Transcript - Taking care season 2

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The inextricable link between climate change and healthcare

Tash Miles: Ahpra acknowledges the traditional owners of country throughout Australia and the continuing connection to lands, waters and communities. We pay our respect to Aboriginal and Torres Strait Islander cultures and elders past and present. Welcome to Taking Care, a podcast of Ahpra and the National Boards. I'm Tash Miles. Today, we're speaking about an issue that affects all of us as citizens of the world, though it certainly affects some communities more than others. It's climate change that's on our agenda and how our changing climate is affecting access to safe healthcare and ultimately, our health and health outcomes.

It's a big topic. Fortunately, I have some big thinkers with relevant lived experience here to discuss this. Dr Ying Gu is an obstetrician in Melbourne and a volunteer with Doctors for the Environment with an interest in issues for sustainable healthcare. Dr Simon Quilty is a specialist physician who has lived and worked in the remote Northern Territory and is particularly interested in the link between environmental heat and wellbeing there. And finally, Professor Sharon Friel is Professor of Health Equity and Director of the Menzies Centre for Health Governance at the School of Regulation and Global Governance at ANU.

Welcome to our podcast. I've started off an introduction but I'm hoping that you could talk more about your motivations for speaking with us about climate change and healthcare. Let's start with you, Ying.

Dr Ying Gu: Sure. Thanks, Tash, for having me on the podcast. As you said, I'm an obstetrician gynaecologist. I specialise in ultrasound at the Royal Women's Hospital and Mercy Hospital for women in Melbourne. I joined Doctors for the Environment Australia, a not-for-profit advocacy group made of doctors and medical students, following the Black Summer bushfires in 2019-20. I saw how the thick smoke exacerbated my niece's asthma and kept the children from playing outside. This is when I looked into the health impacts of climate change. And as a doctor and parent, I feel that it's very much part of my duty to advocate for science-based climate action to limit global warming for the sake of our health and our children.

Tash Miles: Thank you. And Sharon, could you do the same? Could you introduce yourself in the context of this discussion about climate change and healthcare?

Professor Sharon Friel: Sharon Friel, a Professor of Health Equity at the Australian National University. For years, I've been researching around inequalities in health and trying to advocate for action on the underlying social inequities that contribute to poor health outcomes and the unequal distribution of that. And of course, climate change, we've seen climate change exacerbating those inequalities. It's widening social inequality which is then feeding through to widening health inequities. I'm just really, really concerned that unless we do something about climate change, we will see even worse health inequities here in Australia and globally.

Tash Miles: And Simon, could you talk a bit about where you work and how you see climate and climate change affect the communities that you work with?

Dr Simon Quilty: I have lived and worked in remote Northern Territory for the last 20 years. When I first moved to Darwin, I realised that there was a very substantial problem on our hands. And indeed, the Northern Territory Government recognised that as well in their 2004 report on climate change and a more recent report done in 2021 by the Northern Territory Government once again commissioned by CSIRO deemed that the 2004 report was a substantial underestimation of the new extreme heats.

When I moved to Darwin in 2004, I just presumed the adults in the room would stand up. There was some talk about mitigating carbon emissions from healthcare in 2005 in the Northern Territory and the Northern Territory Government as a sector, pledged to reduce their energy consumption in their buildings by 10% by 2011. In 2016, there was some infrastructure that was built that was supposed to substantially reduce the carbon emissions of Alice Springs Hospital and in 2021, the Natasha Fyles signed, the then Health Minister and now Chief Minister of the Northern Territory signed every single Northern Territory health institution up to the global green healthy hospitals.

However, the adults never stood up and I would say they still haven't stood up in the Northern Territory. To date, the Northern Territory signature to global green healthy hospitals has amounted to nothing. There is still not a single solar panel on a single hospital. And I guess more broadly speaking than just my own personal profession is obviously, these remote communities which I know very well. I started the specialist service in Katherine Hospital in 2012, one of the hottest towns in Australia. On average, Katherine has 6 days a year above 40 degrees Celsius and 2019-20, they had 56 days above 40 degrees Celsius and they had an incredible stretch of profound heat that had never been experienced before.

Trees died. Trees died from heat all along the Katherine River. There was a collapse of the bush apple tree which was a substantial food source for First Nations people. The entire population along the river collapsed and birds were falling from the trees. It doesn't take much to imagine that people who live in tin sheds that are not insulated and don't have power or water running to them, are incredibly vulnerable. We're reaching threshold temperatures in the north of Australia where, if people can't shelter from these extreme conditions, then they will essentially cook. It's extremely concerning that the poorer people are the less-resourced to shelter from this extreme new heat.

Tash Miles: Thank you, Simon. That's an extremely vivid picture you paint of a really concerning reality. And Sharon, for you, could you give some examples of the effects you've seen of climate change on individuals but also, maybe on society more broadly?

Professor Sharon Friel: Yes, there are many, many tentacles from climate change in to people's lives and ultimately, our health and it also affects us physically and mentally. Of course, the immediate experience that people will remember of the fires and the floods that are ongoing at the moment in parts of the country, immediately are affecting people's lives. For some, it's a matter of life or death. It's that stark. And then, the heat stress that comes from the increasing temperatures, the erosion of land that's pulling down people's homes and structures, the incredible stress from that. Not just the physical risks to people's health and wellbeing but the mental stress, the immediate and the accumulating stress that's associated with that.

We will see – we already are seeing – but we're going to see a very long tail, I think, of mental health problems associated with climate change. And then, the way it's affecting – I mentioned how my real concern of the widening of social inequities within Australia and what that means related to the health inequities. If you think of people in the floods, people in the Lismore caravan parks who were so terribly, terribly affected by the floods. Many of those people really having insurance for their dwellings is a stretch, let alone they've been able to move to somewhere else, move to somewhere safer afterwards.

But of course, as more affluent households and people are absolutely able to do that. Just have the financial capacity to do that. That's just one example of how we start to see a cleavage in the already-existing social fault lines here in Australia.

Tash Miles: Yes, it's not just about those big singular weather events. It's about the day-to-day impacts that you see and the tentacles of climate change reaching everywhere, reaching all facets. Simon, back to you.

You haven't spoken a lot about heat and its affect on the communities who you work with. What do you see as the big-ticket items that really affect health outcomes in the communities you work with?

Dr Simon Quilty: Housing. If Australia is serious about closing the health and social gaps that exist in indigenous Northern Territory, then the only thing that needs to be looked at is housing. It's not just more houses. It's a lot better quality housing. Probably 70% of all remote housing stock – there are about 10,000 remote houses in the Northern Territory. And then, for indigenous people living in town, many of them live in town camps which are extreme poverty. Of the 10,000 remote houses, probably 70% of them are old infrastructure.

This connects with some of the more recent research that I've had published last year in Nature Energy, which demonstrated that remote indigenous houses have the highest rates of energy insecurity in the world. Energy insecurity as opposed to energy poverty means that you're not sure how long your power will stay on. What we found in our research for remote indigenous houses is they disconnect up to every fourth day for an average 10 hours at a time. This is because they purchase power in a prepurchase arrangement. They have meters that they have to credit up.

It's a response to incredibly poverty. Aboriginal people in communities like Lajamanu have an average weekly wage of $200 per week. In the current environment, they pay up to $5 per litre for fuel. They pay up to $7 per litre for milk and they pay significant amounts to rent these incredibly poor houses. A solution to that is to prepay your power and then, you can choose between energy poverty or food poverty. What happens is in the hottest months of the year is the hot weather extends more and more, people run electricity increasingly and they lose any capacity to even have a refrigerator.

A lot of this is non-biomedical. In fact, almost all of it is non-biomedical. There are not enough houses. They're poorly constructed. They are poorly designed. They have terrible thermal ratings. The more energy efficient your house is, the safer it is in very hot weather and the less electricity you have to pay to keep it cool. There are all of these structural barriers around housing that are absolutely obscene and need to be urgently addressed because we're only one El Nino Summer away from catastrophic heat where people really simply can't escape.

Tash Miles: And how is climate change affecting the communities that you work with accessing health care?

Dr Simon Quilty: There are different types of health care. There are Western Biomedical Health Care. And what we know is when the weather is hotter, we have increased admissions to hospital. I've also got some research that demonstrates that increasingly hot weather means increasing retrieval services. In the Northern Territory in a place like Alice Springs, we only have three fixed-wing aircraft for all of our retrieval needs covering an area of well over one million square kilometres and about 40 remote communities. Those planes are really precious. If you have an increased burden on that, then you've got reduced access to acute care.

Even more fundamentally, you can imagine that if people's power is turning off every fourth day on average for ten hours, people just don't buy fridges and if you prescribe medications which are temperature sensitive. Where do you store them when you get home in summer? For instance, insulin. If you don't have a fridge, you can't store it when the inside of your house gets well above 40 degrees Celsius day after day after day. One of the other things that I think is really interesting as a society, we presume that the thermal stability of our medications is a granted. When people come to work in very hot parts of the Northern Territory, they don't appreciate that people can't shield their medications from very hot weather.

But the First Nations people that I know and love and work with are a lot less concerned about their medications than they are about their food. If you can't store your medications, you can't store your food. These are extraordinarily fundamental inequities that drastically need to be addressed but they need to be addressed in terms of what remote communities see as the more important. I think most people would say that the most important thing isn't medications. It's food and water security and being able to shelter from extreme heat.

Tash Miles: I guess sometimes patient-centred care can mean not prioritising their healthcare but caring for them in the ways that they need more. Ying, can we go to you and talk about how you've seen climate change affect the patients and communities that you work with in quite a different context?

Dr Ying Gu: Yes, sure. Before I go into that, I just want to add that it's really important to highlight the food security and nutrition, all tied up with worsening climate change and its impacts on health. In regards to the question, how is it affecting my patients, I'm very concerned for my patients who are women that span different stages of life. Women will be one of the more vulnerable groups affected by climate change. One of those is the gender inequalities, the social and family responsibilities that women have. Currently, there is strong epidemiological evidence to support that climate change reduces fertility and has adverse pregnancy outcomes such as reduced fertility, live birth rates and also, links with increased preterm birth and low birth weight.

One example of how that's mitigated in terms of preterm birth is a pollutant that's very fine particular matter that's less that 2.4 micrometres. That is so fine. It can be inhaled into the lungs and enter the bloodstream where it causes inflammatory stress in the body. This comes from wood smoke from wild fires. During the Black Summer bushfires, the Eastern States reached levels of 5 to 7 times more than what is classified as poor air quality. It has been shown that exposure of this pollutant has been estimated to account for up to 18% of the global preterm birth rate. We know that preterm births have significant health impacts beyond the newborn period.

Also, I'm concerned about the global rising temperatures which will see increased distribution of vectors like mosquitoes that carry infections. A recent report that showed the Zika virus. Transmission temperatures that will save a Zika virus spread will endanger a further 1.3 billion people. We know Zika virus causes severe microcephaly among other severe birth defects. I think the other impacts that we will see is that populations will become displaced as we saw locally with the floods. In Europe with the evacuations from the fires is that women will be at higher risk of gender-based violence, exploitation and consequent mental trauma.

In areas where there are already low resources and poor access such as regional areas, extreme weather events will further add to the access barriers to healthcare and reproductive care. I'm very concerned about how climate change will affect women's health.

Tash Miles: Do you talk with your patients about that connection?

Dr Ying Gu: Yes, I do. When there is time and the clinic setting is limited, I do try to bring this up in particular, relating to the obstetric outcomes and the things that women could do in terms of their own decision making. Yes, I do take that opportunity as part of health promotion.

Tash Miles: That's great. Sharon, do you have anything to add in terms of, for want of a better phrase, hot-ticket items when it comes to climate change affecting the healthcare system?

Professor Sharon Friel: Building. Building from what Ying was reminding us of, thinking about the experiences locally, nationally. It can't be done separate to the global connectedness in which we're all living. I do think there is a positive and a negative of the global pandemic at the moment. It has made many in the public as well as in policy and politics, much, much more aware of that interconnectedness. We've just seen the Australian State of the Environment report come out finally, which is just alarming in lots of different ways.

Climate change is threatening every ecosystem that we have here in Australia. It's not a particular hot-ticket item but it's just the absolute urgency for action or else the sorts of issues we have been speaking about are just going to ramp right up.

Tash Miles: Have you seen any strategies that you think, if they got legs, they might work to address some of those structural changes?

Professor Sharon Friel: We've got to do something about adaptation right now. And at the same time, we have to address the structural drivers of ongoing climate change. It's not an either-or. We need both. And I would argue that good climate adaptation policy is good social planning economic policy. How do we address some of the inequities that we're seeing in the ability to adapt and respond to the existing climate change that we have right now? This about something like the income support levels that we saw people in – when that was amended to enable people to live during the pandemic. We saw that empowered communities. That is the sort of levels that people need ongoing, so a decent living wage and then, a decent living, level of income support to me, is actually really good climate adaptation policy, for example.

Yes, a really important and exciting development that's happening here in the ACT in Canberra is the ACT government has introduced a new policy to really make a big difference to emissions. By 2035, car dealers won't be able to sell any cars with internal combustion so a major new policy direction for the ACT. That alone with a number of incentives to help access to electric vehicles, I think, is going to really help shift the dial, which is very positive.

That goes some of the way from a mitigation perspective but I would argue we have to see a much bigger structural intervention because it becomes reliant on the individuals. Let's go out there and drive a car that's based on renewables, based on electricity or it's turn off the lights or use solar panels, all of which are very important and useful individual level interventions but we still haven't seen the level of structural intervention from a mitigation perspective that basically stops the use, the production and consumption of fossil fuels. There are some rumblings. I am quite encouraged to hear the discussion that's going on about whether there will or won't be legislation where any new proposed fossil fuel project has to go through an environmental assessment. Heaven forbids why that wasn't happening already.

That goes some of the way but actually, doesn't veto any introduction of those sorts of projects would be ultimately, I think, what we're going to have to do in terms of the drastic change that we need to prevent the ecosystem collapse that will happen based on the state of the environment report.

Tash Miles: Simon, could you talk to us about innovations and work around's that you've seen?

Dr Simon Quilty: I'm so enamoured and enthralled by First Nation people's ingenuity in circumstances that they have. Climate change is obviously affecting the ecosystem and putting extreme pressure on a lot of ecosystems, which is a threat in itself. But I have seen some significant issues of advocacy and indeed, Norman Frank Jupurrurla who is a very good friend and mentor of mine, recently achieved solar panels on his rooftop. It's the first remote indigenous house to have solar panels on it. That has completely alleviated his energy poverty. He was disconnecting from power probably once every two weeks. He's a relatively well-to-do Warramungu man who lives in a town camp in Tennant Creek.

Since he received his solar feed-in tariff, thanks to the amazing work of Original Power, a First Nation renewable energy organisation, he hasn't disconnected from power and he's not concerned about that anymore as a threat to his family's wellbeing. There are innovations and there are lots of great works and great people really pushing the agenda but it is all completely without the support of either Federal or State governments. There have been no subsidies. Indeed, the remote houses that are currently being constructed are $850,000 a piece, are three-bedroom Besser brick, poorly designed, no eaves on walls, no solar panels on the roof, really poorly constructed dwelling that, even when they're brand new, anyone in a mainstream suburb of Sydney or Melbourne would be reluctant to rent.

They don't have nearly enough windows. The ones in the north of Australia are definitely not air conditioned. There is no innovation and it feels like there is a complete head-in-the-sand from the Northern Territory government in terms of them needing to be much cleverer in the way that they start addressing these inequities.

Tash Miles: The Australian healthcare system has a lot of opportunity to learn, I guess. It's difficult to talk about climate change and really specifically talk about healthcare because, as everybody has said, it touches everything and then, that flows down to healthcare. But I'm wondering whether we could go back

in and talk about the hospital setting and whether you've seen specific work arounds or improvements to really respond to the climate crisis?

Dr Ying Gu: Yes, I think within the hospital system, I work in both public and private hospitals, and there are variations in the sustainability initiatives and levels of how much that is embedded into the operations. There is progress in wanting to reduce the health service's emissions but there is a lot of variability and measuring emissions is still difficult and not standardised. There are definitely good-news stories though, in that the Mercy Hospital for women have released their caring for people and planet sustainability strategy where they work towards achieving net zero emissions by 2030 for Mercy Health. The Royal Women's Hospital is also in the process of developing a similar strategy.

I think there is growing acknowledgement of the contribution of the healthcare sector to global emissions. One of the Doctors for the Environment members, anaesthetist intensivist, Professor (26:41) [Forbes McGain] published Australia's healthcare sector's carbon footprint is estimated to be about 7% of the national total greenhouse gas emissions, of which public and private hospitals and the pharmaceutical supply chain make up about two thirds. It is very significant. There is now also, increasing advocacy from medical professionals to act on climate to protect health. For example, last year, more than 200 international medical journals released a joint editorial calling for emergency action to limit global temperature increase, restore biodiversity and protect health.

Last year, the Australian Medical Association, along with Doctors for the Environment and the Australian Nursing and Midwife Federation released a joint statement that healthcare sector emissions need to be reduced with a target of 80% reduction by 2030 and thereby advocating for the health sector to be part of the solution rather than contributing to the problem.

Tash Miles: Simon?

Dr Simon Quilty: We need to be leaders. We need to mitigate our carbon footprints. There is not a single solar panel on a single hospital in the Northern Territory and they have done nothing to mitigate their footprint. There needs to be some really clever adaptation plans because most of the Northern Territory experiences very extreme heat for prolonged periods of the year and we need to get acting very quickly because it's going to be very dangerous in the next five years if people aren't afforded better housing infrastructure in which to shelter from this extreme heat.

Dr Ying Gu: I think at a state level, there are good-news stories in that Victoria public hospitals will be powered by 100% renewable energy by 2025, and the new Milton Hospital will be all electric with no gas infrastructure, which is amazing. On a national level, we can look towards England's National Health Service. While every health service has its challenges and issues, they do lead the way in terms of sustainability in that they have a national sustainable healthcare unit and they're able to successfully reduce their emissions by 26% since 1990, despite the population of England growing in that period. And the financial savings they have estimated associated with the initiatives they have put in place for energy and waste and water improvements have saved the NHS 90 million pounds per year.

That's in Australian Dollars, $168 million per year. Can you imagine what we can do with that money if we were to reinvest that in health prevention and therefore, reduce the burden of disease and strain on our health services? One of the very interesting policies they have announced in NHS is they have used their purchasing power to tell their suppliers that if they do not innovate and be part of the solution by becoming carbon neutral themselves, they will not have the NHS as a customer. That's a huge incentive to really drive that systemic change we desperately need. Australia really needs to emulate this and have its own national sustainable healthcare unit.

What that does is enable a national coordinating effort to work with State's general practise and not-for-profit organisations and industry so that we could have a consistent measurement of health sector emissions, implement what's best practise and evidence-based approaches so that we could collaborate and then, effectively achieve net zero carbon emissions for the health sector and provide the high-value care for our patients and save financially as well. That's what we need.

Tash Miles: That was inspirational. Thank you. Sharon, I'll go to you and ask, looking to the future, what do you think that signs would be that change is happening, meaningful change is happening? What are the markers of positive change?

Professor Sharon Friel: Everything that Ying just explained gets implemented in Australia. I would love to see that sort of model taken across the different departments. We just don't have that as a mission. If for no other reason, just listen to the savings that Ying was describing from the UK. But it can't just be about the savings. This is an efficiency item and this is about actually preventing ecosystem collapse. What I would love health practitioners to be doing is to collectively advocate for this type of action. Advocate for what needs to happen within healthcare, advocate for action into these other policy domains. Everything that I've spoken about sits outside of healthcare and it's not an either-or. It's all of it. But health practitioners are the people who care about health so being able to help guide other sectors to address these sorts of climate, health and equity concerns.

Tash Miles: Ying, what do you hope for the future?

Dr Ying Gu: I do hope that we can see broader community engagement within the medical profession and outside of them in the more general community because we really need to engage everyone in our society. Because ultimately, health affects all of us, whether we are young or old, male or female. The most effective way to prevent further health deterioration is to limit global temperature increase to within 1.5 and the critical time to act is in this decade so we really need to empower everyone that they have the power to make the decisions, after being informed take those actions and demand businesses and governments to apply a climate care lens to their policies and operations.

Tash Miles: And finally, Simon, what do you see as markers or priorities for a future of safer healthcare in response to climate change?

Dr Simon Quilty: I might turn that question on its head, if you don't mind. I think that the really fascinating thing with the people that I work with is that they have extraordinary and ancient history. They don't record it in writing. It's all verbal and it's all through song lines and it's ancient. It's tens of thousands of years old sometimes. There are many First Nation people that I know who can recall the hunting habits of thylacines even though they disappeared from the landscape 5,000 years ago in the Northern Territory. There are ancestral stories about meteorites hitting the landscape and that would have happened about 15,000 years ago. First Nation cultures have been shaped by climate change in the past and maybe, as a society, Australia would be well-placed to start talking to First Nation people about how to live within an ecosystem rather than battling against it.

Tash Miles: We have covered a lot of ground in our time together today. Thank you. I want to really call out the generosity of our guests today for walking us through the complexities of the current and likely future climate change impacts on health and wellbeing. And I'm particularly grateful for them bringing that balance to us of responsibility because there are things that we all can and need to do with hope that we can find a way through this challenge that we face together. And I'm sure our listeners will join me in thanking you, Ying, Simon and Sharon, for your time today.

Dr Simon Quilty: It's a pleasure.

Dr Ying Gu: Thanks for having this podcast.

Professor Sharon Friel: Thank you, it's been a real pleasure.

Tash Miles: And thank you for listening to Taking Care. Please do subscribe, recommend our podcasts. You can tell us what you think or suggest ideas for future episodes by emailing us at communications@ahpra.gov.au. Until next time, take care.

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