



Social Isolation of Older Adults, Family, and Formal Caregivers During the COVID-19 Pandemic: Stories and Solutions Through Participatory Action Research

Ann MacLeod¹, Justine Levesque² and Catherine Ward-Griffin³

¹Trent/Fleming School of Nursing, Peterborough, ON, Canada, ²Bishop Strachan School, Toronto, ON, Canada and ³University of Western Ontario, London, ON, Canada

Article

Cite this article: MacLeod, A., Levesque, J., & Ward-Griffin, C. (2024). Social Isolation of Older Adults, Family, and Formal Caregivers During the COVID-19 Pandemic: Stories and Solutions Through Participatory Action Research. *Canadian Journal on Aging / La Revue canadienne du vieillissement* **43**(2), 230–243.

<https://doi.org/10.1017/S071498082300048X>

Received: 16 November 2021

Accepted: 26 May 2023

Mots-clés:

vieillesse; isolement social; COVID-19; recherche-action; personnes âgées; soignants; milieu communautaire

Keywords:

aging; social isolation; COVID-19; participatory action research; older adults; caregivers; community dwelling

Corresponding author:

La correspondance et les demandes de tirés-à-part doivent être adressées à : / Correspondence and requests for offprints should be sent to: Ann MacLeod, Trent/Fleming School of Nursing, 1600 West Bank Drive, Peterborough, ON K9L 0G2 (annmacleod@trentu.ca).

Résumé

Cette recherche-action visait à comprendre les répercussions sanitaires des directives qui ont influé sur l'isolement social parmi les personnes âgées vulnérables vivant en milieu communautaire, ainsi que leurs familles et leurs soignants professionnels, pendant la pandémie de COVID-19. L'analyse thématique réflexive de données puisées dans dix documents de politiques et procédures a révélé quatre thèmes : valoriser les principes; déceler les problèmes; établir les priorités et formuler des recommandations. Les entrevues avec 31 participants de Peterborough, en Ontario, ont également révélé quatre thèmes : sacrifier la santé sociale; affaiblir la santé physique; miner la santé mentale et définir les mesures de soutien. Les recommandations destinées aux décideurs ont été mises au point lors d'un événement d'échange de connaissances auquel ont collaboré les participants à la recherche et les membres de l'organisme Age-friendly Peterborough. Les principales conclusions démontrent la nécessité pour les gouvernements et les agences de la santé et des services sociaux du Canada d'améliorer l'accès à des interventions basées sur la technologie, ainsi qu'à des ressources éducatives et financières pour les soignants. Une communication et une collaboration profondes entre les personnes âgées, leurs soignants et les décideurs est également nécessaire pour combler l'écart entre les politiques et les pratiques visant à remédier à l'isolement social.

Abstract

This participatory action research (PAR) aimed to understand the health implications of guidelines impacting social isolation among frail community-dwelling older adults and their family and formal caregivers during the coronavirus disease (COVID-19) pandemic. Reflexive thematic analysis (RTA) of data collected from 10 policy/procedural documents revealed four themes: valuing principles, identifying problem(s), setting priorities, and making recommendations. Interviews with 31 participants from Peterborough, Ontario, also revealed four themes: sacrificing social health, diminishing physical health, draining mental health, and defining supports. Recommendations to decision makers were finalized at a knowledge exchange event involving participants and members of Age-friendly Peterborough. Key findings demonstrate the need for Canadian governments and health and social service agencies to enhance access to technology-based interventions, and educational and financial resources for caregivers. Meaningful communication and collaboration between older adults, caregivers, and decision makers are also needed to reduce the gap between policy and practice when addressing social isolation.

Introduction

Older adults age 70 years and older are at higher risk for increased disease severity and mortality from the coronavirus disease (COVID-19) virus (Ulugerger Avci et al., 2022). Older adults' family and formal caregivers are also at high risk of contracting COVID-19 because of their work with vulnerable older adults (Reed et al., 2022). All levels of governments in countries around the world have responded to the pandemic by altering practices, programs, and policies to keep community-dwelling older adults and their caregivers physically safe, we contend, at the detriment of their mental and social health (Irani, Niyomyart, & Hickman, 2021; Su et al., 2022). Promising practices to address social isolation before the pandemic were employed at individual, community, and societal levels; however, none considered the context of a pandemic in which older adults and caregivers are experiencing isolation (Courtin & Knapp, 2017; World Health Organization, 2021). Examining the lived experiences of social isolation among

© Canadian Association on Gerontology 2023. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.



marginalized older adults and their caregivers such as those living in rural, underserved areas where community and health services are strained, is critical for identifying effective practices, programs, and policies to mitigate the negative impacts of isolation during the pandemic and afterwards (Meisner et al., 2020; Parmar et al., 2021; Poulin et al., 2021; Rodrigues, Han, Su, Klainin-Yobas, & Wu, 2022; Rotenberg et al., 2021). This participatory action research (PAR) complements existing research as a timely approach for uncovering lived experiences of older adults and their family and formal caregivers during the pandemic and proposing contextual solutions to social isolation.

Our study leveraged long-term relationships among a network of over 50 individuals, representing academia, businesses, community health and social service providers, elected officials, and older adults who volunteer with Age-friendly Peterborough (AFP). During the early weeks of the pandemic, this collaborative group in Peterborough, Ontario, wanted to examine the health experiences of community-dwelling older adults and their family and formal caregivers to tailor their service adaptation appropriately. Peterborough with a population of 83,651 in 2021 (Statistics Canada, 2022) is a small city in central Ontario with 24.2 per cent of the population ages 65 years and older. Peterborough County, which includes many rural municipalities and two First Nation reserves, recorded a population of 147,681 of which 25.2 per cent of the residents are 65 years or older (Statistics Canada, 2022). Unlike other pandemic social isolation studies such as reviews (Lebrasseur et al., 2021; Poulin et al., 2021; Rydenfält et al., 2020) and qualitative research (Rotenberg et al., 2021), this PAR offers a rigorous, virtual approach, which can be adapted by community coalitions and decision makers to mitigate the negative impacts of social isolation among older adults, family caregivers, and formal caregivers. Our study is particularly significant because it includes those living alone, with lower incomes, in rural areas with service and Internet challenges, and Indigenous peoples who have been historically marginalized.

Literature Review

Social isolation and loneliness are intersecting, yet distinct phenomena. Social isolation refers to a lack of high quality and quantity of social contacts, whereas loneliness is defined as a subjective feeling of isolation, despite the size of an individual's social network (Cotterell, Buffel, & Phillipson, 2018). Courtin and Knapp's (2017) scoping review showed that little is known about causal pathways relating to social isolation and loneliness, with gaps being identified in only one qualitative study that pointed to the need to understand access to services and other contextual factors of health.

Pre-pandemic, Freedman and Nicolle (2020) estimated that social isolation impacted 6 per cent to 43 per cent of Canadian older adults. The Canadian Longitudinal Study on Aging reported pre-pandemic prevalence of older adults age 75 years feeling lonely at least some of the time – for women, 30.83 per cent, and for men, 19.41 per cent (Raina, Wolfson, Kirkland, & Griffith, 2018). When looking at the intersection of loneliness and social isolation, 32 per cent of adults age 55 years and older were desolate (both lonely and socially isolated) and more likely to be living alone and have an income under \$50,000 (Korzinski, 2019). The pandemic prevalence of social isolation and loneliness increased, in the first phase of the pandemic, where Savage et al. (2021) reported that 43 per cent of community-dwelling Ontarians age 65 and older were experiencing loneliness. Of the 43 per cent

experiencing loneliness, 8 per cent reported these feelings always or often in the preceding week (Savage et al., 2021). Colucci et al. (2022) examined feelings of social isolation and loneliness over time among older adults in Quebec. Reduced well-being was reported among participants, which was predicted by older age, lower energy, and social isolation (Colucci et al., 2022). Moreover, a larger decline in well-being was explained by feeling more isolated by January 2021 by 17.3 per cent ($\beta = -0.349, p = .004$) (Colucci et al., 2022). Poverty is also an influencing factor of social isolation, and older adults living alone are more at risk of living in poverty, therefore, facing additional barriers to accessing technology and services (National Seniors Council, 2017). Together, there is a call for a greater understanding of the context of older adults during a lockdown resulting from a pandemic and targeted interventions to mitigate the negative outcomes. Generally, these studies paint a diverse landscape of social isolation and loneliness increasing during the pandemic that requires further understanding of the experiences of older adults and the contextual factors of social isolation.

We know that community-dwelling older adults, of which 25 per cent are adults over 65 who live alone, will require more support with age from family caregivers or formal caregivers such as visiting volunteers or paid visiting home care providers (Statistics Canada, 2022). It is estimated that 28 per cent of Canadians are family caregivers – among this group, 26 per cent caring for older adults and 45 per cent caring for those with dementia report experiencing distress including disruptions in social and family relationships, which can contribute to social isolation (Stall, 2019). One in five family caregivers has experienced social isolation as one of the negative consequences associated with caregiving (Couture, Orzeck, & Petropoulos, 2019). Social isolation was also documented amongst paid and unpaid caregivers of older adults, which has also increased among these groups during the pandemic (Dos Santos Azevedo et al., 2021).

The majority of paid personal care in the home is provided by unregulated health professionals, mainly women, largely because of relationship and non-monetary rewards, but they face challenges of poor wages, inconsistent scheduling, lack of training, opportunities for advancement, and feeling isolated (Keefe, Knight, Martin-Matthews, & Légaré, 2011). The challenges of retention are exacerbated in rural areas where relationships are complex, and the context of the care needs to be considered by health service provider organizations, going beyond the provision of education and training (Rydenfält et al., 2020; Sharman, 2014). One study based on home support worker experiences suggested team-based approaches, increased control over scheduling, reduction of risks taken, and isolation experienced to enhance retention (Sharman, 2014). Even when considering the importance of the health and social service workers to enable older adults to age in place, there have been only 16 studies identified in a scoping review – none of them PAR – that focused on the retention of home support workers. The majority of studies focus on education interventions, with very few addressing organizational approaches, digitalization, and scheduling, ignoring the more complex contextual, gendered, and psycho-social challenges (Rydenfält et al., 2020). Before the pandemic, caregivers experienced feelings of isolation, being undervalued, being exposed to risks and illnesses related to stress, but this was amplified during the pandemic.

Given the documented health impacts associated with social isolation (e.g., cognitive decline, premature mortality, and lower quality of life) (Smith, Steinman, & Casey, 2020), several studies have evaluated effective and proposed interventions to address

social isolation among older adults. Interventions to facilitate social connection include arts and technology-based programs, facilitated interaction, physical activity, and education (Punjwani, 2021). Promising practices demonstrating positive outcomes include community gardens, recreation/exercise programs, regular and robotic pet programs, and computer literacy programs (Poscia *et al.*, 2018; Williams *et al.*, 2021). Technology-based interventions and programs using multiple types of interventions were most successful in alleviating social isolation and loneliness (Poscia *et al.*, 2018). Far less research has examined interventions for social isolation among family caregivers and formal caregivers, but providers in Quebec made recommendations, including collaboration among service providers to identify those households at risk, enhancing volunteer supports for respite and social interaction (Poulin *et al.*, 2021). Existing studies have explored Internet and technology-based tools such as virtual support groups and blog exercises for families caring for older adults, in particular, caregivers of older adults with dementia to regain a sense of social belonging (Newman, Wang, Wang, & Hanna, 2019; Poulin *et al.*, 2021; Van Orden & Heffner, 2022).

Recent studies have investigated social isolation among older adults during the pandemic. A scoping review revealed that older adults whose social contacts were based outside the home are disproportionately impacted by social isolation and loneliness (Sayin Kasar & Karaman, 2021). Several reviews recommended the use of virtual interventions that could be offered remotely during the pandemic. Telephone-based interventions, including cognitive behavioural therapy, interpersonal psychotherapy, befriending programs, and illness management courses, reduced feelings of social isolation and loneliness (Gorenko, Moran, Flynn, Dobson, & Konnert, 2021). Similarly, web-based interventions included computer and Internet tutoring courses, weekly video calls with family, and mental health modules for issues such as depression and anxiety (Gorenko *et al.*, 2021). Technology has been useful to address social isolation; however, contextual challenges need to be considered.

Among health and social service sector providers for older adults, early in the pandemic, cross-sectional online survey results identified regional urban/rural differences, for example, a greater ability to maintain social support services in urban areas compared to rural areas (Poulin *et al.*, 2021). However, essential services were given priority, interrupting social support services and putting those more vulnerable older adults with dementia and their caregivers in a more precarious position and challenges in identifying those most at risk (Poulin *et al.*, 2021). While existing interventions may mitigate the negative impacts of social isolation among older adults and caregivers, many of these interventions were not developed through consultations with older adults and caregivers to ensure that the services meet their unique needs (Blusi, Nilsson, & Lindgren, 2018; Tonkin, Freeman, Martin, Ward, & Skinner, 2018).

Social isolation interventions and policies are needed to recognize the diversity of older adults and their caregivers. The Age-friendly Communities Outreach Program in Ontario provided an environmental scan of practices, programs, and policy guidance to mitigate social isolation and facilitated knowledge exchange opportunities among community service providers and mobilizers to meet the needs of more marginalized older adults and caregivers during the pandemic (Punjwani, 2021). Collaboration among diverse stakeholders as a key approach is recommended to address the real intersecting challenges of older adults, family caregivers, and paid caregivers in the context of their community, during a pandemic (Meisner *et al.*, 2020).

The scarcity of PAR studies to investigate social isolation and related practices, programs, and policies affecting older adults, family caregivers, and formal caregivers reflects a lack of collaboration between service providers, older adults, and caregivers to address social isolation (Poulin *et al.*, 2021; Rydenfält *et al.*, 2020). PAR enabled co-learning between researchers, older adults, care providers, and decision makers and facilitated engagement of those more vulnerable service users and providers with managers and decision makers (Blusi *et al.*, 2018; Turcotte, Carrier, & Levasseur, 2019). Similar to Poulin *et al.*'s (2021) call for older adults and their caregivers to be essential partners in prioritizing and adapting services consistent with their values, preferences, and experiences, this PAR study was developed with people as co-inquirers and co-learners, who sought to understand, explain, and collaboratively act on real problems with those who usually have the power to influence programs and policies (Casey, O'Leary, & Coghlan, 2018).

Methods

Study Design

The purpose of this PAR study was to better understand the health implications of social isolation among community-dwelling older adults and their formal and family caregivers during the pandemic and to make mitigation recommendations. Hand, Rudman, McGrath, Donnelly, and Sands (2019) argued that PAR facilitates the development of collaborative relationships between stakeholders as well as strategies to address social isolation that is based on the lived experiences of older adults, two components that are critical to mitigating social isolation. PAR is therefore well-suited for investigating the contextual aspects of the COVID-19 pandemic that have impacted social isolation among older adults and their caregivers. We anticipated that a PAR study would also strengthen and build new partnerships, facilitate discussions between decision makers, older adults, and caregivers, providing practice, program, and policy suggestions to mitigate social isolation both during and post-pandemic.

Every phase of our research was informed by the principles of PAR, which included a commitment to collaborative and equitable partnerships, community empowerment, co-learning among all partners, capacity building, a balance of research and action, and long-term involvement with a commitment to sustainability (Israel, Schulz, Parker, & Becker, 2008). To that end, at the beginning of the pandemic, weekly teleconference participants (averaging about 30 attendees) comprising AFP members and stakeholders were invited to join a task force (TF) to address social isolation. The TF developed had 17 stakeholders, including local older adults, caregivers, members of non-profit organizations, private companies, researchers, public health, regional health planning bodies, and First Nation community members. Their role was to guide a smaller research team comprising a rural dwelling professor emerita, an older adult volunteer, a city and county government employee, an academic, and a graduate student. The TF met with the research team at specific points during the project between March and December of 2020 to guide the development of the research question, facilitate participant recruitment, advise on document selection, support data analysis, and participate in knowledge exchange strategies.

The main research question was, "What are the health implications of social isolation among community-dwelling older adults and their familial and formal caregivers in Peterborough City and

County?” Additional objectives were to identify relevant best practices, programs, and policies that will address social isolation among community-dwelling older adults and their family and formal caregivers during and post-COVID-19 pandemic; and collaboratively develop effective knowledge translation approaches that will foster multi-stakeholder engagement and actions to prevent social isolation during and post-COVID-19.

Consistent with the tenets of PAR, an integrative knowledge translation (IKT) approach was utilized in this PAR study through bi-weekly teleconference meetings with the TF from March–June 2020, then shifting to monthly July–August 2020, and bi-monthly with the broader collaborative of AFP, a network made up of 24 older adult volunteers and 66 community-based organizations or businesses. IKT shifts from a paradigm of the researcher as the expert to one where researchers and knowledge users collaborate on issue-driven research with the expectation the research will generate implementable solutions to long-standing problems (Kothari & Wathen, 2013). Therefore, we involved members of AFP who could use the research evidence of lived experiences of older adults and guiding documents related to the pandemic to inform practice and policy responses in a very timely manner. This approach required a meaningful partnership in the research process, where the smaller research team worked closely with the TF and the broader AFP members to further the refinement of the study findings. In December 2020, a virtual knowledge exchange event hosted by AFP with 55 participants met to discuss a set of actionable recommendations based on the research findings. Once finalized, these recommendations were distributed to the four AFP Working Groups, community members, and decision makers who have been working on identified action priorities in 2021–2022.

Data Collection

Two types of data were collected and analysed: interview transcripts and documents. Semi-structured interviews were conducted with older adults and their caregivers remotely by telephone or Zoom to collect demographic data and rich, in-depth narrative data to better understand the health experiences and proposed solutions related to social isolation. Discussions with TF members, particularly older adults and providers living rurally and in First Nation communities, identified the importance of recruiting frail older adults in a variety of housing settings, those living alone or with fragile support systems, those living more rurally and seeking an Indigenous perspective. The partnership with our TF collaborators enabled decision makers in local organizations to identify federal, provincial, and organizational documents that were guiding pandemic service changes, providing context to the experiences of older adults and caregivers during the initial phases of the pandemic. The documents were also purposively selected and analysed to triangulate our data, thereby increasing the trustworthiness of the study and developing a comprehensive understanding of social isolation among participants (Bowen, 2009). Moreover, the convergence of information in the two data sources served to enhance the validity of themes drawn from these data (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014), as well as minimize the possibilities for biases (Bowen, 2009).

Interviews

Community-dwelling, frail older adults were recruited as they are particularly susceptible to both social isolation and negative impacts of COVID-19 (Colucci et al., 2022). There are diverse definitions and screening tools for frailty, but common elements

established by the National Institute on Aging (NIA) include multimorbidities, existing difficulty performing activities of daily living, reducing mobility, social engagement, and cognitive abilities (e.g., dementia) (Sinha et al., 2018). Participants were recruited by TF members through their strong relationships and trust established with older adults and caregivers in the care circle, often overlooked by the health care system. Moreover, social isolation research often focuses on older adults themselves but tends to exclude family caregivers and formal caregivers, therefore we sought to recruit these two additional groups to investigate the relationship between caregiving and social isolation amid a global pandemic.

To obtain approval from the Trent University Research Ethics Board, key informants from the AFP social isolation TF helped develop the purposeful sampling framework previously described. Eligible older adults were those identified by TF members as frail, community-dwelling adults age 70 years and older and their family and formal caregivers living within the City or County of Peterborough. Lay language describing frailty based on NIA consensus was used in a letter of information to aid in recruitment, including one or more of the eligibility criteria: limited ability to get around, care for oneself or get groceries, and may have been losing weight, have less energy, have fewer social contacts than they desire, or experience loneliness. Older adults with advanced dementia were excluded given ethical concerns regarding telephone interviews with this population documented in previous research (Lepore, Shuman, Wiener, & Gould, 2017). Residents in long-term care facilities were not included as another Task Force was addressing this population and was beyond the scope of this project. Informed consent was sought after potential participants had reviewed the letter of information. Older adults with self-disclosed early-stage dementia were included in the study, and consent was retrieved from these individuals as well as a proxy. Older adults, family caregivers, and formal caregivers were recruited until there was a redundancy of information or a saturation of themes (Morse, 2000). In total, 31 participants were recruited for interviews, which is considered an appropriate sample size to ensure data adequacy (Morse, 2000).

Trained research assistants conducted semi-structured interviews on Zoom or by telephone between June and September 2020. The duration of each interview was between 30 minutes and 1 hour, 45 minutes. All participants were asked basic demographic questions and their impression of their physical, mental, and social health, before and during the pandemic; the availability and adequacy of social supports before and during the pandemic; and the types of supports that were needed to improve well-being. Family and formal caregivers were also asked about the care they provided to seniors – changes to caregiving responsibilities during the pandemic and factors that helped or hindered their overall well-being or ability to provide care. Older adults and their caregivers were interviewed separately due to the sensitive nature of caregiving, unless the older adults requested assistance from their caregivers due to mild cognitive impairment. Field notes were documented immediately after each interview. The interviews were then transcribed verbatim and cleaned by separate research assistants. A live transcription software (Otter AI) was used to facilitate the transcription process.

Documents

The collection of relevant documents began before the interviews and continued concurrently as interviews were conducted, based on TF suggestions. Table 1 provides a summary of the 10 documents selected for analysis in this study. Purposive sampling (Flick, 2018) was used to select and retrieve relevant documents that provided context to the direct or indirect influences on the health

Table 1. Documents selected

Document Number and Title	Author	Date of Publication	Summary
Pre-pandemic documents			
D01: Global Age-friendly Cities: A Guide	The World Health Organization	2007	A guide to assist cities in creating more age-friendly communities with changes in eight key areas: outdoor spaces, housing, transportation, social participation, respect and inclusion, civic participation and employment, communication and community support, and health services.
D02: Age-friendly Peterborough Community Action Plan	Age-friendly Peterborough	2017	A guiding document for individuals, organizations, and the local government in Peterborough to refer to in working towards a more age-friendly community. The plan is structured in four goal areas: (a) Older adults' basic needs are met, (b) older adults can get around the community, (c) older adults are supported to build and maintain relationships, and (d) older adults have the opportunity to learn, grow, and contribute.
Pandemic documents			
D03: Supporting Expansion of Virtual Home Care Delivery.	Brown, C., and Graham, P.	March 2020	A memo from the Ontario Ministry of Health to guide professional care providers to enable billing of virtual services during the pandemic.
D04: Recommendations for Regional Health Care Delivery During the COVID-19 Pandemic: Outpatient Care, Primary Care, and Home and Community Care.	Anderson, M.	June 2020	Ontario Health document outlining the planning recommendations that should be considered as outpatient care, primary care, and home and community care begin to increase care delivery along their return to their full scope of services during the pandemic.
D05: Hiawatha First Nation Stage 2 Reopening—Update #8.	Hiawatha First Nation Council	July 2020	Communication from the Hiawatha First Nation Council and COVID-19 Task Team to local community members about the Stage 2 re-opening process in their community.
D06: Coronavirus (COVID-19): Tips for People with Dementia, Caregivers and Families	The Alzheimer Society of Canada	March 2020	A guide for people with dementia as well as their families and caregivers during the COVID-19 pandemic.
D-07: Fact Sheet: Update About VON Safety Measures During COVID-19	VON Canada	July 2020	A fact sheet from the VON to clients providing an update on enhanced safety measures followed by staff and recommended safety measures for clients to follow during the pandemic.
D-08: COVID-19 – Information for Seniors	Peterborough Public Health	August 2020	Information related to COVID-19 from Peterborough Public Health targeted at older adults. The document provides information on what to do if older adults start to feel unwell, steps to take to stay healthy, ways to manage mental health, and updated guidance on visiting with family/friends.
D-09: Family Presence/Visitor Restrictions	Peterborough Regional Health Centre	July 2020	An updated information sheet about changes to the family presence/visiting policy at Peterborough Regional Health Centre.
D-10: My Transitional Care Plan During the COVID-19 Pandemic	Behavioural Supports Ontario	November 2020	A planning document to be filled out by Behavioural Supports Ontario (BSO) clinicians/team members in collaboration with the persons with dementia and their family members when planning a transition of care during the COVID-19 pandemic.

experiences of participants. This included documents from international, national, provincial, regional, and organizational levels to ensure there was representation of different levels of authority/decision-making that could impact the older adults and their caregivers related to the pandemic and social isolation. Consistent with PAR principles, the key AFP TF members also identified federal and provincial documents that were directing organizational and regional pandemic responses and documents. This information led to the retrieval of additional documents that specifically targeted vulnerable older adults, their families, and friends who assumed caregiving roles and formal caregivers experiencing challenges because of the pandemic.

In selecting specific documents, we considered several factors, such as authenticity and meaning (Flick, 2018). Confirming the authorship, date, and location of publication can be a way to attend to issues of authenticity. The number of documents a researcher should select cannot be determined before starting a study of this nature. Sampling for this study involved reaching a point of redundancy when new insights after collecting new data were not found, and analysing more data did not help develop a new theme (Merriam

& Tisdell, 2016; Morgan, 2022). After data were extracted from each document, individual summaries and a chart presenting data from all 10 documents were created. Specifically, data extracted from the documents included: author(s), date of publication, guiding principles of the document, issue(s) addressed by the document, framing of the issue, practices enabling the issue, and proposed solutions. These data were charted to facilitate reflexive thematic analysis (RTA).

Data Analysis

Both interview and document data were analysed, using an RTA approach (Braun, Clarke, Hayfield, & Terry, 2019). RTA is considered a reflection of the researcher's interpretive analysis of the data conducted at the intersection of the (a) data set, (b) theoretical assumptions of the analysis, and (c) analytical skills/resources of the researcher (Braun et al., 2019). Lived experience transcripts and contextual documents were analysed through an interpretive/constructivist lens by the smaller research team, with preliminary analysis refined by the AFP TF of older adults and decision makers. RTA emphasizes that researcher subjectivity is a resource rather

than a problem (Morgan, 2022) and highlights the researcher's active role, considering personal knowledge, values, and decisions affecting findings and knowledge production (Braun et al., 2019). For example, our "insider" perspectives as older adults, nurses, and caregivers shaped our interpretations of the data and dialogue with the TF members. We were also alert to the social, political, cultural, and economic factors that influenced our perspectives as well as those of the participants (Patton, 2014). RTA was an ideal method that was congruent with a participatory approach because the TF and participants were able to be involved with theme refinement.

Three research team members coded the interview and document data. Multiple coders were beneficial because it allowed the exploration of multiple assumptions to achieve richer interpretations of meaning (Braun et al., 2019). An inductive coding process produced a codebook, which was uploaded to NVivo 1.3 and used to code all interview transcripts (Lofland, Snow, Anderson, & Lofland, 2006; Yeager, 2020). Line-by-line coding of the interview transcripts led to the development of an initial coding scheme, which was applied and refined using an iterative reflective process until we arrived at consensus evolving to focused codes: *Physical Health, Social Health, Mental Health, and Supports*. This reflexive coding process evolved, which helped the research team visualize patterns by looking at the frequency of codes and exemplar participant quotes indicative of themes.

Like the coding process of the interview transcripts, RTA of the documents helped identify codes related to the problem/issue, the practices that enable the problem, the implications of the problem within practice, and the opportunities that exist to address the problem. Initial coding by two research team members through an iterative process led to focused coding and themes guiding the analysis of each document. Making comparisons between and among the documents helped shed light on the themes reflecting patterns of shared meaning (Braun et al., 2019).

The subsequent analysis of both interview and document data involved diagramming, a process that facilitated a broader conceptualization of major themes in the two data sets (Lofland et al., 2006; Verdinelli & Scagnoli, 2013). Diagramming was a useful analytic tool that helped organize our data and illustrate conceptual relationships (Miles & Huberman, 1994). Most of all, diagrams helped explain our preliminary findings to participants and the social isolation TF in very systematic and organized ways.

Following a preliminary analysis by the research team, older adult, family caregiver and formal caregiver virtual discussion groups were facilitated separately. The focus groups promoted interaction among participants, enabling a deeper understanding of the major health experiences and supports proposed to mitigate social isolation, enhancing the credibility of the study findings (Gundumogula, 2020). Diagrams and quotes facilitated further dialogue around sub-themes of mental strain, reduced social and physical health, and supports accessed. Furthermore, the use of diagrams in conjunction with quotes facilitated the refinement of dominant sub-themes represented in the diagrams and emphasized points of convergence between the two data sets. For example, Figure 1 depicts four pairs of principles that are valued in the documents used to facilitate discussion with the participants and other TF members, around the dominant theme of "valuing principles." Participants concurred that health was central to the purpose of all the documents, with much attention focused on providing guidance regarding *safety* and *protection* and the means to achieve that through *communication* and *collaboration*. The more dominant themes were at the centre of the concentric circles and graphically larger. The dashed lines recognize the fluidity and

influence of principles on each other. More implicit were the values of *responsibility* and *support*, particularly at the individual level, and more broadly societal values of *inclusion* and *equity*, which were less frequently seen in documents. In three separate virtual group discussions, following ground rules and consent, group members discussed points of alignment of documents with the supports that were needed. Each focus group was recorded, and summaries of the discussions were developed and discussed by the research team. Participants who were unable to attend the focus groups but wanted to provide feedback on the preliminary findings discussed during the focus groups provided their input via e-mail. This information was synthesized and presented at a facilitated virtual discussion with the larger AFP network.

Findings

Sample

A total of 13 older adults, nine family caregivers, and nine formal (paid or volunteer) caregivers were interviewed. There were 23 (74.0%) female and eight (26.0%) male participants. The median age for all participants was 71 years, for older adults it was 86 years, for family caregivers, 68 years, and for formal caregivers, 59 years. Across the 31 participants, 32.3 per cent live alone. Half (50.0%) of the older adults, 22.2 per cent of family caregivers, and 11.1 per cent of formal caregivers live alone. Twenty-six (84%) participants reported annual income, and 54.0 per cent of older adults and 67.0 per cent of family caregivers make less than \$50,000 a year, whereas 67.0 per cent of formal caregivers made over \$100,000 a year. Twenty-eight participants provided information on racial/ethnic identity and 89.0 per cent identified as white/Caucasian, 7 per cent as Indigenous, and 3.5 per cent as "Other."

Interviews

Four integral themes related to participant experiences during the pandemic emerged from the interview data analysis: (a) sacrificing social health, (b) diminishing physical health, (c) draining mental health, and (d) defining supports.

Sacrificing social health

Much of the dialogue during the interviews centred around the impacts – predominantly negative – on participants' social health. Overwhelmingly, participants described feelings of loneliness and loss because they followed the public health guidelines to protect their physical health to the detriment of their social health. Older adults described how their social relationships were severely limited by their decisions to follow public health guidance. In tandem with personal decisions to reduce social interactions, older adults' and caregivers' formal social supports (e.g., support groups and social gatherings) were halted by organizations to prevent the spread of COVID-19, thereby decreasing their opportunities for social participation and enhancing their risk of social isolation:

I'd feel lonely sometimes and also, I would feel overwhelmed like I thought I just can't do this... I would feel overwhelmed for having to do everything and then I would feel sad about the fact that [my husband] was dead, and I was on my own. – Family Caregiver #1

Notably, the sacrificing of social relationships was experienced by two distinct groups of participants. The first were participants who were previously experiencing social isolation before COVID-19

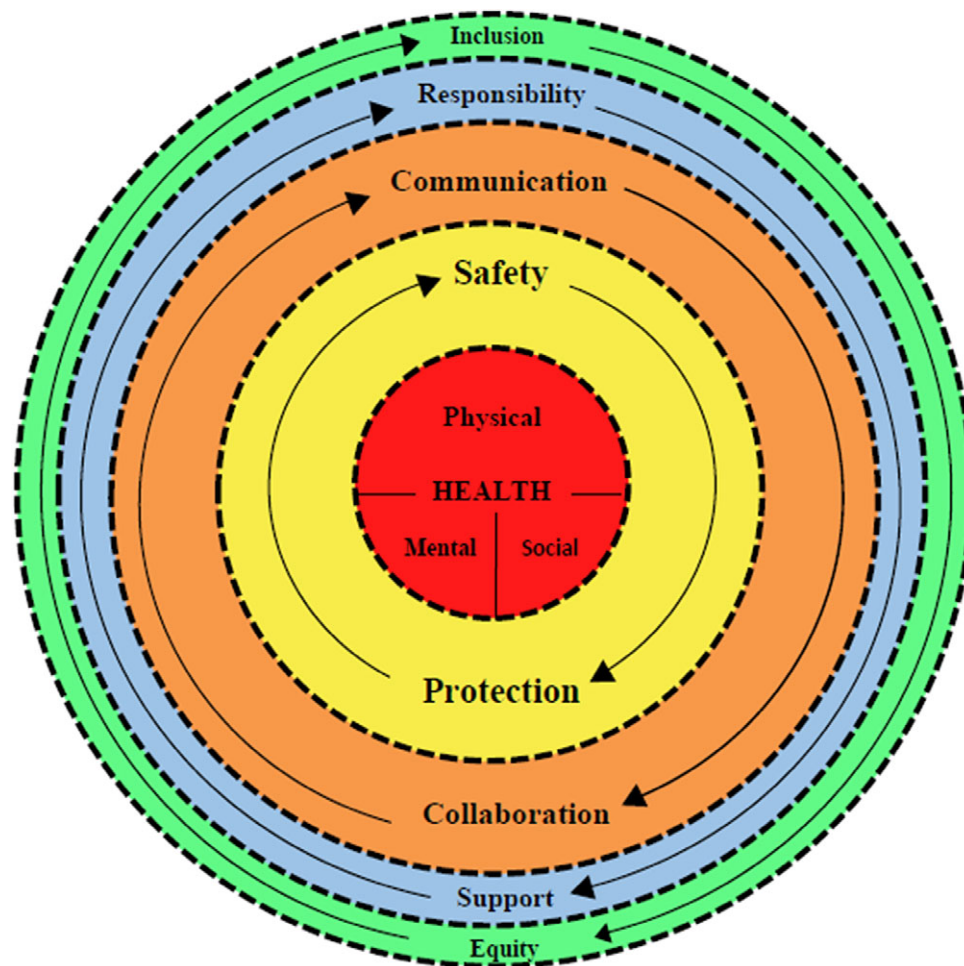


Figure 1. Document sub-themes of “valuing principles.”

and whose feelings of loneliness and isolation were exacerbated by the pandemic. The second were participants who were socially active and experienced minimal to no self-reported isolation or loneliness before the pandemic but were newly socially isolated due to pandemic restrictions. One family caregiver to her mother with dementia, vision, and hearing loss described how she gradually became socially isolated before the pandemic and how her social interactions were sacrificed during the pandemic:

Even, prior to the pandemic, we were socially isolating just out of necessity. Little by little, I mean, people don't want to be around when a person has dementia. It kind of scares off friends and family. They don't want to be around that. It's too hard for them. They don't know. They don't want to have to deal with it. So, you just kind of get used to it... It's pretty much the same as before [the pandemic] as it is after the pandemic. Other than the fact that I had more people coming over to the house and visiting with me, prior to the pandemic. Now, I don't hardly see anybody. I miss the kids... There are times when it's very lonely. – Family Caregiver #5

Diminishing physical health

The second theme identified was that of diminishing physical health during the pandemic experienced by all participants. For family caregivers, the decline in their physical health often was a result of the increased caregiving responsibilities due to the withdrawal of formal caregiving supports. Older adults who had several co-morbidities experienced further decline. Diminishing physical

health for older adults commonly included a decline in their mobility and was also characterized by their inability to attend regular doctor appointments. Diminishing physical health for formal caregivers was less severe and primarily centred around a decline in physical activity:

But I was seeing seniors that were a lot more ill than they had been when I was seeing them before [the pandemic]. And that's not something that I can really prove categorically but just from an experience perspective, and the time and the number of seniors that I was seeing in the time that it was taking to look through their situation, they were much more complex, and a lot of them needed to be admitted to a hospital. It wasn't as easy to send them home because they had been struggling and doing the best they could at home. But they weren't thriving at all. They weren't doing well because they're isolated for so long. – Formal Caregiver #7

Draining mental health

Participants experienced a serious drain on their mental health. Many family and formal caregivers felt mental exhaustion as they were trying to manage caregiving stressors that increased over the multiple waves of the pandemic. All participants were experiencing strain on their emotional capacities due to the lack of social participation available as described in the first theme. Older adults' and caregivers' mental health was also strained as they tried to cope with the worry and distrust that they felt towards others as they related to the spread of COVID-19. Family caregivers, usually older

adults themselves, were particularly stressed about not having an alternative care plan for their family member(s) if they became ill. Participants' experiences demonstrated how the prolonged nature of the pandemic does not allow for any emotional/mental respite from the anxieties that accompanied living through a global pandemic as a frail older adult, and as a family or formal caregiver lacking adequate personal and professional resources. One family caregiver described a sense of helplessness in caring for older adults when adequate resources were not available:

I think it [my health] was, it was good, but I'm definitely feeling the strain. And that would manifest itself periodically, I just get cross and I sort of yell or just get cross with her [wife]. "Can you not stop..." And then of course, she'd be in tears and I feel bad... And I think it's, as I said, it's her gradual decline has been my gradual increase in stress. I'm being pushed into an area that I've never done before. It's like jumping into a new career and without much help. – Family Caregiver #4

Defining supports

In conjunction with the social, physical, and mental health experiences described by the participants, specific supports that were needed to address the health-related challenges they faced during the pandemic were also defined during the interviews. These supports were categorized into three levels: (a) individual/familial, (b) organizational, and (c) governmental with the view that responsibility can be assigned at the different levels to ensure these supports are provided to older adults and their caregivers. At the individual/familial level, older adults, family caregivers, and formal caregivers emphasized the need to prioritize self-care and access the necessary resources to ensure they are taking care of themselves, if possible. Similarly, at the organizational level, enhancing telephone check-in programs and outreach was frequently mentioned by participants as a helpful service. Providing funding to support older adults and their caregivers during the pandemic, tailored to what they needed, was highlighted as a major support that governments should consider implementing. The most requested supports were those that could be collaboratively provided at all three levels, which included technology, caregiver supports, and two-way collaborative communication. Older adults specifically cited the need to be provided with the technologies and related training used to connect virtually (e.g., iPads, cell phones, and laptops):

We're interested in getting a pad [iPad]. But we have to have [internet company] come in to install whatever gadget is necessary for Internet. The last time I talked they were still not making house calls. So, I don't know when. I really would love advice other than what the store would show us. You know, maybe an hour of someone to come and to teach us. I don't know how the best way to arrange that. – Older Adult #9

Meanwhile, family caregivers needed educational resources and better communication from formal care organizations. Communication with family caregivers as part of older adults' circle of care was not prioritized during the pandemic, and so all participants commented on the need for better communication between organizations, older adults, and caregivers:

What I found really hard was there was no communication or no contact for months [between us and] our community nurse or social service administrator, and [from] the health administrator with the client. The client had no clue what was going on. – Formal Caregiver #4

Moreover, participants reinforced the need for incentives from both organizations and governments to work in home care (e.g., wage increases and paid benefits). Older adults, family caregivers, and formal caregivers recognized the value of the work that home care providers do, particularly during the pandemic, and emphasized the need for their wages to reflect this value:

I got no support. I got no financial support other than the [temporary] \$4 raise. But like I have friends who weren't even – they were getting more money than I was, and I was working my ass off and in the middle of it [the pandemic] and so that to me didn't make a lot of sense. I felt like holy shit the grocery store workers are getting a raise right away like it wasn't even brought up for the nurses in the beginning... – Formal Caregiver #3

I don't think they [PSWs] are paid what they are worth. I think that's something we should look at especially since all of you are going to get old. If you're all going to live into your 90s you sure as heck have to make sure there is somebody there that will at least give you a helping hand. But those PSW people they earn their keep. They really should be appreciated and valued more than I think they are. – Older Adult #1

Resources provided by both organizations and governments that enable older adults to age at home were another focal point of the discussions. Many older adults in this study felt that they do not currently have adequate financial, transportation, or home maintenance supports to age at home:

I know that they have, or had started a bus service to get in and out of Peterborough but the bus service is useless to people who live [far], I mean you have to get from your house to where that is. So, it may be helpful for people trying to get in as I understand to [the university] or go into shop. But, you know, 70, 80 and 90 year olds, don't want to go to the mall. They want groceries and I know that some organizations were starting to help that you know if you need groceries or something, let us know, but that took a long time. And so, people in this area have actually created their own little links, which is a good thing. – Family Caregiver #8

While many participants easily defined the support(s) they felt could address the health-related challenges they faced during the pandemic, we observed a hesitancy among older adults and older family caregivers to criticize existing supports directly to the organizations. There was a tendency to express appreciation for existing supports even if participants also acknowledged that their needs were not being met with these existing supports. This same hesitancy was not as prominent among family and formal caregivers, perhaps because they perceive themselves as less dependent on organizations:

I just appreciated what I was receiving. And in this regard, sometimes the more you do that way, the more you're cared for. And I've learned often if you keep quiet, some people will just do more for you. And, it's a fact of just showing your appreciation in some ways. And if you're smart enough you'll find a way to show your appreciation. – Older Adult #11

Family caregivers understand their challenges in caregiving and have clear ideas of the supports that would be helpful to them to provide not only respite but also safe social opportunities:

I have a vision of – it goes with dementia-friendly communities – but I'd like to somehow work with the community, like the art galleries or the museums or anywhere that you would go for an outing leisure activity and have dementia-friendly times. So, even a grocery store and

providing a bit of staff training or we provide the volunteer that's trained to maybe stay at the door looking at the things that might cause a barrier for people to engage their community. And I also had the idea for a restaurant so if we found like six restaurants that twice a year or once a month they offer a dementia-friendly dining experience... I think that if we could do that, it would make caregiving roles easier – I think people living with dementia, their quality of life would improve – but I think for caregivers, it would reduce that stress of being so alone. – Formal Caregiver #6

These quotes reflect the need for improved timely, two-way communication required between the decision makers in many sectors that interface with older adults and their caregivers to shape services that are responsive to their needs. Many of the guiding documents created by those in power could have been better informed by including older adults and caregivers in discussions at the beginning of the pandemic, to better understand challenges and supports required.

Documents

Four themes were identified across the 10 documents analysed in this study: (a) valuing principles, (b) identifying problem(s), (c) setting priorities, and (d) making recommendations. Valuing principles was the main overarching theme, which shaped the problem(s) identified, the prioritization observed, and the resulting recommendations to address the problem(s).

Valuing principles

This refers to specific values that guided both the intent and content of the documents. Four interrelated pairs of principles were common across all documents: safety/protection, collaboration/communication, equity/inclusion, and care/responsibility.

While the concept of health was not defined in many of the documents, it was central to the purpose and problems that the documents were addressing. Safety and protection were principles that were always observed in the context of maintaining health, dominating the content of the eight documents published during the pandemic (see Table 1). The pandemic documents framed the virus as a threat to people's health, and so the protection of health through different safety measures (e.g., social distancing and symptom screening) was highly valued in these eight documents. For example, Document 10 (Behavioural Supports Ontario, 2020) included guidance on how to protect the physical, social, and mental well-being of older adults transitioning from one care setting to another, utilizing different COVID-19 safety precautions:

Include a summary of strategies to assist in keeping the person well and meaningfully engaged during the first 14 days of their move while they remain in isolation. Consider activities that promote social, sensory, kinesthetic, and intellectual needs... Identify the methods by which family/friends will be able to connect with the person following the move (e.g., virtual visits, phone calls, in-person visits, window visits, etc.). Identify whether these methods may be applicable for the first 14 days or following a 14 day isolation period... (D-10)

Next, the principles of care and responsibility were observed together across the documents. Assigning responsibility for care-related actions and resources underpinned the content of many of the documents. In all documents, assigning responsibility was important for establishing accountability in the processes of health care delivery, care planning, and caregiving. For example,

Document 3 from Brown and Graham (2020) focused almost entirely on fiscal responsibility as it related to establishing new physician billing codes for virtual care. Comparatively, Document 6 (Alzheimer's Society of Canada, 2020) placed the responsibility on family caregivers of people with dementia to document their care instructions and get an adequate supply of their medications. Document 5 from a local First Nation community (Hiawatha First Nation Council, 2020) also assigned responsibility to its community members to follow COVID-19 safety measures so that their community could re-open safely, including allowing PSWs back into older adult homes on the First Nation reserve:

We have done very well in keeping the virus out of our Community, keeping the risk of transmission low, and the number of COVID cases low in our local area and in the province and across the country. In saying this, we must remain vigilant in our efforts for when the second wave hits. How hard this wave hits will depend on all of us and our diligence. We still have a way to go with this pandemic and each and everyone of us must take responsibility and continue to practice all measures put into place, including social distancing, hand hygiene, and sanitization to keep each other safe. (D-05)

Communication would often be linked with the principle of collaboration in the documents given that effective collaboration should involve communication. The content of many of the documents emphasized the need for communication most often from decision makers (e.g., governing bodies such as the Ministry of Health) to individuals (e.g., older adults and family caregivers). Communication was a key principle given the need to establish communication channels for individuals to get the most up-to-date information about the pandemic. Many of the documents endorsed collaboration as an important component of organizational or individual responses to the pandemic. However, while collaboration was often promoted as the ideal approach to respond to the pandemic, very few documents provided meaningful guidance to implement a collaborative COVID-19 response. These paired principles emerged in documents from public health and health care organizations as they sought to communicate information about changes to health care services, develop collaborative strategies for COVID-19 prevention, and inform about individual physical, social, and mental health care management. This is reflected in two recommendations from Anderson (2020) of the provincial Ontario Health, Document 4:

1. Regions, organizations, and health care workers should work together to ensure delivery of services that support patients'/clients' full continuum of care. Collaboration should aim to avoid unintended community-wide consequences of resuming care as well as seek to improve the integration of care between sectors and across regions.
2. Communicate regularly with patients/clients and caregivers. It is up to each health care provider to determine how they will communicate to patients/clients and caregivers during this pandemic. Take this opportunity to talk with patients/clients and caregivers about their needs, wishes, and values. (D-04)

Lastly, the principles of inclusion and equity were identified, although to a lesser extent; not surprising, they were emphasized more in the pre-pandemic documents. These principles highlighted the need to, first, identify marginalized individuals or populations who are most affected by the issues discussed in the documents and, second, respond to their unique needs. Inclusion was valued as it related to including older adults in decision-making discussions

about their health and well-being. Equity was identified as an important principle to consider in relation to access to different resources for all populations but more so for marginalized older adults. Document 2 (Age-friendly Peterborough, 2017) which pre-dated the pandemic, demonstrated the valuing of equity:

Older adults, particularly those who experience vulnerability or marginalization, may require specific supports to access services depending on their circumstance. All older adults should have access to the services they require regardless of income, ability, or geography. (D-02)

Identifying problems

The identification of the problem(s) necessitating the creation of the documents was a common theme observed across all 10 documents. The problems identified were broader in scope in three documents (e.g., the evolution of the pandemic in Ontario and population aging) and more context and population-specific in the other seven documents (e.g., the higher vulnerability of seniors age 70 and older during the pandemic). The principles underpinning each document informed the identification and framing of the problem(s) within each document. For example, as mentioned above, community responsibility is valued in Document 5 from the local First Nation community reflecting their self-governance and cultural context; therefore, the problem in this document is framed as a community-wide issue. Included in the content of each of the documents is a statement of the problem. Document 6 (Alzheimer's Society of Canada, 2020) presented the problem as challenges:

The current situation with coronavirus (COVID-19) presents some unique challenges for people living with dementia and their caregivers and families. Social distancing, self-isolation and the associated changes in routine can lead to increased feelings of stress, anxiety, and confusion for people with dementia, and can even make the person's dementia symptoms worse. Many people with dementia also depend on others to help with their daily needs, making social distancing a challenge for everyone involved. (D-06)

Setting priorities

The third theme identified was the "setting of priorities." This refers to a clear prioritization of one or more aspects of the problem(s) identified in the document. This prioritization is then observed in the specific recommendations laid out in each document. Many of the documents included the principles of safety/protection for physical health. These values are then reflected again in the prioritization of protecting physical health by preventing the spread of COVID-19. Meanwhile, measures to protect social or mental health were not given the same attention in the documents. We see this in Document 4 (Anderson, 2020) of the provincial government, where planning criteria for care activities largely centred around safety precautions to protect physical health by preventing the spread of COVID-19:

Organizations and providers should consider the following key planning criteria before any increase in care activities, and determine whether they have: 1. A long-term strategy for virtual care (where applicable), 2. Policy and procedures for IPAC, 3. An adequate supply of PPE, 4. Adequate health human resources, 5. Collaborative relationships with local health service providers, other community supports, and patients/clients, 6. Capacity to monitor rates of COVID-19 in the community, 7. A strategy for communicating with patients/clients and caregivers, and 8. A strategy for ethical prioritization of patient/client care. (D-04)

Making recommendations

The final theme identified in the documents, "making recommendations," responded to addressing the issue or problem(s) identified in each document. These recommendations were significantly influenced by the principles described in the first theme. The principles may be embedded and explicitly stated in the recommendation themselves, such as checking in/communicating with caregivers for persons with dementia. The principles were also implied through the recommendations, such as assigning responsibility of specific actions/roles to respond to the problem(s) of the document. Recommendations were targeted at governments (e.g., municipalities implementing affordable transportation), organizations, sectors (e.g., home and community care), communities, and individuals (e.g., older adults and caregivers). Document 8 (Peterborough Public Health, 2020) included the following recommendation:

In general, if you are an individual in an at-risk group, it is recommended that you reduce your time outside your home, wear a face covering or mask, and keep a distance from others as much as possible... This means that you should avoid going into stores. Consider these options instead: Asking a neighbour or family member to pick up things you are in need of, ordering items that can be delivered to your home. (D-08)

The analysis of these interviews and documents provided a fulsome understanding of the context of older adults', family caregivers', and formal caregivers' experiences with social isolation in the context of the pandemic. There was alignment between the two data sources primarily as they related to the prioritization of protecting physical health through infection, prevention, and control (IPAC) measures and public health guidelines. However, we observed a disconnect between the reality of older adults' and caregivers' experiences that were shared during the interviews and the proposed practices, programs, and policies intended to support older adults and caregivers that were recommended in the documents. For example, the lack of two-way collaborative communication between health care organizations, older adults, family caregivers, and formal caregivers was a common concern reported in the interviews. Meanwhile, collaboration/communication was being promoted as an important part of the recommendations to respond to the identified problem(s), but clearly not being put into practice.

Practices, programs, and policies that facilitated virtual supports without physical contact helped protect physical health, but participant supports for training and access to technology were not provided to older adults and their caregivers, suggesting hybrid mechanisms for care to consider the context are needed. Policies to remunerate physicians were facilitated, allowing hybrid delivery of both virtual and in-person visits to clinics; however, the lack of two-way communication between older adults and caregivers failed to acknowledge the financial investment needed for hybrid virtual and in-person health and social care needed to maintain their physical, mental, and social health. The points of divergence were developed further by AFP during the Working Together virtual meeting into recommendations for action by working groups of the AFP and its network members.

Discussion

Our research builds on existing studies about insights on the health effects of social isolation among older adults and their caregivers

and provides new insights about how multisectoral collaborations can use PAR as a potential approach to mitigate the negative impacts of social isolation in the context of a global pandemic. While many people eagerly anticipate a return to “normal,” our study findings have demonstrated that the norm was insufficient for many older adults, family caregivers, and formal caregivers.

The focus for decision makers was to reduce mortality and morbidity during the COVID-19 pandemic, produce guidelines for practice to mitigate the spread of the virus, provide incentives to organizations and practitioners to reduce contact, replace in-person care with remote technology-based visits, and institute policy changes to distribute some of the human resources required to support older adults and caregivers self-isolating for much of the pandemic. Unfortunately, these decisions and government policies that were intended to protect the population’s physical health against COVID-19 had the unintended impact of sacrificing social health, draining mental health, and diminishing physical health of marginalized older adults living alone, or previously strained caregivers on lower incomes, often living with several chronic conditions. The stories of our participants demonstrated that known negative impacts of social isolation and loneliness in older adults (e.g., cardiovascular disease, stroke, diabetes, and cognitive decline) were ultimately exacerbated by the swift withdrawal of opportunities for social participation (Smith *et al.*, 2020; World Health Organization, 2021). Meanwhile, family and formal caregivers experienced a drain on their mental health and put preventive self-care practices on hold to continue to care for older adults without adequate financial, physical, and human resources.

Valuing principles underpinning practices, policies, and programs means facilitating dialogue with decision makers to negotiate feasible recommendations to facilitate social connection amongst community-dwelling older adults and their family and formal caregivers, based on their context. First, stories from our participants reinforce the need for health and social services to scale up outreach and promote access to technology support, and technology-based interventions, as well as physical and social activity programs for older adults and caregivers. Consider, No Isolation, the Norwegian company, who developed Komp, a one-button computer simplifying digital connections across generations (No Isolation, 2021). As of 2021, Komp has nearly 7,000 older adult users in Norway, the Netherlands, the U.K., Sweden, and Denmark, enabling older adults to connect with their families without requiring extensive training or advanced knowledge of technology. Similar technology supports and interventions could be utilized in Canada with particular emphasis on connecting older adults and caregivers in rural and remote locations. Another key consideration, particularly for the federal government in Canada, in the provision of technology and Internet-based supports for social isolation, is addressing the digital divide by extending broadband to rural and remote communities to underserved individuals and communities, including older adults and caregivers, to mitigate feelings of isolation and loneliness (Kearns & Whitley, 2019).

Second, family caregivers continue to be undervalued and overlooked along the continuum of care for vulnerable older adults. Family caregivers should not be sacrificing their social health or draining their emotional health or diminishing their physical health. The family caregivers in this study explained that, before and during the pandemic, they were pushed into “new careers” with little support from formal organizations and governments, resulting in negative personal outcomes. For this reason, it is critical that caregivers, especially family caregivers, receive appropriate educational and financial resources to maintain their own health as well

as the health of those whom they care for. Newman *et al.* (2019) reported that e-Health technological tools enable caregivers to access supports virtually, such as psychoeducation, which aims to build caregiver knowledge about the illnesses their family members are faced with and associated caregiving issues. Equipping older adults’ caregivers with much-needed supports, such as fiscal and communication infrastructure, to overcome common barriers (Rodrigues *et al.*, 2022) will ensure that all members of the circle of care do not experience social isolation and do not compromise their own health to meet the demands of family caregiving. Workplaces need flexible family care policies to mitigate the negative impacts of caregiving.

Next, participants defined a type of support needed – a meaningful collaboration across intersecting organizations that serve older adults and their caregivers for the purpose of enhancing communication with each other to improve timely supports appropriate to their context. It seemed that communities with multiple networks, many affiliated with AFP, developed “workarounds” such as the colour-coded paper posted on a door acting as a communication system in the First Nation community indicating the type of need (e.g., food, check-ins). Additionally, at-risk older adults living alone were identified by the geriatric emergency medicine nurse to a community organization to facilitate in-person outdoor visits during grocery drop-offs, supporting those most negatively impacted in our region. In Germany, the German Foundation for Civic Engagement and Volunteer Work has focused their efforts on funding a program that supports 500 local alliances for people with dementia, where multi-generational houses and networks of individuals in rural communities come together to support people with dementia and their families (European Commission, 2019). With supportive policies and adequate funding, the support networks for older adults with dementia and their family caregivers can be restructured to ensure they are still connected to their communities, preventing social isolation beyond the pandemic.

Further, enabling older adults to age in their homes, if they choose, should be at the centre of all policies, programs, and practices intended to meet the needs of this population, while considering needs to connect socially as part of meeting basic needs. To ensure that older adults’ perspectives are considered in all policies, all levels of government and health and social service agencies need to engage with older adults’ advisory groups (e.g., the Ministry of Health Patient and Family Advisory Council) and ensure older adults are members of these advisory groups, valuing principles of inclusion and equity that may influence choices of investments and service provision. Notably, investment in infrastructure like older adults’ co-housing communities, which originated in Denmark, has increased quality of life, belonging to a community, and social interaction for residents of these communities (Puplampu *et al.*, 2020). Likewise, innovative transportation options geared toward older adults and their caregivers must be embedded within public transportation systems. Leistner and Steiner’s (2017) evaluation of the integration of a dynamic ridesharing system into existing government transportation supports the use of this type of transportation to enhance older adults’ physical mobility and social participation at a small cost to local governments, while appropriate to local contexts.

Moreover, for older adults to age at home, more resources must be dedicated to the home care sector, often comprising marginalized racialized women providing the hands-on care. It also requires attention to policies related to privacy and financial structures to support older adults to age in place, removing barriers, particularly

for marginalized older adults. The findings and recommendations for supports align with the World Health Organization's (2021) promising practices to address social isolation and loneliness – specifically, noting the need for rigorous research and collaboration among researchers and decision makers to advance the evidence, develop supportive policies, scale up effective interventions, identifying contexts and people most at risk who would benefit from interventions that affect modifiable factors. Solutions to prevent social isolation exist around the world, and it is imperative that we bring these solutions to our communities to prevent older adults and caregivers from being pushed into social isolation both in and outside of an international public health crisis. As demonstrated in our findings, inclusion is a key principle identified in the study documents, guiding provincial action plans and social isolation research. However, what is lacking are PAR studies, particularly including caregivers (both family and formal) to be co-learners to develop contextually appropriate interventions (Blusi et al., 2018; Hand et al., 2019; Tonkin et al., 2018; Turcotte et al., 2019). Building on the reflexive lens of this study, PAR lends itself to opening the opportunity for research with a more critical lens, creating dialogue with decision makers and marginalized older adults and caregivers who confront discrimination based on gender, race, income, rurality to stay socially connected, especially during a crisis such as a pandemic. Age-friendly principles and many regional health and social service planning bodies espouse the principle of inclusion. Why is it that the recommendations proposed by the participants echo those in plans and charters from over 3 decades ago?

We support the call for interdisciplinary and multisystem approaches to social isolation that consider the individual, their families, the local context, and the broader society (Poulin et al., 2021; Rine & LaBarre, 2020). The next steps are to leverage individual and community resilience, not focusing on the deficits of older adults but further engaging decision makers to reduce barriers to social connection and engagement. Madsen, Ambrens, and Ohl (2019) noted that when older adults' capacities (e.g., skills, wisdom, economic, and social contributions) are drawn upon rather than age-related deficits and challenges highlighted when developing policies, community resilience increases. With ongoing input from older adults and caregivers in designing supports needed, a more just, evidence-informed approach to addressing social isolation among our older adults and their caregivers can be addressed, being more prepared for the negative impacts of future crises.

While PAR has the benefits of being a nimble, timely research approach to create meaningful dialogue between more vulnerable people, their service providers and relevant decision makers in a particular context, a limitation of this study, is that the specific findings may be less relevant in other settings or cultural contexts. PAR was possible in such a short time frame for this study because of long-standing authentic relationships, strong networks with older adults in leadership positions, and a history of effective collaboration among service providers in a relatively small geographically mixed urban and rural areas with similar goals easily agreed upon. As with our Indigenous collaborators, their approach to addressing social isolation was unique. Unique cultural approaches are not likely applicable to other large urban contexts or where relationships may be more transient. Without these conditions, extra time is needed to establish trusting relationships and an understanding of similarities and differences. We can also not ignore (though we interviewed marginalized older adults and caregivers identified by engaged older adults and organizations) those with no connections or supports who often “fall through the cracks.” While older adults were included in all phases of this research project, including making

recommendations to decision makers, like other PAR studies, rarely do marginalized older adults hold significant power as potent agents of sustainable change (Corrado, Benjamin-Thomas, McGrath, Hand, & Laliberte Rudman, 2020). Particularly, smaller, community-based health and social service providers were extremely strained during the pandemic, so often organizational adaptations to service practices and application of guidance documents were unavailable in writing. Many TF members used the phrase that they did not have documents because “they were building the plane as they were flying it.” Communities will always lack resources for social isolation interventions recommended, especially during a pandemic, but older adult volunteers, service providers, and decision makers can adapt our study process for future research and building on this study to enable contextually appropriate responses to mitigate social isolation with a more critical lens that is hopefully sustainable in non-pandemic times.

Conclusion

In conclusion, this paper has reinforced the known negative health outcomes of social isolation, in the context of the COVID-19 pandemic, with older adults and their family and formal caregivers emphasizing mental strain and altered social relationships needing attention. To prevent and mitigate social isolation among these populations, our findings call for organizations, communities, and governments to engage in genuine collaborative communication among the circle of care, enabling older adults to stay connected and supported, caregivers to practise self-care, and outreach serving marginalized older adults living alone and their caregivers. Finally, engaging with age-friendly networks or similar groups to conduct PAR about mitigating social isolation serves to inform researchers, health and social service care providers, regional planning bodies, and government policy analysts regarding meaningful pandemic responses and future planning. Furthermore, these key decision makers need to collaborate in the development and evaluation of the practices, programs, and policies. To create meaningful and sustainable social change to support older adults and caregivers, parties from individuals to governments must acknowledge that social connection is a fundamental social determinant of health and should be addressed with the same primacy as other social determinants of health, including physical health, poverty, education, and employment. Ultimately, lessons learned during the pandemic, therefore, must not be forgotten when COVID-19 no longer shines a light on the needs of the most vulnerable populations.

Acknowledgements. We would like to thank each older adult, family caregiver, and formal caregiver who shared their stories with us. We would also like to thank the Age-friendly Peterborough Task Force members and collaborators who were fundamental to the success of this project. We would like to thank Dawn Berry Merriam and Jayne Culbert who were lead collaborators on our research team as well as the student research assistants, Julia Osei-Boateng, Jenna Fraser, Dhruvika Joshi, and Owen Tam.

Funding. This work was supported by Trent University Special Call COVID-19 Rapid Response, City of Peterborough, McMaster University.

References

- Age-friendly Peterborough. (2017). Community action plan. Retrieved July 10, 2020, from <https://www.peterborough.ca/en/city-hall/age-friendly-peterborough-plan.aspx>.

- Alzheimer's Society of Canada. (2020). Coronavirus (COVID-19): Tips for people with dementia, caregivers and families. Retrieved July 10, 2020, from <https://alzheimer.ca/en>.
- Anderson, M. (2020). Recommendations for regional health care delivery during the COVID-19 pandemic: Outpatient care, primary care, and home and community care. Retrieved July 10, 2020, from https://www.corhealthontario.ca/Recommendations-for-Regional-Health-Care-Delivery-During-the-COVID-19-Pandemic-Outpatient-Care-Primary-Care_and-Home-and-Com.pdf.
- Behavioural Supports Ontario. (2020). *My transitional care plan during the COVID-19 pandemic*. Retrieved November 10, 2020, from <https://brainxchange.ca/BSOResources>.
- Blusi, M., Nilsson, I., & Lindgren, H. (2018). Older adults co-creating meaningful individualized social activities online for healthy ageing. *Studies in Health Technology and Informatics*, *247*, 775–779.
- Bowen, G. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, *9*, 27–40. <https://doi.org/10.3316/QRJ0902027>
- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. In P. Liamputtong (Ed.), *Handbook of research methods in health social sciences* (pp. 843–860). Singapore: Springer. https://doi.org/10.1007/978-981-10-5251-4_103
- Brown, C., & Graham, P. (2020). Ontario Ministry of Health memo: Supporting expansion of virtual home care delivery. Retrieved July 10, 2020, from https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/memos/MOH-OH_Memo_Virtual_Visits_March_18_2020.pdf
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, *41* (5), 545–547. <https://doi.org/10.1188/14.ONF.545-547>
- Casey, M., O'Leary, D., & Coghlan, D. (2018). Unpacking action research and implementation science: Implications for nursing. *Journal of Advanced Nursing*, *74*(5), 1051–1058. <https://doi.org/10.1111/jan.13494>
- Colucci, E., Nadeau, S., Higgins, J., Kehayia, E., Poldma, T., Saj, A., et al. (2022). COVID-19 lockdowns' effects on the quality of life, perceived health and well-being of healthy elderly individuals: A longitudinal comparison of pre-lockdown and lockdown states of well-being. *Archives of Gerontology and Geriatrics*, *99*, 104606. <https://doi.org/10.1016/j.archger.2021.104606>
- Corrado, A. M., Benjamin-Thomas, T. E., McGrath, C., Hand, C., & Laliberte Rudman, D. (2020). Participatory action research with older adults: A critical interpretive synthesis. *Gerontologist*, *60*(5), e413–e427. <https://doi.org/10.1093/geront/gnz080>
- Cotterell, N., Buffel, T., & Phillipson, C. (2018). Preventing social isolation in older people. *Maturitas*, *113*, 80–84. <https://doi.org/10.1016/j.maturitas.2018.04.014>
- Courtin, E., & Knapp, M. (2017). Social isolation, loneliness and health in old age: A scoping review. *Health & Social Care in the Community*, *25*(3), 799–812. <https://doi.org/10.1111/hsc.12311>
- Couture, M., Orzeck, P., & Petropoulos, A. (2019). Public health and social services system: The disenchantment of isolated senior caregivers. *Innovation in Aging*, *3*(Suppl 1), S387. <https://doi.org/10.1093/geroni/igz038.1420>
- Dos Santos Azevedo L. V., Calandri, I. L., Slachevsky, A., Graviotto, H. G., Vieira, M. C. S., de Andrade, C. B., et al. (2021). Impact of social isolation on people with dementia and their family caregivers. *Journal of Alzheimer's Disease*, *81*(2), 607–617. <https://doi.org/10.3233/JAD-201580>
- European Commission. (2019). Peer Review on “Strategies for supporting social inclusion at older age”, Berlin (Germany). *European Commission*. Retrieved July 10, 2020, from <https://ec.europa.eu/social/main.jsp?langId=en&catId=1024&furtherNews=yes&newsId=9418>.
- Flick, U. (2018). *An introduction to qualitative research* (6th ed). Thousand Oaks, CA: SAGE. Retrieved July 10, 2020, from <https://uk.sagepub.com/eng/eur/an-introduction-to-qualitative-research/book261109>.
- Gorenko, J. A., Moran, C., Flynn, M., Dobson, K., & Konnert, C. (2021). Social isolation and psychological distress among older adults related to COVID-19: A narrative review of remotely-delivered interventions and recommendations. *Journal of Applied Gerontology*, *40*(1), 3–13. <https://doi.org/10.1177/0733464820958550>
- Gundumogula, M. (2020). Importance of focus groups in qualitative research. *International Journal of Humanities & Social Studies*, *8*(11), 299–302. <https://doi.org/10.24940/theijhss/2020/v8/i11/HS2011-082>
- Hand, C., Rudman, D. L., McGrath, C., Donnelly, C., & Sands, M. (2019). Initiating participatory action research with older adults: Lessons learned through reflexivity-ERRATUM. *Canadian Journal on Aging = La Revue Canadienne Du Vieillessement*, *38*(4), 524. <https://doi.org/10.1017/S0714980819000266>
- Hiawatha First Nation Council. (2020). Hiawatha first nation stage 2 re-opening —Update #8. Retrieved July 10, 2020, from <https://www.hiawathafirstnation.com/covid-19-notice-2020/>.
- Irani, E., Niyomyart, A., & Hickman, R. L. (2021). Family caregivers' experiences and changes in caregiving tasks during the COVID-19 pandemic. *Clinical Nursing Research*, *30*(7), 1088–1097. <https://doi.org/10.1177/10547738211014211>
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (2008). Critical issues in developing and following community-based participatory research principles. In M. Minkler, & N. Wallerstein (Eds.), *Community-Based Participatory Research for Health: From Process to Outcome*. (pp. 47–62). San Francisco, CA: Jossey-Bass.
- Kearns, A., & Whitley, E. (2019). Associations of internet access with social integration, wellbeing and physical activity among adults in deprived communities: Evidence from a household survey. *BMC Public Health*, *19*(1), 860. <https://doi.org/10.1186/s12889-019-7199-x>
- Keefe, J. M., Knight, L., Martin-Matthews, A., & Légaré, J. (2011). Key issues in human resource planning for home support workers in Canada. *Work*, *40*(1), 21–28. <https://doi.org/10.3233/WOR-2011-1203>
- Korzinski, D. (2019). *A portrait of social isolation and loneliness in Canada today*. Vancouver, BC: Angus Reid Institute. Retrieved August 26, 2023, from <https://angusreid.org/social-isolation-loneliness-canada/>.
- Kothari, A., & Wathen, C. N. (2013). A critical second look at integrated knowledge translation. *Health Policy*, *109*(2), 187–191. <https://doi.org/10.1016/j.healthpol.2012.11.004>
- Lebrasseur, A., Fortin-Bédard, N., Lettre, J., Raymond, E., Bussièrès, E.-L., Lapierre, N., et al. (2021). Impact of the COVID-19 Pandemic on Older adults: Rapid review. *JMIR Aging*, *4*(2), e26474. <https://doi.org/10.2196/26474>
- Leistner, D. L., & Steiner, R. L. (2017). Uber for seniors?: Exploring transportation options for the future. *Transportation Research Record*, *2660*(1), 22–29. <https://doi.org/10.3141/2660-04>
- Lepore, M., Shuman, S., Wiener, J., & Gould, E. (2017, January). Challenges in involving people with dementia as study participants in research on care and services. Research Summit on Dementia Care: Building Evidence for Services and Supports. Retrieved August 26, 2023, from <https://aspe.hhs.gov/basic-report/challenges-involving-people-dementia-study-participants-research-care-and-services>. <http://files/5458/challenges-involving-people-dementia-study-participants-research-care-and-services.html>.
- Lofland, J., Snow, D. A., Anderson, L., & Lofland, L. H. (2006). *Analyzing social settings: A guide to qualitative observation and analysis*. Toronto, Canada: Wadsworth Publishers of Canada Ltd.
- Madsen, W., Ambrens, M., & Ohl, M. (2019). Enhancing resilience in community-dwelling older adults: A rapid review of the evidence and implications for public health practitioners. *Frontiers in Public Health*, *7*, 14–14. <https://doi.org/10.3389/fpubh.2019.00014>
- Meisner, B. A., Boscari, V., Gaudreau, P., Stolee, P., Ebert, P., Heyer, M., et al. (2020). Interdisciplinary and collaborative approaches needed to determine impact of COVID-19 on older adults and aging: CAG/ACG and CJA/RCV joint statement. *Canadian Journal on Aging / La Revue Canadienne Du Vieillessement*, *39*(3), 333–343. <https://doi.org/10.1017/S0714980820000203>
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation*. John Wiley & Sons, Inc. New York.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. St. Paul, MN: SAGE.
- Morgan, H. (2022). Conducting a qualitative document analysis. *Qualitative Report*, *27*(1), 64–77. <https://doi.org/10.46743/2160-3715/2022.5044>
- Morse, J. M. (2000). Determining sample size. *Qualitative Health Research*, *10* (1), 3–5. <https://doi.org/10.1177/104973200129118183>
- National Seniors Council. (2017). Who's at risk and what can be done about it?: A review of the literature on the social isolation of different groups of seniors. Employment and Social Development Canada. Retrieved August 26, 2023,

- <https://www.canada.ca/en/national-seniors-council/programs/publications-reports/2017/review-social-isolation-seniors.html>.
- Newman, K., Wang, A. H., Wang, A. Z. Y., & Hanna, D. (2019). The role of internet-based digital tools in reducing social isolation and addressing support needs among informal caregivers: A scoping review. *BMC Public Health*, *19*(1), 1495. <https://doi.org/10.1186/s12889-019-7837-3>
- No Isolation. (2021). The impact of Komp on seniors' levels of loneliness and well-being. No Isolation. Retrieved August 26, 2023, from <https://www.noisolation.com/research/the-impact-of-komp-on-seniors-levels-of-loneliness-and-well-being>.
- Parmar, J., Anderson, S., Dobbs, B., Tian, P. G. J., Charles, L., Triscott, J., et al. (2021). Neglected needs of family caregivers during the COVID-19 pandemic and what they need now: A qualitative study. *Diseases*, *9*(4), 70. <https://doi.org/10.3390/diseases9040070>
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. St. Paul, MN: Sage.
- Peterborough Public Health. (2020). COVID-19 – Information for Seniors. Retrieved August 10, 2020, from <https://www.peterboroughpublichealth.ca/>.
- Poscia, A., Stojanovic, J., La Milia, D. I., Duplaga, M., Grysztar, M., Moscato, U., et al. (2018). Interventions targeting loneliness and social isolation among the older people: An update systematic review. *Experimental Gerontology*, *102*, 133–144. <https://doi.org/10.1016/j.exger.2017.11.017>
- Poulin, V., Provencher, V., Nicole, M., Shea, V., Aubin, G., Beaulieu, M., et al. (2021). Challenges and strategies to adapt the provision of support services to older adults and caregivers during the COVID-19 pandemic: The perspective of community organizations. *Canadian Journal on Aging / La Revue Canadienne Du Vieillessement*, *40*(4), 591–603. <https://doi.org/10.1017/S0714980821000507>
- Punjwani, Z. (2021). Building connections: Promising practices to reduce older adult social isolation for age-friendly community initiatives. Retrieved December 15, 2021, from www.agefriendlyontario.ca.
- Puplampu, V., Matthews, E., Puplampu, G., Gross, M., Pathak, S., & Peters, S. (2020). The impact of cohousing on older adults' quality of life. *Canadian Journal on Aging / La Revue Canadienne Du Vieillessement*, *39*(3), 406–420. <https://doi.org/10.1017/S0714980819000448>
- Raina, P., Wolfson, C., Kirkland, S., & Griffith, L. (2018). The Canadian longitudinal study on aging (CLSA) report on health and aging in Canada findings from baseline data collection 2010–2015. Retrieved August 26, 2023, from <https://www.clsa-elcv.ca/doc/2639>.
- Reed, A. C., Murmann, M., Hsu, A., Turnpenney, A., Van Houtven, C., Laberge, M., et al. (2022). Risk recognition policies for the long-term care workforce during the first year of the COVID-19 pandemic: A multi-country study. *Journal of Long-Term Care*, *2022*, 22–22. <https://doi.org/10.31389/jltc.110>
- Rine, C. M., & LaBarre, C. (2020). Research, practice, and policy strategies to eradicate social isolation. *Health & Social Work*, *45*(4), 221–224. <https://doi.org/10.1093/hsw/hlaa031>
- Rodrigues, N. G., Han, C. Q. Y., Su, Y., Klainin-Yobas, P., & Wu, X. V. (2022). Psychological impacts and online interventions of social isolation amongst older adults during COVID-19 pandemic: A scoping review. *Journal of Advanced Nursing*, *78*(3), 609–644. <https://doi.org/10.1111/jan.15063>
- Rotenberg, S., Oreper, J. S., Bar, Y., Davids-Brumer, N., Arbel, I., & Dawson, D. R. (2021). Occupational disruption during the COVID-19 pandemic: The lived experience of community-dwelling older adults. *Canadian Journal on Aging / La Revue Canadienne Du Vieillessement*, *40*(4), 521–532. <https://doi.org/10.1017/S0714980821000465>
- Rydenfält, C., Holgersson, C., Östlund, B., Arvidsson, I., Johansson, G., & Persson, R. (2020). Picking low hanging fruit – A scoping review of work environment related interventions in the home care sector. *Home Health Care Services Quarterly*, *39*(4), 223–237. <https://doi.org/10.1080/01621424.2020.1772936>
- Savage, R. D., Wu, W., Li, J., Lawson, A., Bronskill, S. E., Chamberlain, S. A., et al. (2021). Loneliness among older adults in the community during COVID-19: A cross-sectional survey in Canada. *BMJ Open*, *11*(4), e044517. <https://doi.org/10.1136/bmjopen-2020-044517>
- Sayin Kasar, K., & Karaman, E. (2021). Life in lockdown: Social isolation, loneliness and quality of life in the elderly during the COVID-19 pandemic: A scoping review. *Geriatric Nursing*, *42*, 1222–1229. <https://doi.org/10.1016/j.gerinurse.2021.03.010>
- Sharman, Z. (2014). Recruitment and retention of home support workers in rural communities. *Home Health Care Services Quarterly*, *33*(4), 229–243. <https://doi.org/10.1080/01621424.2014.964897>
- Sinha, S., Mckee, A., Dunning, J., Wong, I., Nicin, M., & Muscedere, J. (2018). *We Can't Address What We Don't Measure Consistently. Building Consensus on Frailty in Canada*. National Institute on Ageing. Retrieved July 10, 2020, from <https://static1.squarespace.com/static/5c2fa7b03917eed9b5a436d8/t/5c9a5ee8ec212d3c3a988470/1553620716220/Frailty+Paper.pdf>.
- Smith, M. L., Steinman, L. E., & Casey, E. A. (2020). Combatting social isolation among older adults in a time of physical distancing: The COVID-19 social connectivity paradox. *Frontiers in Public Health*, *8*, 403. <https://doi.org/10.3389/fpubh.2020.00403>
- Stall, N. (2019). We should care more about caregivers. *CMAJ: Canadian Medical Association Journal*, *191*(9), E245–E246. <https://doi.org/10.1503/cmaj.190204>
- Statistics Canada. (2022, February 9). Profile table, Census Profile, 2021 Census of Population—Peterborough, City (CY) [Census subdivision], Ontario. Retrieved August 26, 2023, from <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>.
- Su, Y., Rao, W., Li, M., Caron, G., D'Arcy, C., & Meng, X. (2022). Prevalence of loneliness and social isolation among older adults during the COVID-19 pandemic: A systematic review and meta-analysis. *International Psychogeriatrics*, *35*, 229–241. <https://doi.org/10.1017/S1041610222000199>
- Tonkin, R., Freeman, S., Martin, J., Ward, V., & Skinner, K. (2018). First nations elders' perspectives of engagement in community programs in Nak'azdli Whut'en, British Columbia, Canada. *Canadian Journal of Public Health*, *109*, 717–725. <https://doi.org/10.17269/s41997-018-0125-7>
- Turcotte, P.-L., Carrier, A., & Levasseur, M. (2019). Community-based participatory research remodelling occupational therapy to foster older adults' social participation. *Canadian Journal of Occupational Therapy*, *86*(4), 262–276. <https://doi.org/10.1177/0008417419832338>
- Ulugerger Avci, G., Bektan Kanat, B., Suzan, V., Can, G., Korkmazer, B., Karaali, R., et al. (2022). Clinical outcomes of geriatric patients with COVID-19: Review of one-year data. *Aging Clinical and Experimental Research*, *34*(2), 465–474. <https://doi.org/10.1007/s40520-021-02047-y>
- Van Orden, K. A., & Heffner, K. L. (2022). Promoting social connection in Dementia caregivers: A call for empirical development of targeted interventions. *Gerontologist*, *62*, 1258–1265. <https://doi.org/10.1093/geront/gnac032>
- Verdinelli, S., & Scagnoli, N. I. (2013). Data display in qualitative research. *International Journal of Qualitative Methods*, *12*(1), 359–381. <https://doi.org/10.1177/160940691301200117>
- Williams, C. Y. K., Townson, A. T., Kapur, M., Ferreira, A. F., Nunn, R., Galante, J., et al. (2021). Interventions to reduce social isolation and loneliness during COVID-19 physical distancing measures: A rapid systematic review. *PLoS ONE*, *16*(2), e0247139. <https://doi.org/10.1371/journal.pone.0247139>
- World Health Organization. (2021). *Social isolation and loneliness among older people: Advocacy brief*. World Health Organization. Retrieved August 26, 2023, from <https://www.who.int/publications-detail-redirect/9789240030749>.
- Yeager, K. (2020). LibGuides: Statistical & Qualitative Data Analysis Software: About NVivo. Retrieved August 20, 2020, from <https://libguides.library.kent.edu/statconsulting/NVivo>. <http://files/5464/NVivo.html>.