

Disaster Preparedness in Social Work: A Scoping Review of Evidence for Further Research, Theory and Practice

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Abstract

The aim of this study was to understand the extent and nature of social work literature relating to preparedness in the context of natural disasters and to identify the implications for further research, theory and practice. A systematic scoping review explored scholarly databases pertaining to literature about social work and disaster preparedness, between 2000 and 2019; a total of thirty-nine articles met the inclusion criteria. Data were extracted from these articles to map the range and type of literature, and thematic analysis was undertaken to explore aspects of preparedness in greater depth. Analysis revealed a recurring theme regarding the need to foreground preparedness in social work and disaster practice along with recommendations that preparedness be more consistently enacted as an ongoing, localised, dynamic and dialogic process in order to better respond to a diverse range of community needs. Building on these findings, the authors highlight the need to challenge dominant discourses in social work and extend the conceptualisation of the profession in the context of disasters at both the intra- and inter-professional levels. By drawing on transformative, ecosocial approaches, the profession's contributions to disaster practice, equity and justice in this complex context of global practice can gain visibility.

Keywords: disaster preparedness, ecosocial work, environment, scoping review, social work and disasters, transformative ecosocial theory

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Teaser text

The paper by Boetto *et al.* (2021) reports on a scoping review of social work literature relating to disaster preparedness in the context of natural disasters. As a result of climate change, the frequency and magnitude of natural disasters are increasing. Marginalised groups and communities are disproportionately impacted by disasters, and as a global profession committed to equity and justice, there is an ethical imperative for social work to actively engage in disaster preparedness practice as part of mainstream, generic practice. Through a systematic analysis of the literature, the authors:

- provide a comprehensive overview of contextual factors impacting on levels of disaster preparedness and they also explore characteristics of effective preparedness planning;
- discuss ways in which the social work profession contributes to multidisciplinary disaster practice and how these contributions can gain visibility and wider recognition;
- highlight the need to embed disaster practice into the professional domain, through curriculum and education, standards for professional practice and opportunities for ongoing professional development; and
- argue that social workers need to maintain a clear focus on equity and environmental justice as transformative, culturally sensitive, community-based approaches to disaster practice are developed and implemented.

Introduction

This article reports on findings from a systematic scoping review of social work literature regarding preparedness in the context of natural disasters. The aim of the research was to explore the nature and extent of literature relating to disaster preparedness and to consider implications for further research, theory and practice. Disaster preparedness refers to the development of interventions to effectively prepare for a disaster event, such as formulating policies and plans, training and education and sharing of information to prepare individuals and communities should a disaster eventuate (Alston *et al.*, 2019). Disaster preparedness requires an understanding of the level of resilience within a community, potential hazards and risks; and involves strengthening a community's capacity to cope with the effects and impacts of a disaster event (Pfefferbaum *et al.*, 2017). Disaster preparedness also requires an integrated approach involving all sectors of the community, including local members and groups, private and public organisations and local governments (Alston *et al.*, 2019). The term community is used broadly here to refer to a group of people who share a common identity, including geographical location, special interest or common circumstances (Kenny and Connors, 2017). Given that a community's capacity to adapt and recover from a disaster event is intrinsically linked to their level of preparedness (Augustine *et al.*, 2019), this area of practice for social work is of critical importance.

Defining natural disasters

Disasters are increasing in frequency and magnitude worldwide. According to the [Centre for Research on the Epidemiology of Disasters \(2020\)](#), the number of natural disasters in 2019 was above the average for the previous ten years with at least 396 recorded events and almost 12,000 fatalities across the world. Research has confirmed that an increase in average global temperatures as a result of human-induced climate change has in part contributed to the increase in natural disasters (United Nations Office for Disaster Risk Reduction [UNDRR], 2015). While linking any one particular natural disaster with human-induced climate change may be scientifically unsound, overall trends indicate that an increase in greenhouse gas emissions over the last 150 years and concomitant industrialisation have exacerbated climate variability ([Intergovernmental Panel on Climate Change, 2018](#)).

A natural disaster is an adverse event caused by Earth's natural processes, for example storms, earthquakes, floods and bushfires, which disrupts the normal functioning of communities ([UNDRR, 2015](#)). Natural disasters cannot be divorced from contextual socio-economic and political factors pertinent for understanding disproportionate impacts on marginalised groups and communities ([Park and Miller, 2006](#); [Hallegatte *et al.*, 2020](#)). A commonly used framework for organising responsibilities and processes to address natural disaster impacts consists of four phases—prevention, preparedness, response and recovery ([Pfefferbaum *et al.*, 2017](#)). Finally, it should be noted that natural disasters intersect with a broad range of different types of disasters, including technological failures (e.g. oil spill), terrorism (e.g. damage to natural landscapes), pandemics (e.g. zoonotic diseases) and war and conflict (e.g. over scarce natural resources).

There is ample evidence to demonstrate how the impacts of natural disasters disproportionately affect groups and communities experiencing poverty and disadvantage ([Yoosun and Miller, 2006](#); [Hallegatte *et al.*, 2020](#)). Given that social workers engage with people experiencing poverty and disadvantage as part of everyday practice, the profession has a major role to play in producing effective action to mitigate disaster impacts. This inequity requires critical examination of the dominant modernist discourse pertaining to the 'naturalness' of disasters, which typically constructs Earth's natural processes as isolated and decontextualised events. In the modernist paradigm, positivist assumptions situate the natural environment as an objective entity that is independent or separate from humans ([Boetto, 2019](#)). In the context of natural disasters, this means that disproportionate and unequal impacts of disasters on disadvantaged groups are concealed within a cloak of 'naturalness'. Natural disasters are construed as inevitable, natural and isolated events

detached from the complex milieu of socially constructed patterns of interaction that shape the context of disasters. For example, authors, such as Pereira (2000) and Park and Miller (2006), draw attention to differences in the socio-economic and political capital held by communities that determine the extent of human impacts. Further, True (2013) refers to the ‘political economy of gender inequality’ to explain violence against women both before and following a disaster (p. 79). This evidence highlights the complex and dynamic nature of disasters and suggests that a range of socio-cultural, political and economic dimensions shape the context of disaster events.

Lived experience of natural disasters is also variable and diverse, particularly in relation to people who require functional supports to assist with cognitive, sensory, language and physiological processes (Kailes and Enders, 2007). For example, official emergency advice following the 2010 earthquakes in New Zealand was considered at times to be inappropriate for many older people in light of their physical and social capabilities (Allen et al., 2018). Other evidence indicates that people with disabilities (Hay and Pascoe, 2019), culturally and linguistically diverse groups (Marlowe, 2015), people with dementia (Christensen and Castañeda, 2014), people who are homeless (Fogel, 2017) and families with children (Howard et al., 2018) have diverse needs in disaster situations. Despite the diversity within and between human communities, evidence suggests that predominant modes of disaster practice emanate from a modernist standpoint that does not readily account for diversity.

Disaster preparedness and social work

Social workers have an extensive record of supporting individuals and communities in response to natural disasters (see, e.g. Zakour, 1997). However, the profession’s contribution to the pre-disaster phase is more limited. Various authors have highlighted the need for social workers to undertake disaster preparedness interventions when working with vulnerable groups (e.g. Ali et al., 2014; Mihai, 2017), such as older people (Stewardson and Crump, 2013) and people who are homeless (Fogel, 2017). More recently, Harms et al. (2020) undertook a scoping review of social work literature in relation to post-disaster practice and highlighted the need for the profession to more comprehensively contribute to disaster preparedness. The authors contend that the profession needs to better prepare social workers for rapid deployment to often dangerous disaster situations so that they not only have solid foundations for practice, but so they are also less exposed to risk. The scoping review also identified the need for organisations that employ social workers to establish organisational infrastructure, including clear policies and procedures, to prepare for disaster situations. This call for disaster

preparedness in practice is consistent with international frameworks, such as the Sendai Framework for Risk Reduction (UNDRR, 2015) and the Sustainable Development Goals (United Nations [UN], 2015), as well as the Global Agenda for Social Work (IFSW, 2020). With these recommendations in mind, this systematic scoping review was undertaken to examine the nature and extent of disaster preparedness in social work, and to consider implications for further research, theory and practice.

Method

Data collection

Search strategy

Using Arksey and O'Malley's (2005) scoping review method to guide the research process and the Preferred Reporting Items for Systematic Reviews statement (Moher *et al.*, 2009), a search of the literature on social work and disasters was conducted (4 December 2019) by the third author. This involved a systematic search of scholarly databases (PsycINFO and Commonwealth Agricultural Bureaux (CAB) abstracts via the Offshore Vessel Inspection Database (OVID) platform, Social Sciences and Sociology databases in Proquest, and EbscoHost databases—Psychology and Behavioral Sciences, Humanities International Complete and SocINDEX). A protocol was developed specifying the search terms used in each database to locate contemporary social work studies for the reference period 2000–2019:

'Social work*' AND 'natural disaster' OR 'adverse weather event' OR 'extreme weather event' OR bushfire OR flood OR hurricane OR tornado OR landslide OR tsunami OR earthquake OR heatwave OR pandemic.

Data screening

The search yielded 968 records and after removing duplicate items ($n=289$), 679 remained. The refined search results were then organised into three groups for screening at the title and abstract level. Two members of the research team each independently reviewed two (overlapping) thirds of the data-set to ensure that all items were screened by two members of the research team; the first third was screened by authors one and three; the second third was screened by authors one and two; and the final third was screened by authors two and three. Included

studies were published in English, peer reviewed and were social work studies in the context of natural disasters. Studies were excluded if they were published in a language other than English, if they were not peer-reviewed journal articles, if the research did not examine natural disasters, or if there was no discernible social work affiliation.

The method for assessing social work affiliation was modelled on the approach adopted by Mason *et al.* (2017); if the item was published in a social work journal or authored by at least one person with a social work affiliation it was classified as a social work article. To establish the publication outlet as a social work journal, the journal had to have 'social work' in its title or be listed in the 'Scimago Journal and Country Rank', Social Work subject category for 2018 (<https://www.scimagojr.com/>). To establish author affiliation, at least one listed author needed to have a link to a social work school or department or organisation.

To refine the focus to preparedness as a subset of the data on social work and disasters in general, an additional round of screening at title and abstract level was undertaken. Studies were then excluded if there was no indication in either the title or abstract that the paper considered any aspect of the preparatory phase of disasters (indicated by terms such as pre-disaster, preparation/preparedness/prepare, readiness, prevention, mitigation, social capital, resilience, reduction).

Following data screening at title and abstract level, full-text screening of the remaining thirty-nine articles was undertaken by the research team, again with each item independently screened by at least two researchers. Results of the full-text screening were also discussed during several team meetings and to ensure consistency a protocol was developed to organise the data according to whether there was 'specific' or 'generic' content on preparation (Crisp, 2015). Articles were classified as 'specific' if there was detailed descriptive and/or analytical content on concrete preparatory measures; articles were classified as 'generic' if they mentioned preparation but did not provide further detailed, concrete information on disaster preparation. When screening discrepancies between researchers occurred, they were resolved through consensual team discussion and with reference to the protocol.

Data analysis

Full-text thematic coding of the thirty-nine articles was then independently undertaken by the first and second authors to explore aspects of preparedness in greater depth. Using 'NVivo 12' qualitative data analysis software, an inductive, three-phase approach to coding was used to develop initial, open codes, then topic codes and analytic, thematic codes (Richards, 2015). To gauge inter-coder consistency, the authors compared and contrasted their initial, independently developed open codes

and combined the two sets of codes into refined themes and will be explored in detail in the next section.

Results

Overview of the data

As shown in [Table 1](#), of the thirty-nine articles that met the inclusion criteria, more than half ($n = 22$, 56%) were from the USA, Australia or Aotearoa New Zealand and nearly half ($n = 17$, 44%) focused on marginalised groups, such as older adults, people with disabilities and children. Eighteen articles (46%) were empirical studies and the majority of the empirical studies were qualitative ($n = 11$, 61%).

Themes related to disaster preparedness

Qualitative analysis revealed the majority of included articles provided specific, detailed discussion relating to aspects of preparedness ($n = 28$, 72%), while the remainder provided generic reference to preparedness ($n = 11$, 28%). Regardless of the specificity of content, the need to foreground preparedness in disaster practice was evident. The four main themes explored below are: the context of disaster preparedness, disaster preparedness practice, characteristics of disaster preparedness planning and recommendations for further research.

Theme 1: Context of disaster preparedness

This theme focused on the framing and context of disaster preparedness in social work with three sub-themes: definitions of disaster and disaster preparedness ($n = 22$); the socio-political context ($n = 25$) and challenges that impede disaster preparedness ($n = 22$).

Definition of preparedness All twenty-two articles defining disasters referred to community disruption due to a hazardous event, and in relation to disaster preparedness, all articles provided definitions making reference to aspects of planning, prevention and mitigation. Some articles expanded these definitions to include vulnerable groups (e.g. [Kim and Zakour, 2018](#)) and continuous preparedness planning (e.g. [Pfefferbaum et al., 2017](#)).

Socio-political context Twenty-five articles discussed socio-political factors as having an impact on disaster preparedness. The articles described socio-political factors as shaping the experiences of individuals and

Table 1 Overview of included articles

References	Research design	Country	Focus on marginalised group
Adamson (2018)	Non-empirical	NA	NA
Ali et al. (2014)	Non-empirical	Bangladesh	NA
Allen et al. (2018)	Quantitative—surveys	New Zealand	Older adults
Asad and Hussain (2014)	Qualitative—interviews	Pakistan	NA
Ashida et al. (2016)	Qualitative—interviews and focus groups	USA	Older adults in rural locations
Augustine et al. (2019)	Quantitative—surveys	Afghanistan	NA
Christensen and Castañeda (2014)	Qualitative—interviews	USA	Older adults with Alzheimer's or related dementia (ADRD)
Dominelli (2015)	Qualitative—interpretative ethnography	Sri Lanka	NA
Du Plooy et al. (2014)	Non-empirical	Australia	NA
Dubey et al. (2012)	Qualitative—interviews and document analysis	India	Women
Ellor and Mayo (2018)	Non-empirical	NA	Older adults
First et al. (2017)	Non-empirical	Australia	Women
Fogel (2017)	Qualitative—focus groups	USA	People living on the streets
Ginzburg and Solomon (2008)	Non-empirical	Israel and USA	NA
Hall (2007)	Non-empirical	USA	NA
Hay and Pascoe (2019)	Qualitative—content analysis	New Zealand	People with disabilities
Hickson and Lehmann (2014)	Qualitative—interviews and surveys	Australia	NA
Hossain (2011)	Non-empirical	Bangladesh	NA
Howard et al. (2018)	Qualitative—focus groups	Australia	Five at risk groups—older people, families and children, people with disabilities, low-income households and people with CALD backgrounds
Iravani (2008)	Non-empirical	Iran	NA
Khan and Ali (2015)	Mixed—surveys	Bangladesh	NA
Kim and Zakour (2017)	Quantitative—surveys	USA	Older adults

(continued)

Table 1. (continued)

References	Research design	Country	Focus on marginalised group
Kim and Zakour (2018)	Quantitative—surveys	USA	Older adults
Lewis and Gillis (2008)	Non-empirical	USA	NA
Marlowe and Lou (2013)	Qualitative—focus groups	New Zealand	People with CALD and refugee backgrounds
Mathbor (2007)	Non-empirical	USA, Bangladesh and others	NA
Mihai (2017)	Non-empirical	Romania	NA
Pereira (2000)	Non-empirical	India	N/A
Pfefferbaum et al. (2014)	Non-empirical	USA	Children and adolescents
Pfefferbaum et al. (2017)	Non-empirical	USA	NA
Regehr et al. (2008)	Non-empirical	USA	NA
Rice et al. (2017)	Qualitative—interviews	Chile	Vulnerable people generally
Rowlands (2013)	Non-empirical	Australia	NA
Sim and Liu (2017)	Qualitative—focus groups	China	N/A
Stewardson and Crump (2013)	Non-empirical	New Zealand	NA
True (2013)	Non-empirical	New Zealand, USA and Haiti	Women
Westcott et al. (2019)	Qualitative—interviews and focus groups	Australia	NA
Park and Miller (2006)	Non-empirical	USA	Vulnerable people generally
Zhang et al. (2011)	Non-empirical	China	Children

communities and highlighted the connection between personal experiences and inequities caused by larger social, economic and political structures. The socio-political factors discussed included demographics, culture, patriarchy and violence, politics and economics. Sixteen of these articles foregrounded the pre-disaster phase and referred to these inequitable impacts as relating to the capacity of individuals and communities to prepare for disasters prior to an event occurring. In subtle contrast, the remaining seventeen articles foregrounded the post-disaster phase as a context to inform and improve preparedness practice.

Articles that foregrounded the pre-disaster phase discussed socio-political structures that inhibit individuals and communities' capacity to undertake preparedness activities, including low income, unemployment, low levels of education and discrimination (Pereira, 2000; Yoosun and Miller, 2006; Iravani, 2008; Lewis and Gillis, 2008; Marlowe and Lou, 2013; True, 2013; Christensen and Castañeda, 2014; Khan and Ali, 2015; Ashida et al., 2016; First et al., 2017; Fogel, 2017; Kim and Zakour, 2017, 2018; Mihai, 2017; Allen et al., 2018; Ellor and Mayo, 2018; Howard et al., 2018; Augustine et al., 2019; Hay and Pascoe, 2019; Westcott et al., 2019). For example, Howard et al. (2018) explored the intersection of social isolation and poverty and identified that six at-risk groups on low incomes did not have the financial capacity to purchase equipment to facilitate household preparedness, such as ladders, torches and batteries.

Articles that foregrounded the post-disaster phase discussed socio-political factors evident following an event as a context to inform and improve preparedness practice. These structural factors included gender and violence, age, culture and poverty (Pereira, 2000; Yoosun and Miller, 2006; Dubey et al., 2012; Stewardson and Crump, 2013; True, 2013; Christensen and Castañeda, 2014; Dominelli, 2015; Khan and Ali, 2015; Ashida et al., 2016; First et al., 2017; Mihai, 2017; Rice et al., 2017; Allen et al., 2018; Ellor and Mayo, 2018; Howard et al., 2018; Kim and Zakour, 2018; Hay and Pascoe, 2019). For example, Dominelli (2015) argued that cultural and gender relations, and especially hegemonic masculinity, need to be addressed in the post-disaster context, and consequently considered at the preparedness phase in order to reduce post-disaster gender inequities. Indeed the majority of authors emphasised the importance of comprehensively addressing a broad range of longstanding social justice issues in order to also improve pre- and post-disaster outcomes.

Challenges Twenty-two articles made reference to challenges and barriers relating to disaster preparedness across several levels of practice. Social work practice is generally constructed in terms of operating at different levels of intervention, including individual, group, organisation, neighbourhood, community, society and policy levels (Miley et al., 2017;

Chenoweth and McAuliffe, 2021). In accordance with this multidimensional perspective of social work practice, several levels of intervention were highlighted as consisting of challenges. Seven articles identified challenges and barriers at the individual and household level; seven articles referred to the professional and organisational level; six articles referred to challenges relating to emergency coordination; and five articles referred to the community level.

Challenges and barriers identified at the 'individual and household' level of practice related to a lack of participation in preparedness activities, social isolation and community networks, and inequitable access to resources that facilitate preparedness activities (Stewardson and Crump, 2013; Christensen and Castañeda, 2014; Ashida *et al.*, 2016; Howard *et al.*, 2018; Ellor and Mayo, 2018; Augustine *et al.*, 2019; Westcott *et al.*, 2019). For example, Howard *et al.* (2018) highlighted the risks associated with social isolation of vulnerable groups, including lack of geographical knowledge to facilitate evacuation procedures and fewer established relationships to draw community information from in the preparation and crisis phases.

Challenges and barriers identified at the 'professional and organisational' level of practice related to adapting and maintaining professional supervision, the development of organisational policies and processes and the politics of non-government organisations (Ginzburg and Solomon, 2008; Iravani, 2008; Zhang *et al.*, 2011; Du Plooy *et al.*, 2014; Khan and Ali, 2015; First *et al.*, 2017; Adamson, 2018). For example, in relation to organisation policies and processes, Kim and Zakour (2017) referred to issues caused by disrupted communication networks and referral pathways for organisations supporting women in domestic violence situations.

Challenges and barriers relating to 'emergency coordination' highlighted a range of issues, including technological failure (Fogel, 2017), lack of trained emergency personnel in rural areas (Ashida *et al.*, 2016), access issues for people with disabilities (Hay and Pascoe, 2019), lack of simple English and non-English official communication (Marlowe and Lou, 2013) and the 'tyranny of the urgent' with regard to the absence of addressing men's violence against women in the context of disasters (True, 2013, p. 85).

Challenges and barriers identified at the 'community' level of practice related to the culture of preparedness within communities (Westcott *et al.*, 2019), community resilience (Pfefferbaum *et al.*, 2017), social isolation (Rowlands, 2013), rurality (Ashida *et al.*, 2016) and lack of good governance (Asad and Hussain, 2014). For example, Westcott *et al.* (2019) discussed a lack of community 'culture' relating to disaster preparedness as a challenge for governments and policy makers. Also, Ashida *et al.* (2016) identified that older people living in rural communities are negatively impacted in terms of preparedness due to long

distances from geographical resources and limited availability of information about disaster preparedness.

Theme 2: Disaster preparedness practice

This theme focuses on disaster practice relating specifically to preparedness. Two sub-themes were identified as relating to disaster preparedness practice, including social work interventions in disaster preparedness ($n=28$) and frameworks that inform disaster preparedness practice ($n=9$).

Social work interventions in disaster preparedness practice Twenty-eight articles referred to specific practice interventions relating to disaster preparedness. These practice interventions involved working at various levels of practice, including: twenty articles relating to the organisation and group level; seventeen articles relating to individuals and families; thirteen relating to the community level; ten relating to professional education and training; six relating to policy and three relating to social action.

Practice interventions at the ‘organisation and group’ level of practice related to organisational systems and processes, such as maintenance of databases, registers and best-practice checklists (Hall, 2007; Hossain, 2011; Marlowe and Lou, 2013; True, 2013; Ashida *et al.*, 2016; First *et al.*, 2017; Mihai, 2017; Ellor and Mayo, 2018; Kim and Zakour, 2018; Augustine *et al.*, 2019; Hay and Pascoe, 2019), staff coordination and support (Hall, 2007; Marlowe and Lou, 2013; Hickson and Lehmann, 2014; Fogel, 2017; Ellor and Mayo, 2018), inter-organisational collaboration (Hall, 2007; Zhang *et al.*, 2011; Rowlands, 2013; Ali *et al.*, 2014; Mihai, 2017; First *et al.*, 2017; Sim and Liu, 2017; Ellor and Mayo, 2018; Kim and Zakour, 2018; Augustine *et al.*, 2019; Hay and Pascoe, 2019) and practice with service users (Hall, 2007; Zhang *et al.*, 2011; Rowlands, 2013; Fogel, 2017; First *et al.*, 2017; Mihai, 2017; Ellor and Mayo, 2018; Howard *et al.*, 2018; Hay and Pascoe, 2019).

Practice interventions with ‘individuals and families’ related to developing individual and household preparedness plans (Hall, 2007; Hossain, 2011; Marlowe and Lou, 2013; Ali *et al.*, 2014; Christenson and Castañeda, 2014; Hickson and Lehmann, 2014; First *et al.*, 2017; Fogel, 2017; Kim and Zakour, 2017; Mihai, 2017; Ellor and Mayo, 2018; Westcott *et al.*, 2019), increasing disaster literacy of individuals (Hall, 2007; Sim and Liu, 2017; Allen *et al.*, 2018; Augustine *et al.*, 2019; Westcott *et al.*, 2019), and building informal networks (Hossain, 2011; Marlowe, 2015; First, 2017; Kim and Zakour, 2017).

Practice interventions at the ‘community level’ of practice related to grass-roots capacity building (Dubey *et al.*, 2012; Marlowe and Lou,

2013; Rowlands, 2013; Dominelli, 2015; Pfefferbaum *et al.*, 2017; Augustine *et al.*, 2019), collaboration between community groups and social connectedness (Dubey *et al.*, 2012; Marlowe and Lou, 2013; Dominelli, 2015; Mihai, 2017; Rice *et al.*, 2017; Augustine *et al.*, 2019; Westcott *et al.*, 2019), community-wide preparedness systems (Dubey *et al.*, 2012; Marlowe and Lou, 2013; Rowlands, 2013; Rice *et al.*, 2017; Augustine *et al.*, 2019) and community education and awareness raising (Rowlands, 2013; Ali *et al.*, 2014; First *et al.*, 2017; Hay and Pascoe, 2019).

Practice interventions relating to *professional education and training* involved the need to train volunteers about issues experienced by marginalised groups (Fogel, 2017; Mihai, 2017), the need to train professionals about specific issues relating to marginalised groups (Hall, 2007; Ali, 2014; First *et al.*, 2017; Rice *et al.*, 2017), the provision of tertiary education (Hossain, 2011; Ali *et al.*, 2014; Hickson and Lehmann, 2014; Pereira, 2000) and professional supervision (Adamson, 2018).

Practice interventions at the ‘policy’ level of practice involved participation of marginalised groups in policy decisions (True, 2013; Ali *et al.*, 2014; Hay and Pascoe, 2019), ongoing development and review of policies (Hall, 2007; Ali *et al.*, 2014; Fogel, 2017) and the development of innovative public policy to develop a culture of preparedness (Westcott *et al.*, 2019). Practice interventions relating to ‘social action’ involved challenging social structures prior to disasters that cause disproportionate impacts (True, 2013; Mihai, 2017) and advocacy (Ali *et al.*, 2014).

Frameworks informing disaster preparedness practice Nine articles specified the frameworks underpinning their work in relation to disaster preparedness. Of these nine articles, three referred to the four-stage model consisting of prevention, preparation, response and recovery (Hossain, 2011; First *et al.*, 2017; Fogel, 2017), and two articles discussed social capital theory (Fogel, 2017; Kim and Zakour, 2017). In addition, the Disaster Risk Reduction model (Augustine, 2019), the Extended Parallel Process Model (Ashida, 2016), the Community Based Disaster Preparation model (Dubey, 2012), the Whole Community Approach (Pfefferbaum, 2017) and the social ecology approach (Park, 2006) were identified in relation to disaster preparedness. With the exception of Extended Parallel Process Model with its individualised approach (Ashida, 2016), the majority of these articles focused on community-based approaches.

Theme 3: Characteristics of disaster preparedness planning

This theme focuses on preparedness planning and highlights content from the literature on preferred approaches to effective planning.

Thirty-two of the thirty-nine articles considered preparedness planning and three sub-themes were identified: accounting for diversity ($n = 27$); the need for localised planning ($n = 21$) and planning as a dynamic process ($n = 14$).

Accounting for diversity in planning Twenty-seven of the thirty-nine articles referred to the need to centralise diversity and diverse needs into preparedness planning. Several authors argued that dominant approaches to disaster preparedness planning emerge from a standpoint that reflects the socio-political status quo and thereby fails to account for ‘those who do not fit the established normative order’ and ‘middle-class lifestyle’ (Park and Miller, 2006, p. 15). For example, Fogel (2017) described the diverse needs of people who are homeless, Ali et al. (2014) advocated for children and young people’s views to be heard, and several noted the lack of gender awareness in preparedness planning (Dubey, 2012; Marlowe and Lou, 2013; True, 2013; First, 2017; Augustine, 2019). Diversity in relation to professional practice was also highlighted and some authors called for transdisciplinary and collaborative approaches so that a range of professional perspectives and skills could be used as a basis for comprehensive planning (e.g. Mihai, 2017; Sim and Liu, 2017; Howard et al., 2018; Kim and Zakour, 2018).

Localised, embedded planning The importance of place-based, localised planning was considered by twenty-one of the thirty-nine articles with most authors noting the value of contextual, grassroots knowledge to inform preparedness planning. For example, Marlowe and Lou (2013) noted that culturally appropriate planning should come from community participation and local knowledge, while others argued that assets and strengths-based approaches to planning emerge from maximising community engagement (Rowlands, 2013; Pfefferbaum et al., 2017). Mathbor (2007) and Dominelli (2015) explored bottom-up planning partnerships with local communities and Sim and Liu (2017) and Mihai (2017) identified the need for contextual, socio-cultural knowledge to supplement and tailor broader, often top-down approaches to disaster preparedness.

Planning as a dynamic process Fourteen of the thirty-nine articles articulated the importance of moving away from static, one-off approaches to planning and advocated for planning to be continuous and dynamic (Hall, 2007; Mathbor, 2007; Lewis and Gillis, 2008; Hossain, 2011; Zhang et al., 2011; Christensen and Castañeda, 2014; Dominelli, 2015; Pfefferbaum et al., 2017; Sim and Liu, 2017; Allen et al., 2018; Ellor and Mayo, 2018; Howard et al., 2018; Kim and Zakour, 2018; Westcott et al., 2019). Authors highlighted how the phases of disaster resilience practice are overlapping and interdependent (e.g. Pfefferbaum et al., 2017) and

how preparedness should be centralised as part of a cycle of disaster management (e.g. Hossain, 2011).

Theme 4: Recommendations for further research

Of the thirty-nine articles, fourteen included specific recommendations for further research regarding aspects of disaster preparedness. Some authors had recommendations for research to gather experiential knowledge from marginalised groups; for example, people who are homeless (Fogel, 2017), people living with disabilities (Kim and Zakour, 2018; Hay and Pascoe, 2019), older and/or socially isolated people (Christensen and Castañeda, 2014; Kim and Zakour, 2017; Howard *et al.*, 2018), children (Hickson and Lehmann, 2014) and women experiencing interpersonal violence (First *et al.*, 2017).

Other authors made recommendations for further research into broader issues to inform preparedness practice such as Indigenous knowledge (Mihai, 2017; Augustine *et al.*, 2019; Hay and Pascoe, 2019), climate change (Khan and Ali, 2015), social capital (Kim and Zakour, 2017), empowerment methods (Fogel, 2017), organisation preparedness (Kim and Zakour, 2018) and policy development and evaluation (Westcott *et al.*, 2019).

Discussion

Given the multidimensional and disproportionate impacts of disasters on marginalised groups, the importance of proactive social work in this domain of practice is brought into sharp focus. In general, there is a need to locate disaster practice firmly within the generic social work domain, rather than on the peripheries of the profession. Drawing on the findings of this review, there is scope to extend the conceptualisation of social work in the context of disaster preparedness and to consider the implications for global social work policy and practice.

A major challenge for social work is to disrupt intersecting dominant, modernist discourses that pervade the context of disaster preparedness and disaster practice more broadly. These prevailing discourses, including managerial and patriarchal discourses, promote positivist assumptions associated with individualism and fail to acknowledge broader patterns of privilege and oppression (Bell, 2012). Rather, a transformative perspective argues for the need to centralise diversity in disaster practice in order to account for diverse experiences. Instead of reproducing patterns of oppression in practice, social work needs to promote alternative discourses to embody relational worldviews, interdependence and more holistic approaches to preparedness. Drawing from wider concepts of ecosocial work (Boetto, 2017), this broader understanding offers

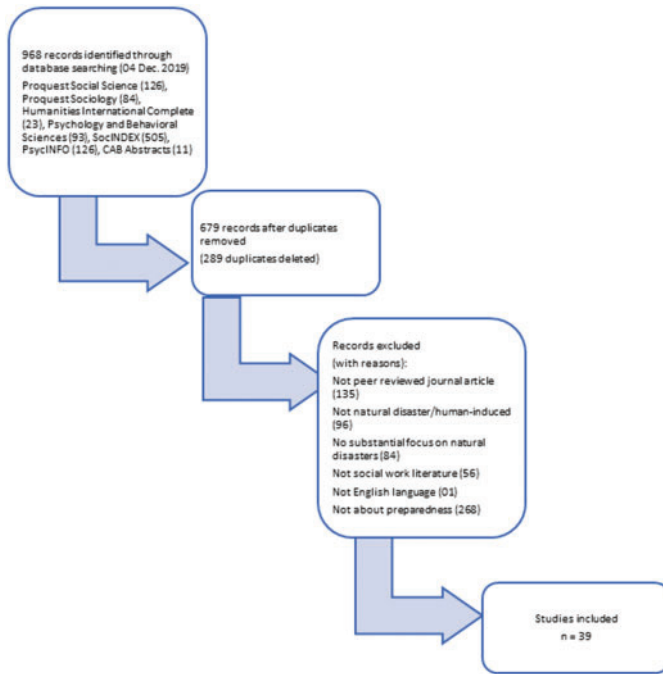


Figure 1: PRISMA statement flow diagram (Adapted from Moher et al., 2009).

a transformed paradigm to challenge existing modernist assumptions influencing social work.

There is also scope to extend the conceptualisation of social work in the context of disaster preparedness at both the inter- and intra-professional levels. At the inter-professional level, the active contribution of social workers in disaster preparedness could be more readily recognised within government and emergency services sectors. Having a stronger presence through the provision of social worker skills in disaster preparedness could further contribute to strengthening community capacity, particularly for marginalised groups, to reduce the inequities exacerbated by natural disasters (Harms et al., 2020). This inter-professional approach to disaster preparedness corresponds with the Sendai Framework for Disaster Risk Reduction (2015), which argues for a multidisciplinary and multi-level approach that brings together governments, professionals, public and private sectors, and communities to reduce the risk of disasters.

At the intra-professional level, disaster preparedness needs to be more explicitly conceptualised as a fundamental part of disaster practice in social work. While much literature focuses on post-disaster practice, there is limited emphasis on a social work role in pre-disaster practice

(Kim and Zakour, 2018; Maglajlic, 2019; Harms *et al.*, 2020). Given that a community's capacity to recover from a disaster event is inextricably linked to their level of preparedness, this aspect of practice is of critical importance (Stewardson and Crump, 2013; Augustine *et al.*, 2019; Alston *et al.*, 2019). Likewise, disaster practice itself needs to be firmly placed within the generic social work domain and skillset, rather than as a distinct field of practice. The increase in the frequency and magnitude of natural disasters worldwide as a result of climate change and the globalised nature of social work reinforces the integration of knowledge and skills into mainstream education and professional practice.

The call for social workers to actively engage in disaster preparedness corresponds with international initiatives to reduce the risk of disasters, including the Sendai Framework for Disaster Risk Reduction and the Sustainable Development Goals. Both initiatives emphasise the need for collective effort and the advancement of sustainable development for a more equitable society (UN, 2015; UNDRR, 2015)). This aligns with the 'Social Work Global Agenda for 2020–2030', and its four interconnected themes relating to the promotion of social work as an essential service, co-building inclusive social transformation, 'Ubuntu—I am because we are', and the transformation of social protection systems (IFSW, 2020). As a profession committed to social justice and human rights, social work's ethical responsibility towards promoting climate justice could be achieved through a comprehensive approach to disaster practice that more fully encompasses preparedness.

Limitations

While this scoping review provides insight into the nature and extent of disaster preparedness in social work, the outcomes must be considered in light of some limitations. The scoping review focused specifically on natural disasters and did not consider disasters more broadly, such as terrorism, war and conflict. As a scoping review, the quality of the articles was not assessed and studies lacking rigour or ethical integrity may have been included as a consequence. Finally, this review is limited by its exclusion of articles published in languages other than English.

Conclusion

This scoping review explored the extent and nature of social work literature relating to disaster preparedness. The four major themes provided a comprehensive overview of the contextual factors impacting on disaster preparedness as well as aspects of professional practice and frameworks

for multidimensional practice. In addition, the characteristics of effective preparedness planning were explored along with areas for further research and development. The findings reinforced the capacity of the profession to contribute to multidisciplinary disaster practice and highlighted the need to embed disaster practice into the professional domain, including education, professional standards for practice and ongoing professional development. The findings also reveal a major challenge for social workers to disrupt intersecting dominant, modernist discourses that pervade the context of disaster preparedness and disaster practice more broadly. These discourses, including managerial and patriarchal discourses, serve to promote individualism and are incongruent with equity and environmental justice. This change in orientation represents an opportunity for a paradigmatic shift towards a transformative, culturally sensitive, community-based approach to disaster practice in this complex global social work context.

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