

Disproportionate burdens: the multidimensional impacts of climate change on the health of Indigenous Australians

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For Indigenous Australians, the “health of country” is inextricably linked with human health

The impacts of climate change on human health are now being documented in Australia.¹ Not surprisingly, these impacts are unequally distributed across our society, as vulnerability depends on a number of factors, including the degree of exposure, sensitivity and adaptive capacity. However, intra-national heterogeneity of climate impacts on health has not been adequately documented to date.² Using this lens, the vulnerability of Australia's Indigenous people living in remote areas of the country is revealed. Their vulnerability to climate change is intensified by the social and economic disadvantage they already experience — the result of factors that include decades of inadequate housing and public services, and culturally inappropriate medical services. In addition, specific cultural ties between Indigenous people's wellbeing and the “health” of their “country” create significant indirect impacts of climate change.^{3,4} We argue that it is vital to acknowledge the significance of this situation now, so that anticipatory adaptive policies can be implemented. Such policies should ensure that adequate resources are provided to mitigate some of the worst impacts of climate change on these communities, in a way that encourages community participation in decision making.

We now know that, across northern Australia, climate change is expected to bring hotter day- and night-time temperatures.⁵ Elevated temperatures and increases in hot spells are expected to be a

major problem for Indigenous health in remote areas, where cardiovascular and respiratory disease are more prevalent and there are many elderly people with inadequate facilities to cope with the increased heat stress. However, while the literature is not clear on the exact effects of increasing heat on people and communities, it does imply that these effects are likely to be less in regions where people are already acclimatised to hot conditions.

Communicable diseases such as bacterial diarrhoea, which are more common in hot, dry conditions, may increase in incidence unless additional preventive action is taken. One study predicted that a 1.0–3.5°C increase in average temperature by the year 2050 would lead to an estimated 5%–18% increase in diarrhoea cases in Alice Springs.⁶ Dengue fever, spread by mosquitoes, also presents a climate-related risk to Indigenous communities. Although the virus is not currently endemic in Australia, there are sporadic epidemics, with occasional cycles over winter in the local mosquito populations in northern Queensland.⁷

The conceptual divide between Indigenous and non-Indigenous Australians about perceptions of “health” also needs to be recognised and accommodated.⁸ The Indigenous concept of health is broad and multifaceted, reflecting a different world view to that of the Western biomedical model. For many Indigenous people, a connection with “country” — a place of ancestry, identity, language, livelihood and community — is a key determinant of health.⁹ If community-owned

country becomes “sick” through environmental degradation, climate impacts, or inability of the traditional owners to fulfil cultural obligations through ongoing management and habitation of their land, the people of that land will feel this “sickness” themselves. That is, the elements contributing to Indigenous health and wellbeing are often abstract and based on social interactions with people and the non-human landscape. Thus, as ecosystems change in response to biophysical impacts and extreme weather events, many traditional owners living in remote areas are likely to face increased physiological, psychological, economic and spiritual stress as it becomes more difficult to “look after their country”.

At both international and national levels, there is some recognition of the specific needs of indigenous people in relation to the impact of climate change. The World Health Organization’s Commission on Social Determinants of Health and the United Nations Permanent Forum on Indigenous Issues have recently acknowledged the importance of tackling climate change, particularly with respect to health, for the world’s 350 million indigenous people. In Australia, the Garnaut Climate Change Review has recognised the importance of some non-quantifiable costs, including the specific intangible costs associated with improving Indigenous health.¹⁰

A challenge for medical practitioners dealing with this issue in the Australian context will be to look beyond the limitations of traditional epidemiology and scientific reductionism to embrace a more ecologically focused, social-determinants approach to health.¹¹ This approach would enable the “health of country” and its inextricable links with human health to be considered in climate impact assessments.

To address these different paradigms of health, the first step is to begin discussions with Indigenous people to prioritise activities. This process will certainly require a significant increase in the capacity of medical professionals and health systems in northern Australia, as well as increased education and training programs for Indigenous trainees and cross-cultural programs for nurses and local Indigenous support staff. Changes also need to be made in teaching practice across Australia. Currently, Indigenous health still occupies a peripheral place in many medical school curricula, with government funding and research disproportionately supporting high-cost, acute-care medicine at the expense of preventive and primary health care.

In tandem with well planned, properly resourced programs that support strong livelihood activities in remote communities, there is the potential to begin to reduce the additional risk for many Indigenous communities from climate change. There are multiple co-benefits of this approach that would raise social and economic indicators. Ignoring the warning signs and failing to take action is no longer an option.

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