

Sustainability In Healthcare

Report by Rebecca Sinclair, RN PgDip SCPHN, Public Health Nurse



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In November last year, I had the pleasure of attending the inaugural Sustainability in Healthcare Forum in Wellington on behalf of The College of Nurses Aotearoa. It was organised by OraTaiao: New Zealand Climate and Health Council, which is a group of health professionals calling for urgent action on climate change. It was fast paced, informative and very inspiring. Around 80 health professionals from many disciplines all over the country were in attendance, with many more tuning in online to view the live-stream event.

The day started with a reflection on the public health revolution, then the high-tech revolution, and now we enter into the environmental revolution. Both The Lancet medical journal and the World Health Organisation recognise that “Climate change is the greatest threat to global health in the 21st century” (WHO, 2015) and at the same time, also offers us the greatest public health opportunity to improve health and a fairer distribution of health.

There was an update on the science around climate change and what we can expect, such as weather extremes, heatwaves and higher temperatures, sea level rise, increased frequency and severity of storms, heavier rain fall and more droughts. These can impact negatively on health and will have the greatest impact on those already experiencing inequality in health or social disadvantage. If the planet warms by 3-4°C half of the world’s coastal cities would be gone, displacing 100 million people, including some of our Pacific Island neighbours where the islands will disappear under rising seas. Overall, human health is better than ever before, however there are still huge disparities in lifespan between the rich and poor.

The Royal Society Te Aparangi (2017) have published an evidence summary of the Human Health Impacts of Climate Change specific to New Zealand. This goes into detail about the building blocks of health, with which we are all familiar, such as air, food, water, shelter, disease, community, temperature and well-being, and what the implications are of climate change, such as increased flooding, fires, damage to infrastructure, changing disease outbreak patterns. Threats to health can be direct such as causing injury or worsening illness, or changing patterns of infectious diseases, changes to water and food supply, change of livelihood, community disruption, forced migration and conflict. Globally, 2016 and 2017 were the hottest years on record, with New Zealand having the hottest January ever in 2018. If greenhouse gases continue to rise, many parts of New Zealand may experience more than 80 days a year with temperatures above 25°C by the year 2100, which is more than double what we experience now, and would contribute to more heat related deaths.

There were 19 presentations on a variety of topics and these are available on the Ora Taiao website. Some of my personal highlights were: Dr Hayley Bennett (Public Health Physician) who



spoke about the co-benefits to the health sector of sustainability, climate change mitigation and adaptive action. We will need more of that adaptation as there are limits to this strategy. Some of the wins include health gain, cost savings, quality, equity and increased resilience. The health sector is responsible for around 3-8% of total greenhouse gas emissions in New Zealand. (The agriculture and energy sectors are the two largest contributors to New Zealand's gross emissions).

Another consideration is Te Tiriti O Waitangi and how we work together to protect the impact of climate change on the hauora (health) of Maori.

Dr David Galler (Intensive Care Consultant) spoke about his work to reduce highly potent anaesthetic gases as these are many times more damaging to the warming of the atmosphere than carbon. By working with anaesthetists he's been able to support them in choosing a less potent option and contribute to the reduction of the carbon footprint at Counties Manukau DHB.

William Van Ausdel spoke about Woodford Community Gardens on the hospital grounds which supports those clients who have experienced mental ill health with opportunities to learn how to grow their own vegetables and for personal growth e.g. communication skills and shop keeping. The produce is organic, locally grown and available for both clients and staff.

A highlight of the day was a visit from Julie Ann Genter MP, who announced that her new role as Associate Health Minister will, for the first time, include climate change. This is such a positive step to have these roles together as they are so closely intertwined with the changing climate having a direct impact on human health and well-being. The New Zealand Government has set the target to reduce our carbon emissions to zero by 2050, by which time I'll (hopefully) be in my 70's. We are certainly going to need more than just recycling to get our emissions down.

As Nurses we have a unique role as trusted health professionals working with individuals and their families and we are also able to call for policy change. We can be role models and advocates at both local and national levels. The actions we take now may not show up in the environment for another 20 years, but the benefits to our health start now!

So, what can we do?

Action to reduce our greenhouse gas emissions can bring co-benefits to both human health and the environment. "Health gains are possible for heart disease, cancer, obesity, diabetes, respiratory disease, and mental health", which would also have cost savings for the health system and help reduce greenhouse gas emissions (Ora Taiao, 2017).

We can educate ourselves around climate change and the risks to health, particularly as they relate to our area of clinical practice. For example, respiratory health where George et al, (2017) describe the eight deaths that occurred in Australia after a severe thunderstorm triggered asthma attacks after a release of dangerous levels of pollen, or where older people are disproportionately affected (Leyva et al, 2017), and also women, children, marginalised communities and those living with mental health disorders are more vulnerable (Kurth, 2017). Nurses in community settings can help clients access support for home insulation as this reduces energy emissions and those who live in warm, dry homes experience better health and less hospitalisations e.g. children with asthma.



As we discuss lifestyle options with clients around physical activity, walking and cycling, this reduces transport emissions that contribute to air pollution and improves fitness and reduces the risk of heart disease, obesity and diabetes. Another benefit of nurses supporting clients to maintain healthy weight and lifestyles is a reduction in the need for surgery and use of highly potent anaesthetic gases that are released into the atmosphere. Reducing red meat intake and eating a more plant-based diet of fruit, vegetables and legumes helps cut greenhouse gas emissions from animal agriculture and decreases the risk of bowel cancer and heart disease. There is also an opportunity for us to lead the way as health professionals in choosing these lifestyle options for ourselves, for example learning how to cook a vegetarian or vegan meal, if we don't already know how, or cycling and advocating for safe streets to ride on. Choosing tap water and reusable cups or bottles over single use plastic bottle drinks saves money and reduces plastic in the environment which can take hundreds of years to decompose, is cluttering up the oceans and is making its way into the food chain e.g. tiny pieces of plastic are being found in fish.

Climate change is in the media on a daily basis and it seems as though there is an increasing shift in perception from "is it real?" or "that's not a problem", to people being more concerned and seeing the effects of global warming and extreme weather events as happening already. Here I can see a parallel with my work around immunisation and antivaxxers. We speak from an evidence-based perspective and work alongside patients to help them make informed choices around their health, and in this case, the health of the environment too.

Nurses can promote efforts to reduce the carbon footprint in the workplace e.g. waste, purchasing and energy use. Carbon footprints could become standard parts of care pathways and taken into consideration for any new service development or project work. We can develop Green Teams in our work settings and consider the items we use. Do we really need so many disposable single use items? Think refuse, reduce, reuse, recycle. Switching off the computer at night saves energy and around \$120 per year. Or, taking turns to take home food waste to compost and save on waste. It just takes one person to get started and get the team on board. Start with the changes that are the easy changes!

We can speak up about the use of coal in the health sector. For example, there are currently 37 coal boilers in New Zealand hospital's which impacts on both the health of the environment and on the local community's air quality. There is a paradox in that the health system is here to keep us well but is also causing harm and contributing to poor air quality and pollution.

Nurses working in primary health care may be interested in the 'Greening Your Practice Toolkit' (2010) which has been "developed to assist with individual general practices making environmentally responsible changes where possible in the day-to-day running of their practice". For example, it was discussed during the forum that some people, particularly the elderly, can feel the need to come away "with a script" to make the visit to the doctors worthwhile, then end up with boxes and boxes of unused medicine at home. Practice nurses could spend time with clients to review medications so they are not being prescribed more than they need or are using. This both enhances their health and reduces unnecessary waste and carbon emissions.

We can write to the local paper or tell our MP what local issues we care about and want to see action on. We can change our bank and superannuation provider to one that doesn't invest in fossil fuels and tell others about what we are doing and why. We can offset our emissions at www.ekos.org.nz .



We can talk to friends and family about the issues that concern us and changes we are making.

Nurses are well respected and trusted members of society and it is our duty of care to advocate for the biggest threat to public health that our generation faces. Nurses are the largest group of health professionals and together we can make a difference. As we transition to a more sustainable and resilient way of life, this will offer huge benefits to human health and the environment. Hopefully this event will be on again next year as it was inspiring, provided a wealth of information and the opportunity to network with other health professionals also passionate about climate change and health.

To join Ora Taiao: The NZ Climate and Health Council visit: http://www.orataiao.org.nz/join_us

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