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FIRE to FLOURISH

The long-term mental health impacts of the 2019–2020 bushfires in rural communities

Results from a population health and wellbeing survey

Professor Jane Fisher AO

Head, Global and Women's Health, School of Public Health and Preventive Medicine

Co-authors: Dr Thach Tran, Hau Nguyen, A/Prof Julie Willems, Dr Revathi Nuggehalli Krishna, Dr Bhiamie Williamson, Mellissa Kavenagh

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MONASH UNIVERSITY recognises that its Australian campuses are located on the unceded lands of the people of the Kulin nations, and pays its respects to their Elders, past and present.

We acknowledge that this research was conducted on the traditional lands of the Gunaikurnai nation; with the Walbunja and Djiringanj peoples of the Yuin nation; Gumbaynggirr, Bundjalung and Yaegl Country and the lands of the Gamilaroi and Bundjalung peoples.

STUDY DESIGN

- *Scoping reviews of available evidence led to survey on population health and wellbeing with people living in severely fire-affected communities*
- *Four regional areas: East Gippsland, Eurobodalla, Clarence Valley and Tenterfield Local Government Areas (LGAs)*
- *Communities were chosen based on severity of fire experience and area-level socioeconomic and remoteness characteristics (Index of Relative Socio-economic Disadvantage (IRSD)*
- *Data collection five years after the 2019-2020 Bushfires*

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COMMUNITY *CO-DEVELOPMENT*

- *Consultations with community representatives (health and social care services, lived experience)*
- *Provided input on topics to be assessed, format, language and recruitment methods*
- *Aboriginal and Torres Strait Islander perspectives were sought through consultations with Aboriginal Community Controlled Health Organisations (ACCHOs) and Traditional Owner groups*
- *Validated and standardised measures such as; Mayi Kuwayu Study, PHQ-9 and SF-12, to ascertain quality of life*

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RECRUITMENT *METHODS*

- *Random household sampling strategy; Geoscape's Geocoded National Address File identified residences with postal address*
- *Surveys could be completed online, hard copy or by phone*
- *A communications strategy tailored to each area, with local media, council and community e-newsletters, and health practitioner networks, to raise awareness of the survey*
- *All participants received a gift voucher on completion*

Ethics approval via Aboriginal Health and Medical Research Council and Monash University Human Research Ethics Committee

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SURVEY DAYS

In person data collection *in community hubs, memorial halls, bush nursing clinics, libraries, neighbourhood houses and community health centres*

20 regional and remote communities in New South Wales and Victoria

WHO *TOOK PART IN THE SURVEY*

- *2,207 participants from across the four study areas*
- *97% of participants lived in the area during the fires*
- *59% women, 40% men and 1% non-binary*
- *18% identified as Aboriginal and/or Torres Strait Islander peoples* *
- *6% of participants were people with disabilities*
- *10% carers/household members of people with disabilities*

Main occupation	%
Full-time work	*35*
Retired or pension	*31*
Part-time work	*18*
Unpaid caregiving, students, volunteers	*9*
Not employed	*7*

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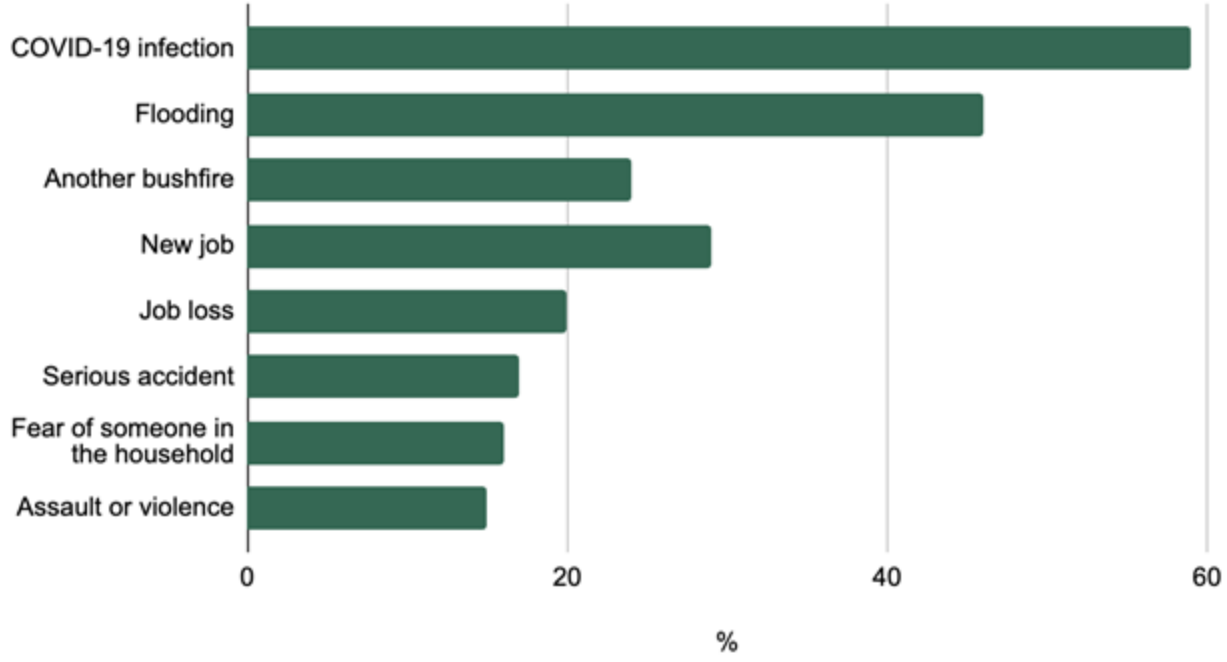
* *Aboriginal and/or Torres Strait Islander peoples constituted 3.5% to 8% of the population in the study areas*

EVENTS SINCE *2019-2020 BUSHFIRES*



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"It's hard to describe the toll it takes on your sense of safety and routine".

Man, 36 years, East Gippsland

In relation to repeated evacuations in parts of the Clarence Valley during 2019-2020

FIVE YEARS LATER: *MENTAL HEALTH*

- *60%* **reported managing well** *with support from family, friends, and neighbours*
- *37% of respondents actively contributed to recovery efforts; volunteering, offering practical help, working together on local solutions*
- *22% of respondents reported moderate to severe symptoms of* **depression,** *which is three times higher than the national rate of 7% among adults of the same age.* *

* *These national estimates are from the 2022 National Study of Mental Health and Wellbeing (NSMHW)*

Source: *Fisher et al. Population health in rural areas affected directly by the Australian 2019–2020 Summer Bushfires: a survey five years post-disaster. (Under review)*

KEY FINDINGS

19.1%

moderate to severe symptoms of depression, three times higher than the national rate of 7% among adults of the same age.

11.7%

clinically significant symptoms of Post Traumatic Stress Disorder (PTSD) compared to 6% nationally.

41%

reported high-very high levels of psychological distress [MCS12] compared with 14% nationally.

Source: Fisher et al. Population health in rural areas affected directly by the Australian 2019–2020 Summer Bushfires: a survey five years post-disaster. (Under review)

FIRE EXPERIENCES AND MENTAL HEALTH

- **ACCUMULATED LOSS**

Homes and livelihoods

Damage, destruction and loss of farm infrastructure

- **GREATER EXPOSURE**

Displacement and grief

Evacuation, separation and losses of culturally significant or sacred places.

- **PERSISTENT EFFECT**

Dose–response pattern

The more severe the bushfire experiences someone had, the worse their depression, PTSD and overall mental health outcomes five years later.

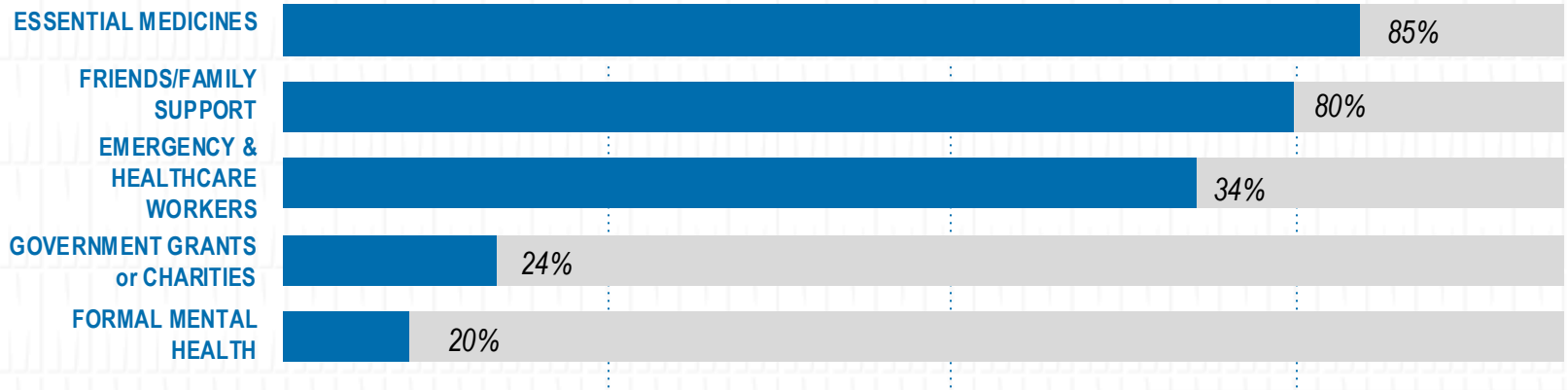
SOLASTALGIA

48% of the total association between the fire experience and overall mental health and 5% for PTSD symptoms

"The extreme heat of the fires completely altered the environment which was an important part of my well-being and **the reason for living in the area**". *[Woman, aged 60, East Gippsland]*

ACCESSING SUPPORT

- *Most respondents could access urgent health care and essential medications*
- *Emotional support from friends, family and neighbours was protective*
- *Only about one in four used psychology services, despite a much broader population concern*



"There needs to be more welfare services readily available for those who suffered losses". (Man, aged 31, Clarence Valley)

GROUPS WITH HIGHEST PREVALENCE: *WHERE ADDITIONAL SUPPORT WAS NEEDED*

People who had the most extreme experiences of the fires had the worst mental health symptoms five years later

Women

A higher proportion experienced moderate or severe depressive symptoms; practical and government support was protective

Older people

Fire-related effects on depression and overall mental health were stronger for older participants

People with fewer opportunities for formal education

More limited education was associated with stronger adverse psychological effects

Aboriginal and Torres Strait Islander peoples

More severe losses from the fires and more displacement than non-Indigenous peoples.

WHAT MADE A **DIFFERENCE**

Experiences that protected mental health:

- *Immediate financial assistance (first 12 months) was associated with lower rates of depressive symptoms and offered some protection against PTSD symptoms long-term*
- *Emotional support from family and friends was associated with lower levels of depressive symptoms over time*
- *Social support through peer-based locally facilitated group activities was helpful for wellbeing in the years following the bushfires*
- *Those who accessed counselling or psychological support reported better overall mental health five years later.*

FUTURE IMPLICATIONS:

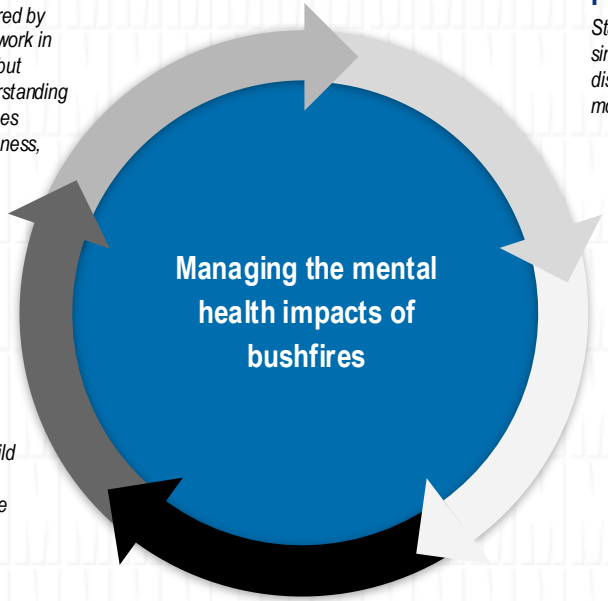
REDUCING THE IMPACT OF BUSHFIRES ON MENTAL HEALTH

Mental Health Care

Psychological support delivered by local providers who live and work in the community is important, but providers need also an understanding of individual needs/preferences alongside treatment effectiveness, access and affordability

Financial Assistance

Staged, longer-term support with simpler access and more equitable distribution beyond the first 12-24 months



Social Connection

Collaborative activities with long-standing community networks build continuity and shared problem solving (eg. Landcare) and reduce isolation

Post Bushfire Health Promotion

Population-wide education about long term impacts of fires on physical and mental health, strategies for self care and what informal and formal services are helpful

Routine Screening

Standard-care screening for eye, respiratory, and mental health in fire-affected communities to enable early detection and support

ACKNOWLEDGEMENTS

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- *Buchan Bush Nursing Association*
- *Bruthen Neighbourhood House*
- *Cann River Community Centre*
- *Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC)*
- *Moogji Aboriginal Council and Medical Services*
- *Katungal Aboriginal Corporation Regional Health and Community Services*
- *Tenterfield Community Hub*
- *Baryulgil Community Hub*
- *Moruya and Grafton Libraries*
- *Clarence Valley Wellbeing Collective*
- *Hunter New England Local Health District and Southern NSW Local Health District*
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paulramsay FOUNDATION PARTNERSHIPS FOR POTENTIAL

ELECTRICAL MERCHANDISING

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Further information:
jane.fisher@monash.edu