

Infrastructures of care: Pregnancy and birth during the 2019-20 bushfires

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Introduction

The 2019-20 Australian bushfires exposed millions of people to unprecedented levels of bushfire smoke. We interviewed mothers living in Canberra or the NSW South Coast, to find out how pregnant women and those parenting a newborn experienced and managed the bushfires and smoke.

Methods

The study involved 23 semi-structured qualitative interviews with people who were pregnant or had recently given birth at the time of the 2019/20 bushfires. Participants were recruited via the Mother and Child 2020 (MC2020) study* or word of mouth. Interviews were audio-recorded, transcribed verbatim and inductively coded by team members. (*<https://medicalschooll.anu.edu.au/research/projects/mother-child-2020-mc2020>)

An 'infrastructure of care' framework foregrounds the complex organisational and societal responses that such crises generate and how they articulate care (Power and Mee 2019). We ask what an infrastructure of care offering pragmatic, long-term solutions that cater for the embodied needs of pregnant women and those caring for newborn babies in future crises might look like.

Findings

Participants highlighted infrastructures that mitigated or exacerbated the impacts of the bushfire smoke on their health and wellbeing. The following quotes illustrate a selection of these concerns.

i) Public health advice

Public health advice identified pregnant women as vulnerable, but information was limited due to a lack of research on the short- and long-term effects of bushfire smoke pollution. While some preferred not to dwell on potential harms, many found the lack of information frustrating/exacerbated their concerns.

"My midwife was fantastic, but she didn't know anything about it because there isn't, you know, and the helpline's the same, there's nothing in their training... so they don't have any information for you that you can't access more and better elsewhere, I guess. So, we asked, but... everyone was kind of going, "Well... We actually don't know." (Libby)

ii) Air quality information

Many women relied heavily on air quality information to make decisions about risk and exposure. Real-time air quality information was initially limited. Referring to a popular air quality website created by a local citizen scientist, Sarah explains:

"He took it on himself to do that. And I thought, 'Well, it [the smoke] makes someone else feel like we do!... He was tweeting them [air quality data]. Yeah. It just actually really helped my mental state because I felt like somebody else cared and was doing something about it, you know?"

ii) Sociotechnical fixes

Many of our participants found comfort in socio-technical solutions such as air conditioners (with HEPA filter) and air purifiers - even if this was more of a psychological aid. However, not all people could find or afford them.

"We got the second Dyson that had the little reading, you could see it fall... Like there's mixed messages about how effective they are, but I felt pretty good. And my god it took the edge off mentally!" (Sarah)

iv) Housing and health facilities

The public health advice was to stay indoors over this period, however, variation in housing quality and airtightness meant many were still exposed to smoke. Participants used a range of strategies to try to seal their homes. Two participants reported wearing a mask inside their homes and several expressed concern about giving birth in a smoky hospital.

"Look, I was scared, because you know what labour is like... You need everything to be optimised, your health, your mind, your support structures, the air. And I was thinking, how am I going to do this?... I was sitting here [in her house], dizzy from the smoke, because I had a huge belly. You can't expand your lungs, and then the air you're breathing is smoke-filled" (Matilda)

Recommendations

What would an infrastructure of care for pregnant women/new parents look like?

- geographically fine-grained, real-time air quality information
- sociotechnical solutions like air purifiers, air monitors and HEPA air conditioners
- solutions for housing airtightness
- accessible information about long-term health risks and best harm minimisation strategies
- emergency accommodation services that accommodate the needs of pregnant/newborn bushfire 'refugees' and families
- public facilities with air filtration systems (including exercise and play spaces, smoke-free hospitals)