Virtual recruitment and selection procedure of caregivers occurred with the support of our partners in LTC and local non-profit organizations. The research team distributed digital brochures via email to administrators of the local organizations, agencies and senior centres across Southwestern Ontario in rural and urban communities to be distributed to their members including friends and families with relatives/loved ones in LTC. The brochures were also shared widely through social media platforms (e.g., Twitter).

Potential participants were asked to contact the lead researcher if they were interested in participating in the study. All recruitment materials were written in English and plain language.

Due to the sensitive subject matter, a formal informed consent procedure was undertaken, emphasizing confidentiality and anonymity. See study protocol (Boamah et al., 2021b) for more details regarding the consent procedure. Potential participants were provided a written description of the study (via email) including the purpose, their role and expectations, and the ethics of photography (e.g., obtaining permissions for photos, and refraining from capturing identifiable information such as names, capturing photos in a permissible location). Participants were informed of their right to refuse to participate or withdraw from the study and the freedom to refuse to discuss any question(s). Consenting participants were provided with additional information about the study design and encouraged to contact the research team if they had any further questions about the study. Part of preparing participants for the study involved training them in photovoice procedures and guidelines. After consultation with participants about their schedules and availability, our research team arranged a virtual information meeting (e.g., pre-focus group session – Stage 2) with participants to provide an overview of photovoice and address participants’ questions about the photovoice process and the research study.

**Facilitating and Obstructing Factors During the Stage of Preparation.** There were several noteworthy methodological and ethical issues, both obstructing and facilitating factors, to take into account during the stage of preparation. Methodologically, the research them had to consider various factors...
including the training of participants – individual (one-on-one) or collectively (as a group) in photovoice procedures and guidelines. An advantage of the group-based delivery of the training is that it can facilitate camaraderie among participants and collectivity encourage and help caregivers to share their thoughts and mutual concerns with each other. An important ethical question that the research team had to consider was the eligibility criteria (described above) including which participants should be included or excluded in the study. Another factor the research team had to consider was the cognitive ability of participants and whether or not they engage meaningfully in the photovoice process. Although photovoice is considered a useful method for engaging people who have low literacy levels or who cannot read (Jurkowski, 2008), the method can be difficult to use with those with cognitive impairment, as they might have trouble presenting complex or abstract ideas through their photographs, or those with limited experience with technology (e.g., electronic device, smartphones or computer). In our study, all the participants understood basic English and most of them expressed comfort with handling digital devices. To reduce potential barriers to participation, participants were offered a new tablet with a camera, if needed, that they could use to take the photos and keep afterwards. Participants were also offered access to internet/Zoom and technical support if needed however, all of them had personal internet access. Another important ethical question the research team had to address was the challenge that the consent and confidentiality procedures pose for participants who could not understand the consequences of their participation (Teti et al., 2012), such as caregivers with cognitive impairment. To ensure that participants are fully aware of their rights, we opted to include only those who were able to provide informed consent. However, there was no strict restrictions for literacy level because some participants may still be able to engage in the photography component of the project and require minimal assistance in reflecting on their photographs taken and the relating themes (Jurkowski, 2008). The flexibility of the photovoice process to accommodate various groups and populations illustrates how the benefits of photovoice far outweigh the challenges as the combination of photographic images and an interview seem to be an effective mix to comprehensively represent the views of people (Ottmann & Crosbie, 2013).

Stage 2: The Pre-Focus Group Meeting

The purpose of the pre-focus group meetings was to serve as an information session for the study and to address participants’ questions or concerns, and any ethical issues (e.g., asking for verbal or written consent when taking photographs of people) and methodological challenges concerning specific aspects of photovoice (e.g., instructed how to operate a camera, the number of photographs to be taken, or the type of camera to use) and the mode of communication (e.g., Zoom). At the pre-focus group meetings, caregivers met as a group for the first time and were asked to introduce themselves and the person they are currently supporting or caring for in LTC. The pre-focus meeting was an important foundational step to a focus group as it familiarized participants with the photovoice process and helped established rapport and relationships between caregivers – something that can be challenging to do if participants went straight to the focus group. The research team created a safe and judgement-free atmosphere throughout the session by actively listening to each caregiver’s experience and encouraging and respecting their views, which enabled caregivers to share freely in the group. In total, we held three pre-meetings – one group meeting was held via Zoom and two individual meetings/interview was offered via telephone based on participants’ availability. The group meeting was between 45 and 60 minutes in duration, and approximately 30 minutes for the individual meetings. Most participants \( n = 8 \) attended the group meeting; however, one participant missed the session due to confusion about time zone difference and another participant had difficulty logging onto the Zoom platform. The research team anticipated possible technological issues/glitches and attempted to mitigate it by contacting all participants prior to the pre-focus group meeting and provided training in using Zoom, as needed.

In the pre-focus group meeting, the research team presented documents using the Zoom Screen Share feature. The documents included: (a) a photovoice guide to describe photovoice, what tools will be needed to participate (e.g., camera, computer tablet, phone), and the responsibilities of participants in taking photos (e.g., obtaining consent); and (b) a photovoice log to record information about their photos. These documents were developed based on the study protocol (Boamah et al., 2021b) and a review of the literature (Jongeling et al., 2006; Ronzi et al., 2016), and written in lay language. In the session, we discussed the ethics of picture-taking including appropriate and inappropriate photos (e.g., unauthorized images), and how to obtain permission/consent prior to taking photographs. Participants were informed that when taking photographs, they could record their first name, indicate the digital file name of the photo, the date and time the photo was taken, and provide a brief description of their top 5 photos using the photovoice log, which was submitted by email. Participants were also shown sample photos during this meeting to demonstrate how to ensure that identities of persons are protected and ways to avoid identifiable information. The session was designed to be interactive in that the research team sought feedback from participants for additional procedural changes required for clarity; however, no changes were identified. With the consent of participants, the pre-focus group meetings were audio-recorded and transcribed for analysis (see Results). All the documents and sample photographs discussed during the meeting were sent to participants via email for their reference.
Facilitating and Obstructing Factors During the Pre-focus Group Meeting Stage. At the pre-focus group meeting stage, a few methodological and practical obstructing factors were discussed by the research team, including the potential influence of the collective group and how some participants may not feel completely comfortable to share their experiences in the presence of strangers. Strategizing in group settings can potentially hinder the diversity of photos taken and narrowed the lenses for what participants are looking for through their photography. On the other hand, collectively strategizing around photos can be beneficial as it can stimulate ideas among the group and help participants build on each other. In our pre-focus group, all the participants expressed their desire and excitement to partake in the research process and the opportunity to share their experiences in a group setting.

Stage 3: Taking Photographs

The third stage involved participants making decisions concerning aspects of photovoice including taking photographs within the timeframe of the study and the number of photographs to be submitted. Decisions included ‘how’ and ‘where’ photographs would be taken, with what camera, and which aspects of their experience were most important to highlight. Participants were provided with an open instruction allowing them to take any photographs they wanted and/or felt reflected their experiences during the pandemic and the places and things that are important to them. There was variation in the form of study team assistance requested by participants, ranging from questions about the technical and practical aspects of taking photographs, including troubleshooting and guiding participants in taking photographs. The team can however inadvertently have an unwanted influence on the content of the photographs. This is especially true for those who may have difficulty photographing negative matters or things that can trigger previous traumatic events or memories. Another potential concern raised by the research team and participants was the possible focus on photographic images that depict concrete issues and not involve abstract themes, such as the temporary relief of the caregiving duties.

Facilitating and Obstructing Factors During the Stage of Taking the Photographs. In the photograph-taking stage, the research team and participants had discussions about the ethical, practical, theoretical, and methodological obstructing and facilitating factors. Most of the discussion centered around the practical problems in the use of cameras. For instance, while most participants were comfortable with using a digital camera or tablet, one person expressed concerns with handling the tablet and using Zoom videoconferencing for the information meeting and group-based pre-focus group session. Another participant was concerned about the quality of photos taken using a tablet or phone.

Participants also raised concern about the ethical difficulties in photographing other people or places. For example, some participants asked whether they could take photographs during their visit with their loved ones in LTC homes and if consent was required from the LTC home prior to taking photos. The research team reiterated the responsibility of accurate portrayal and representation of events and respect for privacy and confidentiality. Participants were encouraged to abstain from taking unauthorized images of other residents, staff, or properties of the LTC home and rather, focus their attention on images that best express their experiences of caregiving for their loved ones during the pandemic. Although there may be certain restrictions on images that participants cannot capture, the benefit of the complementary photovoice method and focus group session is that participants have opportunity to discuss and share their thoughts on any other aspects of their role and emotions which they did not and/or could not photograph.

Participants were encouraged to take photographs independently; however, we encouraged them to contact the research team with questions or concerns at any time throughout the project for assistance or clarification on photographs/images and to foster open dialogue. While support provided by the research team in taking photographs may be perceived as beneficial and facilitates the process, it can also be viewed as obstructing. For instance, the research team can encourage participants and support them in addressing questions about the technical and practical aspects of taking photographs, including troubleshooting and guiding participants in taking photographs. The team can however inadvertently have an unwanted influence on the content of the photographs. This is especially true for those who may have difficulty photographing negative matters or things that can trigger previous traumatic events or memories. Another potential concern raised by the research team and participants was the possible focus on photographic images that depict concrete issues and not involve abstract themes, such as the temporary relief of the caregiving duties.

Stage 4: Reflection and Lessons Learned

The final stage involved reflecting on the photovoice process, lessons learned and implementation insights to researchers. After the pre-focus group meeting, the research team met to reflect on the entire process, lessons learned, and ways forward. It became clear that the intended delivery of the upcoming virtual focus group should be modified. Specifically, the team needed to make changes to the format of the content and questions, and instructional guide to best reflect the desires of the caregivers including those at different literacy levels. At the reflection stage, there were no additional specific obstructing and facilitating factors of photovoice as a research tool identified. The team agreed that photovoice was evidently an empowerment approach for participants to construct their own understanding and knowledge of their realities through photographs that best represent their lived experiences. Participants also recognized the value of
photovoice as a way to reflect on their caregiving experiences during the pandemic.

Results

Data collected during the pre-group meetings were coded for the presence of “I” and “me” statements for the purpose of identifying the “authentic voice” as outlined by Malm (2008) and Lincoln and Guba (1985). Data were transcribed verbatim and coded by two members of the research team with previous transcription experience, using NVivo data management software (QSR International, 2018). Elo and Kyngäs’ (2008) method for content analysis was used including the following three processes: preparation, organizing, and reporting. Three members of the research team reviewed the focus group transcripts as a whole and selected to focus on data that spoke to caregivers’ perceptions of photovoice and its potential usefulness in capturing their thoughts and experiences. Open coding was used to apply labels to concepts as well as define and create categories. Findings were reported as themes developed based on commonalities found within the data.

Through coding, the following themes were extracted: (a) visualizing the impacts of the COVID-19 pandemic; (b) finding commonalities and caregiver support; and (c) eagerness to tell their story.

Visualizing the impacts of the COVID-19 pandemic

Considering the challenges that caregivers faced along with their family members, participants perceived great value in photovoice as a way to express deep emotions, reveal and ‘visualize’ the impact that the pandemic had and continue to have on their health and those of their care recipient. Through photovoice, caregivers spoke of way in which they can document changes and/or decline in their health. Caregivers shared that throughout the pandemic they felt that their voices were not being heard and that they had no avenue to express their thoughts, concerns, and tell their stories. Due to the nature of dialogue and the extent of issues discussed by participants, having the pre-meeting led to such rich understanding of the photovoice process and issue under study. It created opportunity for caregivers to gradually get to know each other and feel at ease with the discussion. Caregivers became comfortable referring to each other by names in discussions and making linkages between situations and sharing personal stories such as the length of time their family members/loved ones have been in LTC and their diagnoses. Without hosting a pre-focus group meeting, caregivers maybe hesitant to share personal experiences or not be as forthcoming during the main focus group.

Eagerness to Tell Their Story

Caregivers shared that throughout the pandemic they felt that their voices were not being heard and that they had no avenue to express their thoughts, concerns, and tell their stories. Due to visitor restrictions in LTC, many of the caregivers had begun taking photos of their family members and documenting changes and/or decline in their health. Caregivers were excited and eager to partake in the photovoice study as it offered them an outlet to express themselves and tell their stories. Although caregivers were not familiar with photovoice prior to the pre-focus group meetings, they recognized the value of taking photographs to capture important moments. One caregiver stated:

Some of the more seasoned caregivers perceived that this type of study of individual storytelling or initiative “will help people [new caregivers] who are coming in” (P03). Photovoice could also offer some comfort for caregivers by providing an outlet for self-expression.

Finding Commonalities and Caregiver Support

In participating in the pre-focus group meetings, caregivers expressed similarities in their caregiving experiences and stories during COVID-19. Caregivers reported a sense of community and felt supported in the group and attested to the fact that they were not alone especially when common experiences or stories were shared and reinforced by others. One caregiver validated the feelings of others that despite their loved ones moving in to LTC, they still had many concerns: “I had the same perspective ‘oh you don’t have to worry about it now’. Same situation as you guys” (P01). When caregivers acknowledged what was being said by other caregivers, they expressed a sense of relief and that it helped them feel valued and heard. As one caregiver said, “you kind of learn from other people’s experience” (P03). Due to the nature of dialogue and the extent of issues discussed by participants, having the pre-meeting led to rich understanding of the photovoice process and issue under study. It created opportunity for caregivers to gradually get to know each other and feel at ease with the discussion. Caregivers became comfortable referring to each other by names in discussions and making linkages between situations and sharing personal stories such as the length of time their family members/loved ones have been in LTC and their diagnoses. Without hosting a pre-focus group meeting, caregivers maybe hesitant to share personal experiences or not be as forthcoming during the main focus group.

They [residents] were first affected. And then us family members who are trying to make the best out of a bad situation on top of that. So, it’s about them for sure but it’s also about us...hoping that maybe listening in to everyone else might have some ideas of how we can make things better for them possibly...this is such a great idea doing this. So, thank you. (P02)
Many caregivers shared their ideas for taking photos and expressed their excitement to share them at the main focus group meeting.

I find this very interesting. I’ve never heard of photovoice, but wow [laughs]. I am going to learn more and go to bed much more smarter [sic] again. I’m already thinking I have a photo that I have taken, and I can retake. I started taking notes. No, it’s just what it means to me. It’s as simple as a photo of my mother’s door to her room and you know it’s very special to me because I was with her when she chose the design. All of the doors have what do you call it…one of those that you stick on…I’m already excited for that! Oh, I could do this, and I could do that. I am looking forward to it. (P04)

Photovoice was a new approach for caregivers to express their feelings with more than just words alone. To caregivers, taking part in this photovoice project became a symbol of hope as they expressed a sense of empowerment in their ability to contribute to change.

**Discussion and Insights on Methodology**

This paper presents the application of photovoice method to capture experiences of informal caregivers and their journey in caring for their loved ones during the COVID-19 pandemic. The project afforded our research team the opportunity to critically reflect on the methodological strengths and challenges/limitations of using photovoice method as highlighted in the literature. Our intent herein was to discuss how the photovoice method, used from a health promotion lens, can contribute to gaining a deeper understanding of caregivers’ experiences. This research was conducted using entirely virtual methods including recruitment, initial contact with potential participants, pre-focus group information sessions on photovoice, and a discussion meeting with participants about photographs. To the best of our knowledge, this is the first study to explore the experiences of informal caregivers during the COVID-19 crisis using a unique and creative data collecting method such as photovoice method, and in a virtual setting. This paper presents a worked example, as well as practical insights and learnings for future studies involving caregivers, which may be particularly helpful to students, trainees, and researchers with limited experience using photovoice methods.

Our study provides further evidence that photovoice can be effectively carried out using exclusively virtual methods. We found that participants enjoyed the experience of learning about photovoice, taking photographs that documented their stories, and meeting virtually with others to share their experiences. These outcomes align with similar success found in recent digital photovoice studies (see Dare et al., 2021; Oster et al., 2021; Tan et al., 2021). Our success in building rapport with caregivers and getting their input in the study design process is particularly helpful given the current challenging context of the COVID-19 pandemic and the ongoing physical distancing measures in many LTC settings. Although we remain optimistic, the shift to increasingly online-only research and social interaction due to COVID-19 is a new practice that is unlikely to change anytime soon. As such, finding effective means of connecting with participants and carrying out meaningful research using online tools is critical. Qualitative health researchers and social scientists can take solace in the fact that creative, arts-based (visual), and participatory methods such as photovoice can be effectively conducted using digital tools such as video conferencing and email.

There are myriad benefits associated with photovoice as a method for exploring diverse lived experiences or experiences of trauma including capacity-building and providing a platform for participants’ voices in public and political discourse (Christensen, 2018; Jurkowski, 2008; Labbé et al., 2021; Ottmann & Crosbie, 2013; Teti et al., 2019). However, like many qualitative research methods, photovoice may be seen primarily as an in-person method to enhance rapport with participants and assess or memo contextual information such as body language and behaviour. Some previous research has also concluded that virtual interviews may result in data that are less “rich” (Johnson et al., 2019). Yet, we found that the benefits outweighed the possible downsides by enabling a virtual study that would have otherwise been both impractical and unsafe due to significant distances between participants and researchers, and risk of COVID-19 spread across participants and their loved ones in LTC.

Key learnings from the implementation of our study can inform the development of photovoice and other qualitative research where in-person interactions may not be possible or safe, such as research that involves hard to reach individuals (e.g., those in rural and/or remote geographical settings) and when there are physical barriers to hosting in-person meetings. This unique and flexible approach enables researchers to plan and implement research projects with participants in various countries and/or time zones. Such projects can also include informal caregivers across the country, and those who may not be able to travel and/or have time to participate in in-person research activities as caregivers often experience scheduling pressures related to their caregiving roles and other responsibilities, and individuals with language barrier and/or disabilities (Garner & Faucher, 2014).

More broadly, this study aligns with previously published literature which highlights the benefits of using photovoice with vulnerable and marginalized populations as it gives voice to the unique concerns of individuals and identify strategies for change (Wang & Burris, 1997). Typical of participatory approaches in research, the photovoice method is advantageous as it is based on the notion that individuals are experts on their own experiences and communities and can offer much richer insight into potential solutions to improve quality of life (Wang & Burris, 1997). If adapted to accommodate the needs of informal caregivers, the photovoice method can provide an innovative and creative approach to health research in virtual settings.
Methodological Recommendations for Future Research

Future photovoice projects should consider hosting pre-meetings with participants about the uniqueness of this method, especially for those who may be unfamiliar. This process enable researchers to address any significant methodological challenges including ethics of photographs to ensure that participants’ perceptions are accurately portrayed (Wang & Burris, 1997). It also offers the opportunity for additional follow-up with participants to explore particular issues in greater depth. Other methodological directions for future research include providing clear directions and reference documents for participants and offering autonomy and flexibility in scheduling. For example, in our study, participants were autonomous in deciding the narrative they wanted to tell and the date and time for the meeting. The flexibility in scheduling for instance is advantageous because informal caregivers face multiple complex challenges and pressures in their roles linked to both the care and well-being of their loved one, as well as their own health and well-being as a caregiver (Erlingsson et al., 2012; Garner & Faucher, 2014; Strauss et al., 2019). Given this and the extent to which their care impacts their loved ones receiving the care (Ansah et al., 2017; Lau-Ng et al., 2020), it is critical that caregivers’ concerns, challenges, and recommendations are considered through engaged research. The informal caregivers who participated in this study perceived their participation to be a positive outlet during the COVID-19 pandemic and experienced benefits to taking photographs of their experiences. Although there were some initial questions regarding photovoice, after clarification from the research team, each participant subsequently enjoyed the process. One participant discussed their plans to disseminate study findings with their network upon study completion. Additionally, two caregivers expressed their desire to connect with each other outside of the research to share resources in the future. These outcomes highlight not only the known benefits of conducting photovoice with caregivers (Capous-Desyllas et al., 2020; Garner & Faucher, 2014; Rabaei et al., 2021) but also the unforeseen advantages of connecting informal caregivers through photographs and shared experiences.

While the overall process of conducting an entirely virtual photovoice study was advantageous for several reasons, we nonetheless experienced several challenges and limitations. Broadly, both the strengths and challenges experienced throughout this study aligned with the advantages and disadvantages of virtual qualitative methods outlined by Pocock and colleagues (2021). At times, we experienced challenges connecting with participants via email. As a result, the research team had to remain flexible regarding response time. Several participants in the study did not check their email regularly, which led to a delay in response in scheduling and follow up. While email delays did not constitute a limitation, they added a slight challenge when scheduling virtual focus groups. In our study, one participant was never able to successfully operate the camera on their device, which meant that we were not able to see them on camera during pre-focus group and focus group sessions. This technological barrier did not prevent the participant from meaningfully engaging in the study but did affect the research team’s ability to consider their body language and other contextual information. Lastly, the sample was diverse in terms of years of experience in supporting family members in LTC homes but not widely diverse in terms of race/ethnicity and gender, as there was only one male participant. Although we incorporated best practices (e.g., two-step approach), our sample were overrepresented by females as caregivers are disproportionately females (Ferrant et al., 2014). Furthermore, in a community-based project such as this, a stakeholder or representative from or within the community should be consulted/asked for their input prior to developing the photovoice project. To address this, future studies should encourage the participation of male caregivers and ethnically diverse populations and consider developing unique strategies to recruit them, and also consult community stakeholders as it is a key component of the photovoice methodology.

Conclusion

Evidently, photovoice is an effective method for capturing complex lived experiences among various groups including informal caregivers, and other vulnerable and/or marginalized populations. When conducted virtually, this creative method facilitates inclusivity by allowing for flexible scheduling and contact with hard-to-reach participants who may be geographically distanced and/or unable to meet for in-person data collection. Likewise, it allows for qualitative health research to take place in a time and/or place where it may be unsafe to do so otherwise – such as during a global pandemic. Meeting virtually ensured the safety of all participants in the study and adhered to public health restrictions. Our experience with the present study has brought forth several learnings that can inform the design of future virtual studies. It is our hope that these learnings and the description of the process may be of particular use to researchers new to the photovoice method, such as early career researchers and graduate students who may be pivoting to online-based research.

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Data Availability
Research data are not publicly available due to restrictions (e.g., contains information that could compromise the privacy of research participants), and in accordance with the ethics agreement.

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