

Why must medical students be climate change action heroes?

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Rennie Qin is the National Coordinator for the Medical Students for Global Awareness' (MSGA) climate change campaign. She is also the International Federation of Medical Students' Associations' Asia Pacific's Policy, Education and Advocacy coordinator. She has a strong background in campaigning and an interest in the role of health professionals in advocacy.

Tobacco smoking, HIV/AIDS and cholera are among the great health challenges of the past that have compelled the healthcare sector to speak up in the name of beneficence and to lead society in action. Today, the biggest global health challenge of our century is climate change. Likewise, climate change is calling today's new generation of doctors to step up and adopt the essential role of advocacy, in particularly at the time of election.

When I ask you of your vision of the future, you'll probably think of a world full of prosperity, peace, health, ample resources and amazing medical technology, or perhaps of nano-robots and hover cars. What is opposite of that are natural disasters, mass migration, food and water scarcity and a sick populace of millions; all caused by climate change. Unlike science fiction, the impact of climate change is a real threat in our world. The real heroes in the climate battle are ordinary citizens among which doctors, bearing the professional duty of care, play a crucial role.

THE SCIENCE, THE DOOM AND THE GLOOM

The Lancet, the World Health Organization (WHO) and the World Medical Association unanimously agree that climate change is the biggest threat to human health in the 21st century.^{1,2} Globally climate change is estimated to affect billions through increased rates of natural disasters, changing patterns of infectious diseases, food and water insecurity and mass population displacement.³ A report published by the WHO Western Pacific region predicts that climate change will affect New Zealanders through increased rates of skin cancer, spread of dengue fever, floods and landslides and photochemical pollution.⁴ The situation is more dire in the Pacific as climate change is already causing rising sea levels and water shortage. Inevitably New Zealand will become a home for thousands of climate change refugees from the Pacific Islands.

Climate change will undermine the basic determinants of health by causing water and food insecurity, air pollution, displacement from shelter; loss of livelihoods and economic meltdown. The health impacts of climate change will be devastating in the future. We must act now to prevent them and

be ready for them. The WHO Director General, Margaret Chan said 'For health, climate change will be a high consequence event. We need to make clear that in a rapidly changing environment, it is not just the animals and plants, but humans that need protection.'⁵

The good news is that there are huge health incentives to mitigate and adapt to climate change. Encouraging public transport, active transport and physical exercise are all good for mitigating climate change, and these actions are also hugely beneficial for reducing health burdens. The same win-win situation applies to home insulation, decreasing consumption of red meat and reducing fossil fuel pollution.^{6,7}

THE CALLING, THE DOCTORS AND THE HEROES

The question now is why should health professionals act? Why must doctors be climate change heroes? The answer is simple. First of all, healthcare professionals are citizens – special citizens who have the duty of compassion, guidance and leadership in the community. Secondly, we bear a professional and ethical responsibility to protect our patients' health and act in the name of beneficence. As health professionals, our role involves diagnosing and treating disease in patients, and also preventing preminent health threats among future patients and their families. Our professional duties keep us not far from political advocacy. Indeed, in the past, we've stood up against smoking, leaded petrol, nuclear war and much more.

The health workforce is gifted with the ability to analyse and evaluate scientific evidence and to communicate complex scientific ideas and evidence in simple terms. With the respect our profession affords us in the community, we have access to power and the listening ear of our political leaders. In a situation where the 'ambulance at the bottom of cliff' is not affordable or feasible, doctors can and must be leaders in climate change health advocacy. Like cholera in the 19th century which gave birth to modern epidemiology and public health, climate change is the health threat that will define our age and shape a new generation of doctors equipped in advocacy.

THE POLITICS, THE NEW ZEALAND PERSPECTIVE AND THE ELECTION

Bearing 97% consensus among the scientific community⁸ and robust evidence, there is no doubt that climate change is happening and poses a significant impact on health; we must act now. What we have to consider now is whether our country is doing enough to combat climate change and its health impacts?

Despite the government's assertion that New Zealand is a world leader in climate change action epitomized by our Emissions Trading Scheme (ETS),

New Zealand has one of the largest increases in gross emissions since 1990.⁹ We are ranked 4th in the OECD countries in terms of emission per capita.¹¹ Officials like to focus on New Zealand's relatively small contribution to global emission – 0.2%¹⁰ whilst ignoring the fact we only have 0.063% of the world's population. New Zealand bears a moral responsibility to the global community and must do its fair share in reducing emissions. Despite being gifted with ample renewable energy sources such as hydropower and geothermal energy, the government is looking into increasing coal mining and exploitation of fossil fuels at great costs to the health and environment.

Economy is at the centre of this election. The National party recently announced its policy to defer the entry of the agricultural sector into the ETS, claiming that inclusion into the scheme would impose a cost or tax on our export industry. Climate change and health issues are often sidelined by economic concerns, and short term financial gains by long term benefits. We must bear in mind that the Stern Review proposed that taking early action on climate change will outweigh the huge cost of economic instability caused by climate change.¹² Economics aside, human health is the highest stake of climate change. Health, education, welfare, equality, environment are core values of our society and they should be a focus of this election alongside economy.

Furthermore, climate change action also offers the opportunity to strengthen our public health system, to improve efficiency, sustainability and reduce wastage. New Zealand has been a world leader in terms of its nuclear free stance; we can be a world leader in climate change action too, keeping to the clean and green image that defines our country. The recent Rena disaster gives us much to think about. With climate change estimated to hit hard in the Pacific, we have to take leadership in combating the health effects of climate change in our region.

WHAT YOU CAN DO

To any medical students accepting the professional responsibility of beneficence and the respect afforded to us by society, while juggling climate change action with daily medical school workload, I congratulate you for taking the path of a climate change hero. There are three things you can do: first personal action, second political action and third public action. Personal action includes first of all self-education about the impact of climate change on health. I would strongly encourage reading the WHO or The Lancet's reports as well as some of Ora Taiao's publications. Personal changes also include driving less, biking more, have meat-free days, recycling and using less hot water, which are not difficult and are good for health too.

Political action involves directly engaging with our country's leaders. Medical Students for Global Awareness has written a declaration on the impact of climate change on health and gathered signatures from hundreds of medical students to send to each party's spokespeople on climate change and health. Alongside Ora Taiao - an organisation of senior health professionals concerned about the impact of climate change on health, we have sent medical students and doctors around the country to meet members of parliament. We have also written a comprehensive report on the impact of lignite mining in Southland on health. Visit Generation Zero's website www.electwho.org.nz to find out what your local candidate think about climate change.

Last but not least, political action cannot happen without public awareness. Medical students must get into the community and educate the public about the impact of climate change on health, as well as raising media attention and awareness on the issue of climate change in general.

Medicine, at its core, is about social justice and the health of humanity. We are stewards of society and must act for a cause larger than ourselves. I want to challenge you with this quote, 'Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.'

MSGA is currently strategising our climate change and health campaign for next year. If you have any questions or ideas, please feel free to email me at climate@msga.org.nz. Visit us at www.msga.org.nz or 'Like us' on www.facebook.com/msga.nz.

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