Different but also the same: mental illness and bushfire planning, preparation and response

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ABSTRACT

At some point in their lives, almost half the Australian population experiences a mental illness that can affect how they think and feel, their relationships, and their social and economic status (Department of Health and Ageing 2012). They can be uniquely vulnerable to disaster risks because of these symptoms, widespread stigma, their reliance on health services, or their social and economic marginalisation. The South Australia Department of Communities and Social Inclusion Vulnerable Persons project (2013) identified that including this group in future capacity-building programs was a high priority. However, very little is known about the unique needs of people experiencing a mental illness during emergencies, nor about interventions that can increase their resilience to natural disasters. In an exploratory study of five households during the 2014 bushfires in South Australia, those who experienced a more severe illness that effected their social connections and income were more vulnerable. Carers with multiple responsibilities were also more vulnerable. However, those who had a realistic assessment of bushfire risk (similar to the wider population) and had access to bushfire safety information were better prepared physically and psychologically. The interviews suggest that bushfire safety was helped by early evacuation to calming places, audio-visual materials and face-to-face education on bushfire safety, and community connections.

Mental illness and natural disasters

> *[After Hurricane Katrina] people with psychiatric disabilities had difficulty comprehending the evacuation messages and other essential communications and some were treated roughly because they could not follow the instructions…nine out of ten residents at a group [psychiatric] home in Mississippi still cannot be found…evacuees with psychiatric disabilities were arrested and jailed, sometimes dragged out of shelters and other times removed from the streets.* (National Council on Disability 2006, pp. 16-21)

As this experience during *Hurricane Katrina* suggests, mental illness can affect an individual's responses to disaster and the community's responses to them with terrible consequences. In Australia, at some time in their lives, almost half the population will experience a mental illness, 'a health problem that significantly affects how a person feels, thinks, behaves and interacts with other people' (Department of Health and Ageing 2012). The most common mental illnesses are depression and anxiety, while about three per cent of adults are affected by psychotic disorders of schizophrenia and bipolar mood disorder (Department of Health and Ageing 2012).

Mental illness is a broad term encompassing a variety of experiences from difficulty leaving one's home to losing touch with reality. It is not homogenous in terms of its severity. In 2007, 2–3 per cent of people experienced a persistent and severe disorder of ongoing intensity with significant disability, 4–6 per cent of people reported moderate disorders, and 9–12 per cent experienced mild disorders (ABS 2007). People experiencing mental illness live in a variety of circumstances. Some may be treated within acute care wards while others live in specialised accommodation or in the community with and without carers (Department of Health and Ageing 2012).

Depending on symptoms, severity, and living circumstances, emergency planning, response and recovery can be negatively affected by fewer social networks, poverty, stigma and misunderstanding (Cutter, Boruff & Shirley 2004, Maguire & Cartwright 2008, Tierney 2006, Wisner 1998). Initial research in the U.S. suggests that people may be unfamiliar with emergency language and personnel and are more likely to react negatively to seeing people in safety gear; they may not interact well with unknown people nor respond to demands (SAMHSA 2007). They also may be less likely to have specific supplies in readiness for an emergency (Eisenman *et al.* 2009). A disaster or

emergency may trigger the onset of new or recurrent symptoms (Fornili 2006). Each of these circumstances can increase a person's risk of injury and fatality and create significant financial and social costs for the person, their families, communities and service providers (Wisner 1998).

People experiencing a mental illness are identified as a vulnerable group for emergency management planners. The recent analysis of vulnerability and disaster programs in South Australia noted 'finding some way of including this group in future programs should be considered a high priority' (DCSI 2013). However, there is no existing data on the particular vulnerability factors in relation to mental illness or on potential capacity-building interventions. This paper explores the planning, preparation and responses of households including a person experiencing a mental illness.

Method

This paper draws on data gathered by Trigg and colleagues for a large project on bushfire behaviour and decision-making during the 2014 bushfires in South Australia (Trigg *et al.* 2015).

Background

In January 2014, 236 fire events occurred across South Australia. A major research project (Trigg *et al.* 2015) involved fieldwork in three sites affected by some of the largest fires. These were Rockleigh to the north behind the Adelaide Hills (the Murraylands), Eden Valley in the Barossa, and Bangor in the southern Flinders Ranges. These sites represented three different types of fire events, being repeat fire incidents (Rockleigh), a rapid-onset fire (Eden Valley), and a long-campaign fire (Bangor). They were also fires that were particularly demanding of Country Fire Service resources. While there was extensive damage to land and some structures, no lives were lost.

Data collection

Data was collected through semi-structured face-to-face or phone interviews (n=171). These were recorded and also summarised with an interview checklist. The interviews covered demographics such as age and disability, community connections, risk perception and awareness, preparation and planning, awareness of emergency warnings and responses to the fires. Interviewees were also asked to 'walk' the researcher through what happened on the day(s) of the fire, detailing what they had done, and why.

Participants

The interview included a question about whether the person lived with someone with a disability or if they themselves experienced a disability. The interview did not prompt people to identify as having particular psychiatric disabilities as the project was not specifically targeting this population. So the sampling for this current research paper was opportunistic, capturing people who voluntarily stated that they or someone else had a mental illness. Given this, it is possible that there were more people who completed the interview who could have identified as having a mental illness. Of the 171 interviews, five people identified as having a psychiatric disability or illness, or as caring for someone who does.

Households included people experiencing Aspergers syndrome, ADHD, schizophrenia and substance abuse disorders. Ages ranged from 10 to 50 years. Three households were located on large working farms, one on a small bush block, and one on a residential block. Three of the properties sustained damage during the fires.

Data analysis

Using thematic analysis (Braun & Clark 2006), the interviews were analysed for:

- the impacts of mental illness on risk perception, preparation, planning and response
- what individual and social factors shaped people's perceptions and actions and made people more or less vulnerable
- how they managed bushfire risk in relation to mental illness.

Findings

Vulnerability factors: type of illness, severity, social connections, multiple responsibilities

The interviews revealed that the effects of mental illness on people's bushfire planning, preparation and responses were varied. The information gathered suggests that it is when a mental illness creates or co-exists with other vulnerabilities that it can adversely affect bushfire safety. Those who had the most difficult experiences in the bushfires were a child in a family isolated from their community, a man experiencing a more severe psychotic illness that affected his income and social connections, and a carer with multiple responsibilities.

In the first of these three instances a mother and her young child with an unspecified mental illness found themselves at home alone on the day of the fire. The mother and daughter retreated inside, while the property burned around them. Almost 80 per cent of their land including all fences and 30 stock were burned. Their bushfire plan had relied on the father to stay and defend the property: however he was unable to return home, having been away for work. The family was socially isolated and had few connections in the surrounding community. These factors combined to create a situation of extreme distress and danger. After this experience, the mother reflected on the unpredictability and rapid spread of the fire and how they would change their plan to evacuate their daughter.

> *...as soon as I knew there was a fire, just so close in the area, it was just like panic, panic, panic. And it was over here in a flash. They were fighting and the wind*

> *just whooshed up, and they knew, at that moment, that they'd lost it. […] It was just a feeling like, "There's no one coming to help." […] you couldn't see out the windows here–it was just all orange smoke, but there were big raindrops – just a few of them – hitting the glass. So it was really like a storm. […] It would be ideal, ideally, if I knew there was going to be a fire that day–if I had seen my–I would have left my–I would have taken my daughter into town and had her babysat in [nearby town].* (Interviewee #1)

Children are more vulnerable in disasters (Ronan & Johnson 2005) and those with a disability even more so (Boon, Brown & Pagliano 2014). The difficulties for this family were compounded by a plan that relied on both parents being home. Their physical isolation meant they had no other pre-established means of support.

In the second of these instances, a young man with schizophrenia defended his property with buckets of water in the ever-increasing heat and with no power. He couldn't receive fire information after his phone lost service. While he had a close relationship with the owner of the property he lived on, he had been harassed in the past by other people living nearby, and was thus wary of interacting with neighbours.

> *There used to be a mob up the hill that used to hassle me all the time but they've left.* (Interviewee #2)

The young man left when the police arrived as the fire began to burn the property. He had no insurance and, if the fire had burned the house, he would have lost his home and all his possessions with little chance of recovery.

Illnesses such as schizophrenia and substance abuse can include difficulties in connecting with others, losing touch with reality, and difficulty looking after one's self and one's property. It can also be stigmatised and people with schizophrenia often find themselves misunderstood, feared and rejected (Department of Health 2010). These circumstances had, for this young man, culminated in very isolated living circumstances, being unable to afford preparation supplies or materials such as backup water and power sources, and having little knowledge about bushfires and preparation.

In the third instance, a family with a young child with a mental illness indicated that being a parent and a carer also increased their sense of vulnerability, particularly how it impacted on their ability to make quick decisions for each of the people they were responsible for. This carer reflected on feeling pulled in multiple directions.

> *I probably would have got the kids out of here into a safer place, and I probably would have come back and actually stayed and helped. [But] because I was a bit pulled between people, my kids were saying "no no, please don't go mum, don't you leave us because dad's already out [fighting fires] and I don't want you to be gone as well as him", so I was a bit torn in that way. And I would have told my parents to get out a hell of a lot earlier than they did too. It was very concerning yeah to have a lot of loved ones around you and not be able to have any control over where or what they were doing.* (Interviewee #3)

These three examples suggest that the impacts of mental illness on people's bushfire safety readiness may be greater when living in isolation and unable to access resources to prepare a property or caring for multiple people.

However, families and people with a mental illness can prepare and adapt their plans prior to the fire to accommodate the illness and increase their safety.

Planning and preparation: what worked

The interviewees spoke about three factors that assisted them in making plans and preparing for bushfire. These were adapting to particular symptoms, managing anxiety, and using visual educational material.

For a child with Aspergers syndrome, early packing for evacuation was found to be more effective if it was 'packed but not packed'.

> *I had my important paperwork in one pile…so they can just be grabbed… if you've just got to go very quickly… It's important he stays calm, because otherwise he will be going in and out of the bag all the time, wanting to repack or redo. […] It's just all there otherwise it would have to be redone*' (Interviewee #4)

For two families, plans and preparation that included ways to manage anxiety were also important. The most important of these was early evacuation, particularly evacuation to a known calm place. For example, people in care for substance abuse were driven by bus to the river in a nearby town well before the fire threatened their property.

The family with a child with Aspergers syndrome also noted, in terms of communication, that visual rather than written information was more useful.

> *After the big fires in Victoria, the CFS sent out a DVD and that was a few years back, and we put that on every year. […] I think that DVD just kind of reminded everybody, and especially with my son, because he has ADHD. For him you can talk until you're blue in the face sometimes but a visual reminder just works a lot better than anything else.* (Interviewee #4)

For the man experiencing schizophrenia, personal connection rather than written material was more useful. Although he did not take fire safety brochures because he already felt overwhelmed with reading material and advice, he was open to speaking with the police and fire services on the day of the fire.

These examples suggest that adapting plans, information for managing anxiety, and visual or face-to-face communication, may be useful for people in the community experiencing mental illness. The interviews also revealed that, although preparing for a bushfire requires some adaption for people with a mental illness, there are also protective factors that are the same for the general population.

Protective factors: different but also the same

Although mental illness can require different approaches to preparation and planning, the factors that increased safety were the same as those for the wider population, being a realistic assessment of fire risk and good knowledge of fire safety (Whittaker & Handmer 2010). The householders who were well prepared both physically and psychologically also perceived that there was a real fire risk in their area. Those who were less well prepared believed that there was a low fire risk. For example, one interviewee who was directly affected by the fire, when asked about her level of concern prior to the fire, responded: 'Not concerned at all'. Those who had accessed available fire information prior to the fire, particularly in the form of DVDs about bushfire safety or through contact with the Country Fire Service, were also better prepared and had developed plans that included early evacuation rather than to stay and defend or wait and see.

Householders experiencing a mental illness also accessed the same information that others accessed—primarily from the internet and the radio. They identified similar, specific issues as others in relation to bushfire information: that of accuracy and relevance (e.g. street and area names), device failure or signal blackspots, and receiving late messages (Trigg *et al.* 2015, Boon 2014).

Although experiencing challenges specific to the type, severity and effects of a mental illness, these interviews suggest that previous experience of fires and understanding bushfire risk are the same as for other people in the community.

Conclusion

Mental illness can be a risk factor for fatalities, injuries, property damage and post-recovery trauma in bushfire management (e.g. Fornilli 2006). This exploratory South Australian research found that those with mental illness have extra challenges when facing a bushfire emergency when the illness creates or co-exists with other vulnerability factors such as isolation.

Households that were better prepared had previous experience of bushfires and a realistic assessment of risk in their area, which are protective factors for the general population as well. Their plans all involved early evacuation. This was the primary way to keep calm and reduce anxiety. Symptom-specific preparation and planning, such as 'packing but not packing', was useful for those with ADHD and Aspergers syndrome.

This research (with its opportunistic sample) cannot be generalised due to its small sample size. However, it is useful for highlighting areas of further research with people experiencing a mental illness in relation to natural disasters. This might focus on the impact of multiple vulnerability factors that co-exist with mental illness, particularly for children. Further research may also trial and evaluate the effectiveness of using visual materials of bushfire safety on DVDs, and developing bushfire plans that use anxiety-reducing activities to encourage the early evacuation to places of calm and reassurance.

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About the author

Dr Danielle Every is a social psychologist specialising in research of social inclusion for vulnerable groups, particularly refugees, people experiencing homelessness, and women and children in the aftermath of violence.