



Promoting Older Adults' Engagement in Disaster Settings: An Introduction to the Special Issue

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1 Introduction

Globally, surging extreme events and the escalating aging population present ongoing and severe challenges to the full spectrum of international community development (for example, social, health, and economic) (Dee 2024). Over the past 20 years, climate-induced and environmental disasters worldwide have caused over 1.3 million casualties and left more than 4.4 billion people injured, homeless, and/or in need of emergency assistance, with total direct economic losses approaching USD 3 trillion (UNDRR 2018). The rising human and economic costs have compelled international communities to prioritize resilience enhancement. Furthermore, the United Nations (UN 2019) reported that the global population of adults aged 65 and older will almost double from 9% in 2019 to 16% in 2050. Some countries, such as Greece, Korea, and Japan, have an even faster aging rate than the global average (World Economic Forum 2020).

Older adults, similar to many other vulnerable and marginalized populations, are disproportionately impacted by disasters (Wu 2020). This presents a vital necessity to connect scholars worldwide and stimulate joint efforts to serve this population. Despite the pressing and growing needs in disaster science and related disciplines (for example, gerontology, social work, and sociology), current disaster-specific research, practice, and policy have mainly focused on generalized assumptions of older adults as a vulnerable, passive, and dependent group, rather than recognizing their diversity, expertise, assets, and experiences (Kwan and Walsh 2018).

The considerable strengths of older people (for example, life-long experience, knowledge, connections, and networks) can significantly advance disaster-related efforts through the entire disaster and emergency cycle and foster resilience capacity at individual, family, community, and society levels (Campbell 2019). Better understanding of older adults' assets (individually and collectively), existing resources, and promising practice interventions and adoption of an integrated perspective to collectively address older adults' disaster-driven needs and inform aging-specific health and social policies can further promote older adults' community engagement and contributions. This understanding is vital for designing empirically-driven strategies and collaborative interventions to promote evidence-based learning and identify new research-practice orientations and partnerships.

Literature regarding older adults in disaster settings has frequently treated them as passive victims, rarely addressing their actual and potential contributions toward building resilience. The same exists with current scholarly outcomes regarding older adults affected by COVID-19 (Petretto and Pili 2020). A paucity of literature and practice examines the intersections between older adults' resilience capacity and disaster-specific efforts. These knowledge deficits and associated impacts on practice, policy, and education threaten older adults' community engagement, jeopardize their health and overall well-being, and, eventually, diminish individual and collective resilience capacity.

Responding to the knowledge deficits and collaborating with international professionals, this special issue was developed to focus on critical knowledge, innovative practice, and older-adult-driven disaster policies to engage older adults in disaster settings that are of interest to international audiences, including academics, practitioners, direct service providers, university students, and policymakers. Building on the knowledge from nine articles, this special issue aimed to create new opportunities to foster older adults' leadership in disaster settings, inform improvements in age-friendly service delivery, and strengthen older adults' resilience in the

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current COVID-19 recovery in particular, and surging global disasters in general.

2 Older Adults are Essential Actors and Valuable Community Assets

Older adults are essential actors and valuable community assets; they contribute to the enhancement of community resilience in disaster and non-disaster settings. The phenomenon of increasing longevity reflects tremendous societal achievements and generates enormous opportunities for ongoing societal development (Kinsella and Phillips 2005). Indeed, the World Health Organization (WHO 2017) encourages age-friendly infrastructure and institutions by addressing various age-specific challenges associated with health and well-being, including chronic diseases, mental conditions, and reduced physical mobility. Rising life expectancy enables older adults to make ongoing contributions to their families and society into advanced age, which is in line with social engagement and productivity as critical criteria in an age-friendly society (WHO 2011). Despite this insight, research has predominantly focused on older people's vulnerabilities rather than their societal contributions (Fried et al. 2004).

The United Nation's Sendai Framework for Disaster Risk Reduction 2015–2030 calls for an all-inclusive approach to advance resilience by engaging diverse vulnerable and marginalized groups (including older adults) (UN 2015). Although older adults have been treated as passive disaster victims, emerging studies shed light on the engagement of older people in community-based disaster-related efforts by leveraging their lifelong multifaceted experiences, knowledge, and skills to accelerate their own and their peers' recovery (Howard et al. 2017). Hence, this special issue addresses age-related challenges and mobilizes expertise from international communities to demonstrate evidence-based strategies that promote older citizens' engagement in disaster-related efforts to advance resilience at the individual, family, community, and societal levels.

Promoting older adults' engagement in disaster contexts illustrates a practical approach to mitigate the risks and reduce the vulnerabilities they face. This special issue fosters meaningful dialogue that benefits international communities by supporting continuous multistakeholder engagement to facilitate timely response to extreme events. This goal is achieved by engaging with older adults and empowering their leadership in disaster-related efforts. Recognizing the evolving global milieu of rapidly aging populations, compound disasters, and compounding processes and impacts (Peek et al. 2020), this special issue makes significant contributions towards the following.

2.1 New understanding of older adults' efforts in the entire disaster cycle

Studies in this special issue address a wide range of disasters, including earthquakes, floods, COVID-19, and wildfires, and focus on all the four stages in the entire disaster cycle (pre-disaster preparedness, emergency response, post-disaster reconstruction and recovery, and mitigation) and further contribute to a nuanced understanding of the full landscape of older adults' disaster-related efforts. Through a scoping review, Ekoh and Walsh (2024) examined older adult displacement due to different disasters and their contributions to post-disaster reconstruction and recovery. They argued that although these older forced migrants are vulnerable, they possess valuable skills, experiences, and perspectives that can enrich their new communities' post-disaster social development and build healthy communities in meaningful ways. Focusing on compound disasters and their impacts, Zhou and Kwan's (2024) four-year research project explored the mental health impacts of 10 types of disasters on rural older adults in China under three natural hazard categories: hydrometeorological, biological, and geological. Although, as they found, cumulative exposure to extreme events generates long-term mental health impacts, older adults have accumulated more resilience to mitigate the adverse well-being impacts during the post-disaster, long-term recovery period than their younger and middle-aged counterparts. Similarly, Xu et al. (2024) investigated older adults' mental health and psychological well-being during the COVID-19 emergency response in the United States through the lens of gender and race. Their research discovered the significant interaction effects on anxiety and depression between females and Black older adults, providing evidence-based strategies to support the mental health and overall well-being of a unique older adult subgroup in public health emergency response.

Canada is situated in a part of the world considerably prone to climate-induced extreme events (Bush and Lemmen 2019). With a faster aging rate than the global average, it is expected that older Canadians (aged 65 and older) will make up 24% of the total population by the end of the 2030s (Government of Canada 2022). Four articles in this special issue address older adults and disasters in the Canadian context. The Canadian knowledge provides valuable references to international counterparts to improve their disaster-related efforts. For instance, Bogdan et al. (2024) investigated older adults' attitudes, actions, and recommendations regarding natural hazards—specifically floods, wildfires, and earthquakes—that pose risks spanning five geographic regions across Canada. This understanding allows for the engagement of older adults in

pre-disaster preparedness planning. Drolet and Choudhury (2024) focused on older adults' community engagement in post-disaster, long-term recovery after the 2016 Fort McMurray wildfires, the costliest environmental disaster in Canadian history. They illustrated that fostering supportive relationships, cultivating partnerships and collaboration, and addressing persistent challenges are the three critical interventions to enhance older adults' engagement in long-term, post-disaster recovery. These approaches contribute to community-based disaster mitigation, and prepare the communities for the next extreme event.

2.2 Methodological advancements in engaging older adults in disaster-related efforts

Diverse and integrated methodologies and methods enabled the researchers to examine older adults' disaster engagement from different perspectives, contributing to a nuanced understanding of the vulnerabilities and strengths of older adults. The quantitative, qualitative, and mixed method studies presented in this special issue applied different data collection and analysis instruments (for example, survey, interview, case study, focus group, and secondary data analysis) to design data-driven interventions. Mainly, Rao et al. (2024) investigated the older-adult disaster and emergency preparedness status associated with extreme weather events among eight counties of Central Ohio in the midwestern United States. Synthesizing primary data from the 2021 Central Ohio Regional Assessment on Aging survey and census data county-level demographic characteristics, the study identified contextual older-adult specific disaster preparedness at the county level. Rodríguez-Giralt et al. (2024) employed a mixed-method approach to evaluate a digital public social service (VinclesBCN) for reducing older adults' loneliness and isolation during COVID-19 in Barcelona, Spain. The data generated from the service user and service provider interplay support the advocacy for inclusive digital interventions that address the unique needs of older adults and utilize their strengths to facilitate mutual social support and connection.

Unlike other articles in this special issue, which focus on older adults in general, two articles collected new data sets that identify older adult professionals who fulfilled their occupational responsibilities in disaster settings. During the COVID-19 pandemic, older adults were identified as occupying the highest risk associated with physical health, mental wellness, and overall well-being (Petretto and Pili 2020). Conversely, responding to the pandemic-specific needs, retired professionals (for example, physicians, nurses, and teachers) returned to work. Notably, Wu and Yung (2024) examined the contributions and leadership of frontline older adult personal support workers in long-term care facilities in the Greater Toronto Area, Ontario, Canada, through an

individual-family-work triangulation framework. Although these frontline healthcare workers bear high age-related and workplace-specific health risks, their health knowledge, previous pandemic experience, professional ethics, and societal obligations propelled them to tirelessly fight on the COVID-19 frontline. They not only successfully led their team to complete their public responsibilities but also effectively managed their private obligations in their own and extended families. Breen et al. (2024) portrayed older adult farmers' disaster experience from the stages of emergency response to post-disaster reconstruction and recovery in the 2021 Fraser Valley floods in British Columbia, Canada. In the context of rural animal farming communities, older adult farmers' place-making knowledge, community connections and networks, and social capital supported the entire rural community's emergency evacuation and generated a therapeutic community, resulting in positive post-flood long-term recovery.

2.3 Application of older-adult research to practice improvement and policy advancement

Recognizing the diversity within the older adult group, as suggested in several studies in this special issue, it is necessary to inform community-based service and advance community-based practice to better support and engage older adults in disaster settings. Xu et al. (2024) suggested that academic-community partnerships can deepen our comprehension of disparities in mental health services among older adults of various genders and racial backgrounds. This knowledge enables community-based healthcare professionals to customize the service delivery models for older adults from diverse backgrounds. This approach addresses the unique needs of older adults and advocates for their strengths to support their peers, whose mental health and psychological well-being were negatively affected by disasters. Furthermore, Drolet and Choudhury's (2024) article assists community-based social workers in profoundly understanding the older adults' challenges associated with the post-disaster environment. This understanding enables social work practitioners to collaborate with other disaster and emergency management professionals to adopt a comprehensive "aging in place" approach to promote older adult engagement in their community-based disaster agenda by bringing together multiple sectors and actors.

Older adult-focused research features a critical approach to inform related policy/decision making, strengthens community-based services, supports new research areas, and provides better support programs for older adults. Through the examination of policy deficits in existing literature, Ekoh and Walsh (2024) proposed a series of policy recommendations associated with the enhancement of the effectiveness, efficiency, and equity of post-disaster humanitarian response

interventions for older adults, especially recognizing the value of older adult migrants' contributions in community social development, such as therapeutic caregiving, inter-generational culture transfer, and community development advise. Breen et al.'s (2024) research illustrated that older adult farmers in rural communities were equipped with necessary environment-specific knowledge and had built sufficient social capital to facilitate the rural community's self-rescue, self-reconstruction, and self-recovery. This research shed light on the policy implication of promoting older adult farmers' leadership in their communities' disaster-related efforts. Zhou and Kwan (2024) unveiled the alarming fact that low-attention, small-scale, and less intensive disasters in rural areas can generate compounding, long-term mental health impacts on rural residents that require holistic policies and long-term interventions. Older adults' resilience capacity, which buttresses mental health recovery, should be magnified to support other dwellers, thus accelerating the entire rural community's recovery.

3 Moving Forward

Rooted in the global context of the severity and frequency of disasters increasing with climate change and impacting a swiftly growing older population, the research findings, promising practices, and robust policy recommendations presented in this special issue emphasize appropriate directions to promote older adults' engagement in future disaster settings. Moving forward, this special issue suggests the following three streams to develop older adult-driven disaster-related efforts:

At the micro level, this special issue contributes to a nuanced understanding of older adults' increased vulnerabilities to disasters coupled with health (physical, psychological, and overall well-being), demographic (for example, age, gender, and race), social (for example, immigration status, and social networks and services), and economic (for example, uneven economic development between rural and urban communities and low income) vulnerabilities, while demonstrating older adults' diverse, resilience capacity to cope with these societal challenges. Although Ekoh and Walsh's (2024) scoping review offered insights into the challenges and strengths of older adult immigrants in post-disaster reconstruction and recovery, a more systematic comprehension of their challenges and strengths is needed. Focusing on the diverse nature of this group, such as age differences (youngest-old, middle-old, and oldest-old), gender and sexual diversity, ethnicity (Indigenous), older adults experiencing homelessness, older adults living with (dis)Abilities, and inter-/trans-generational experience and knowledge, will support development of a comprehensive approach that

examines the interplay among these different dimensions in order to generate inclusive advocate strategies.

At the mezzo level, community-based service agencies and other organizations play a vital role in leveraging the older adults' expertise to continually service their communities. As Drolet and Choudhury (2024) recommended, different community-based agencies and organizations should collaborate in both disaster and non-disaster settings to develop a long-term plan to support older adults in general. Within the workplace environment, Wu and Yung (2024) argued that older adult employees' strengths should be magnified to guide the organization through extreme events. Hence, training programs are needed to help these service providers and organizational authorities appreciate the expertise of older adults and develop suitable strategies to leverage their strengths. These mezzo-level improvements will inform public education at the community level to build a welcoming and inclusive atmosphere to increase the older adults' community participation and, eventually, empower their leadership in disaster-related efforts.

At the macro level, specific policies for older adults implicate a top-down approach to support different initiatives at the micro and mezzo levels. Although all the articles identified some policy recommendations, these recommendations were developed through a bottom-up approach, where older adults rarely participated in the disaster-driven decision-making process for themselves and their communities. Hence, promoting older adults' participation in the decision-making process enables them to offer their life-long experiences, knowledge, and connections to guide their communities to cope with different stages (pre-disaster preparedness, emergency response, post-disaster reconstruction and recovery, and mitigation) throughout the entire disaster cycle. This inclusive engagement in the decision-making process could be extended to non-disaster settings, continuing the older adults' contributions to their community development.

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