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Climate and health

As I write, the whole country is in the grip of an unprecedented heatwave. The temperature outside is more than 40°C. Meanwhile, I am sitting at my desk doing something I learnt to do many years ago when I was managing a very busy operating theatre suite – rostering!

However, this time I am not rostering fabulous nurses to staff busy operating rooms working 24 hours a day. No, this time I am putting together teams of trained volunteer firefighters, members of my local community. Within a 150 km radius there are two major fires burning, with the closest fire front just 10 km from my rural home. The fires have been burning for more than three weeks now and we have been sending out teams of firefighters in our three brigade fire trucks for both day and night shifts on many of those days. With the next predicted substantial rain not forecast until April it seems that these fires are unlikely to be fully extinguished for several months. We have little water in our dams to fight local fires and we have all been brushing up on our 'dry firefighting' skills. There are many other fires burning in similar circumstances all over Australia.

So what has this got to do with nursing in the perioperative clinical environment?

Well - a couple of things. One, those amazing organisational, management and leadership knowledge, skills and judgement capabilities that I developed as an operating room nurse and operating room manager and leader, stand me in good stead as the president of the Climate and Health Alliance and call-out coordinator and president of our local rural fire brigade. I know about the ideal skill-mix in a team. teamwork and communication. preparation and readiness, and the need for appropriate preparatory and ongoing education, training and

support to be able to work in high stress environments while dealing with whatever comes your way.

And, two, the health care sector, including perioperative nursing, has a role to play in reducing climate change. The 2019 report of *The Lancet* 'Countdown on health and climate change: Ensuring that the health of a child born today is not defined by a changing climate', notes:

The world has observed a 1°C temperature rise above pre-industrial levels... a rise as high as 3°C in north western Canada. Eight of the ten hottest years on record have occurred in the past decade. Such rapid change is primarily driven by the combustion of fossil fuels... the health care sector is responsible for about 4·6 per cent of global emissions, a value which is steadily rising across most major economies.¹

What are our responsibilities as health professional leaders in mitigating the greatest risks facing the health system and the community today? While being responsible for a relatively high proportion of emissions, the health professions also have a professional responsibility to take action to respond to the health threats that climate change is generating. According to the 2018 report of *The Lancet* 'Countdown on health and climate change: Shaping the health of nations for centuries to come':

Given that climate change is the biggest global health threat of the 21st century, responding to this threat, and ensuring this response

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delivers the health benefits available, is the responsibility of the health profession; indeed, such a transformation will not be possible without it.²

So, here we are at this juncture in history, possessing both the reality of causation and the professional responsibility to get involved. This we can do, at a broad policy, political, strategic and national level, and by taking direct and local action in perioperative health services and our own 'backyard'.

The Climate and Health Alliance (CAHA) is a coalition of health care stakeholders who work together to promote action to ensure that the threat to human health from climate change and ecological degradation is addressed through prompt policy action. The membership of CAHA includes organisations and individuals from across the health sector, with organisations representing health care professionals from medicine, nursing, public health, social work and psychology as well as health care service providers, research and academic institutions, and health consumers. CAHA's members recognise that health care stakeholders have a particular responsibility to the community in advocating for public policy that will promote and protect human health. CAHA aims to contribute to the development and implementation of evidence-based public policy to reduce greenhouse gas emissions and protect the health of the community3.

Local action

By acting locally we can make a very big difference to mitigating the impact of rising global emissions. Think about what you might be able to do within your own zone of influence. Already there is an international movement that is active in Australia that can assist us in these endeavours - the Global Green and Healthy Hospitals⁴ (GGHH) network. The GGHH network is an initiative of CAHA's international partner, Health Care Without Harm, with CAHA coordinating the GGHH network in Australia and New Zealand. The GGHH network is a vibrant international community of health services, hospitals, health systems and other health organisations dedicated to reducing their ecological footprint and promoting public and environmental health. The GGHH network connects and supports people leading the environmental agenda in health care institutions so they can share best practices and find solutions to common challenges4.

GGHH has an agenda with 10 goals outlined in Figure 1 below.

Rather than feeling overwhelmed by attempting to tackle all of the goals locally, GGHH urges health professionals working in health services to identify one or two of the above goals where it is possible to make a difference within their own service and individual units.

Some areas worth consideration may

- reducing, re-using, recycling, treating and safely disposing of health care waste, the significant waste stream that perioperative health services generate with the high usage of disposable equipment, clothing and drapes
- substituting harmful chemicals with safer alternatives. For example, anaesthetic gases (including the hydrofluorocarbons sevoflurane and desflurane; the chlorofluorocarbon, isoflurane; and nitrous oxide) are expelled into the atmosphere where they contribute to anthropogenic climate change. The use of the most damaging agent, desflurane, is rapidly increasing⁵.

 energy efficiency measures, which may be as simple as turning lights and equipment off when they're not in use.

Many of you will already be turning your minds to these and acting on them individually or collectively, and if you haven't connected with GGHH, as yet, I invite you to do so.

National and global action

We all have a choice. We can create transformational action that will safeguard the living conditions for future generations. Or we can continue with our business as usual and fail. That is up to you and me.

Swedish climate activist, Greta Thunberg

As the remarkable youth advocate Greta Thunberg states, it is not just about local action. As citizens of our planet and health professionals we have a greater responsibility and challenge. We need to accept these responsibilities and challenges if we are going to slow or stop the increasing environmental escalation and dramatic health impacts

Figure 1: Global Green and Healthy Hospitals goals



Leadership

Prioritise environmental health as a strategic imperative



Transportation

Improve transportation strategies for patients and staff



Chemicals

Substitute harmful chemicals with safer alternatives



Food

Purchase and serve sustainably grown, healthy food



Waste

Reduce, treat and safely dispose of health care waste



Pharmaceuticals

Safely manage and dispose of pharmaceuticals



Energy

Implement energy efficiency and clean, renewable energy generation



Buildings

Support green and healthy hospital design and construction



Water

Reduce hospital water consumption and supply potable water



Purchasing

Buy safer and more sustainable products and materials of climate change that we are experiencing. We need to make sure our politicians fully understand the importance of climate change for health. As health professionals we have a powerful and trusted voice and have an opportunity to change the conversation and social norms around climate change. We also have few vested interests. There are about 600 000 health professionals in Australia and, of that number, the largest group (approximately 330 000) are nurses.

Most people are concerned about climate change and believe that human activity is having an impact – witness the extraordinary response of students taking action for climate change across the world, and the many adults that joined them. As people realise the health impacts, they rate these as important and this can refocus their understanding and attention. Talking about climate change can help to influence social norms and educate people about the human face of inaction.

For nearly a decade, CAHA has been conducting the 'Our climate, our health' campaign in Australia. The campaign has the following goals and strategies underpinning all the campaign activities:

- propose (and design the solution)
- build the movement

- · change the story
- shift the politics
- shift the policy.

The aim is to secure a national strategy on climate health and wellbeing for Australia through a range of strategies including convening dialogues between health groups, health professionals, researchers, policymakers and parliamentarians; offering training for climate-health champions; creating climate-health mentors for parliamentarians; encouraging 'climate conversations' and encouraging communities to vote for climate action.

See more about the Our Climate Our Health campaign at www.ourclimate-ourhealth.org.au.

Conclusion

As perioperative nurses, we can contribute a greal deal to the global, national and local efforts that each go some way to reducing the health impacts of climate change. We can contribute in our roles as citizens, as employees of the health sector and as health professionals. Each of us can be party to making a difference.

Ethically and professionally we cannot use the defence we are hearing from some of our senior politicians that 'our efforts won't make a difference'.

I am making a difference as a member of my rural fire brigade and as an active member of the Climate and Health Alliance. The capabilities I attained as a perioperative nurse have equipped me well! I urge you to decide what you are able to contribute, and to take action.

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