The Health Impacts of Climate Change

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Climate change is having significant and damaging effects on communities and economies of the Pacific nations and projected to get worse over the coming decades. The World Health Organization (WHO) estimates an additional 250,000 deaths annually between 2030 and 2050 due to malnutrition, malaria, diarrhea and heat stress, and over USD two trillion in lost productivity globally.¹

While climate change estimates are usually forward looking, here in the Pacific the impact is already being felt. Over the last 10 years, our region has lost countless lives and more than USD two billion due to disasters such as cyclones, tsunamis, flooding and droughts. In Fiji alone, annual losses due to extreme weather events could reach 6.5 per cent of GDP by 2050, with more than 32,000 people pushed into hardship every year. Today, our region is in the unenviable situation of having five of the top 15 nations considered most vulnerable to climate change impact.² While debate over the existence of climate change continues in some parts of the world, here in the Pacific it has become a fact of life, and mitigating its effects is no longer a matter of politics, but rather one of survival.

The health impacts of climate change come about as a result of direct and indirect exposures as well as social and economic disruption and environmental decline. Adverse weather events cause significant damage to critical infrastructure, including health care facilities and critical public health services.³ Climate change acts as a health risk ‘multiplier’ by affecting the social and environmental determinants of health, including safe drinking water, clean air, sufficient food and safe shelter. The effects of climate change on natural and physical systems, that, in turn, alter the number of people at risk of malnutrition, the geographic range and incidence of vector-borne, zoonotic, and food- and water-borne diseases, and the prevalence of diseases associated with air pollutants. Ocean acidification will have negative impact on the health of coral reefs, a critical source of nutrients for fish and other sea life. This in turn will compromise the most important source of protein for Pacific communities given the heavy reliance on fish and seafood.

Adverse impacts of climate change on Pacific economies and human health is compounded by the high prevalence of non-communicable diseases (NCDs) such as diabetes, heart disease and certain cancers. As with climate change, NCDs are having a disproportionate impact in the Pacific region. NCDs are now the leading cause of death, disease and disability in the region. Eight of the 10 most obese nations globally are Pacific Islands, and diabetes prevalence is three to four times higher than elsewhere in the world. Left unchecked, NCDs will cause serious health and social problems for individuals and their families, overwhelm national health systems, and severely limit the development potential of the entire Pacific region.³

At first glance, climate change and NCDs may appear to be serious, but separate challenges. However, many of the causes and solutions to these challenges are interconnected. Climate change fundamentally changes the social, economic, cultural and commercial determinants of health. These changes, in turn, negatively impact the environment in which people live and work, which increases the risk of NCDs among the most vulnerable populations. Conversely, interventions to combat climate change present key opportunities to effectively address NCDs, and actions to reduce the burden of NCDs may have a positive impact on climate change mitigation.

For example, shifting to an increased use of renewable energy and investment in active transport systems would not only reduce greenhouse gas (GHG) emissions and air pollution, but would also promote physical activity, contributing to a reduction in NCD incidence.

Or consider how food production is managed. Investing in a sustainable food system, based on locally sourced, unprocessed foods, reduces reliance on imported, highly processed food items, and has clear co-benefits in reducing NCDs and mitigating climate change.
While many evidence-based, globally agreed interventions have been adopted to reduce the burden of NCDs, up until now these agreements have been weakly implemented. Similarly, international agreements to counteract the effects of climate change, such as the landmark Paris Agreement, are now under pressure, which threatens to reverse both the health gains from economic development and health benefits that accrue from sustainable development. A public health perspective has the potential to unite all actors behind a common cause. Simply put, by combining the research, expertise and political will behind each of these areas, we can create a stronger voice for positive and sustainable change and help to achieve the common goals of both challenges.

As a region currently suffering some of the greatest impacts of both climate change and NCDs, the Pacific is well positioned to take the global lead in bringing these issues together and ensuring a more coordinated approach is taken to finding solutions.

Climate change and NCDs are key challenges for the global community, and our ability to mitigate these challenges will go a long way in determining if we are able to meet national development objectives and international targets, such as the Sustainable Development Goals. In the Pacific we are already integrating our work in these areas and showing how a combined approach can help build understanding and create consensus across nations, and dramatically increase the impact of mitigation work. If the same approach can be adopted globally we have a real chance of creating a cleaner, safer, more sustainable and healthier world.

REFERENCES
1. World Health Organization. Climate Change and Health Fact Sheet Feb 2018