2nd Place Winner of 2023 PIF New Zealand Essay Competition

Jackie Hazelhurst
5th year medical student, University of Auckland





Essay topic – Whakataukī: Naū te rou rou, Nāku te rou rou, Ka ora ai te iwi.

With your food basket and my food basket the people will thrive.

With this whakataukī (proverb) in mind, discuss mental wellbeing within the current global climate change?

Ngā Whakāwhitinga (at crossroads): choosing partnership
By Jackie Hazelhurst

Introduction: Language as a tool for social change

The act of coining a new phrase is powerful. Encapsulating a concept in words allows new realities and concerns to be reflected in language. (Grieve et al. 2017) The first known use of the term 'climate change' spans back to an 1854 American scientific periodical which described milder winters across Europe. (United States Magazine of Science, Art, Manufactures, Agriculture, Commerce and Trade 1854) Although the authors concluded this was due to "the changeable position of the magnetic poles", over the next century and a half the concept of climate change entered the mainstream public consciousness and took on new meaning. Consider then the recent emergence of the phrases, 'climate emergency', 'planetary overload', 'eco-anxiety', 'ecological grief', and 'solastalgia'. Language has become a dynamic tool for expressing and grappling with man's impact on the planet and the immense fear, uncertainty, and hopelessness it provokes. In this essay I will begin by discussing the role of whakataukī for Māori, the Indigenous Peoples of Aotearoa, examining possible interpretations of "Naū te rou rou, Nāku te rou rou, Ka ora ai te iwi". I will then explore this interpretation in the context of climate change and associated mental health impacts, comparing a Western Eurocentric lens with an Indigenous perspective. Finally, I will consider the role of psychiatrists in responding to the mental health impacts of climate change, both as clinicians and advocates. I write from the perspective of a Pākehā-Afrikaans medical student studying in Aotearoa New Zealand.

Naū te rou rou. Nāku te rou rou. Ka ora ai te iwi

When early Māori arrived on Aotearoa's shores as seafarers from Polynesia, they used fishing and harvesting techniques combined with ecological expertise to adapt to the new landscape. (Barber 2004; King et al. 2007; Harris et al. 2013) These observations were stored in oral formats and passed on from generation to generation, forming a knowledge system we now refer to as mātauranga Māori. (Awatere et al. 2021) Although it is challenging - perhaps impossible - to describe whakataukī in absolute terms, it is perhaps best translated in English as a proverb communicating traditional knowledge and practices. (Whaanga et al. 2018; New Zealand's Environmental Reporting Series: Our land 2021) The whakataukī above is commonly understood as speaking to the value of partnership, encapsulated in te reo Māori by the word 'kotahitanga'. (Rua et al. 2023). The United Nations acknowledges "Indigenous Peoples have accumulated valuable traditional knowledge about nature and sustainable practices, [yet] this knowledge often is not recognised as an important tool to protect the environment and to enhance resilience". (Affairs and Jerez 2021) Therefore, in a world facing unprecedented challenges it is critical that

we work in partnership to develop innovative solutions, combining Western science with mātauranga Māori, and recognising the inbuilt capacity of Indigenous Peoples to understand ecological balance. In the words of poet and doctor, Glenn Colquhoun, "There are two ways of doing things in this country that cannot be found anywhere else in the world… Pākehā and Māori are joined at the historical hip… What we do next will define us." (Colquhoun 2012)

Climate change: through the lens of te ao Pakehā and te ao Māori

The most recent IPCC report found global surface temperatures were on average 1.1°C higher than temperatures a century ago, leading to widespread and rapid changes in our atmosphere, ocean, cryosphere and biosphere. (Calvin et al. 2023) The report confirms that global warming is unequivocally due to human activities and is resulting in weather and climate extremes that disproportionately affect vulnerable communities who have historically contributed least to climate change. In Aotearoa, this is seen through fewer kina in our oceans due to ocean acidification, a decline in hoiho numbers due to warming sea levels, and the complete loss of rimurapa (bull kelp) from habitats such as Lyttleton. (Awatere et al. 2021) Historically, climate change research has focussed on physical impacts on environments and communities, however, in recent years the relationship between climate change and mental illness has become a rapidly growing area of research. (Charlson et al. 2021)

Climate change has mental health consequences through direct and indirect mechanisms. Directly, climate change is responsible for increasing frequency and severity of extreme weather events (such as floods, storms, heatwaves, and fires) which can result in psychological distress. Adverse weather events are associated with higher rates of clinically diagnosed post-traumatic stress disorder (PTSD), anxiety disorders, depression, and suicide. (Hayes et al. 2018) Indirectly, flow-on consequences (such as climate-driven food and water insecurity, social unrest and displacement) arise due to complex social, economic and cultural interactions. (How Climate Change Affects Mental Health in Australia 2021) However, even without direct exposure, the awareness of the compounding threat of climate change can be a source of hopelessness, fear and anger that for some individuals may lead to clinically significant anxiety or depression.

The research underpinning most findings regarding the mental health consequences of climate change have almost entirely been conducted in European contexts. Even the term 'climate change' is a Western term that reflects a Eurocentric worldview and may be considered adversarial and at odds with an Indigenous approach to the whenua (land). Through a whakaaro Māori lens, human-caused climate change is particularly devastating as for Māori, the people of a place are related in personal terms to its mountains, land, rivers, and oceans. (*New Zealand's Environmental Reporting Series: Our land* 2021) Therefore when the mauri (crudely defined in English as the energy that binds and animates all things in the physical world) of an ecosystem is degraded, this can profoundly affect iwi/hapu Māori sense of identity and self. (Te Ahukaramū Charles Royal 2007; Awatere et al. 2021) Although research specific to Māori is incredibly limited, the literature emerging in relation to Indigenous Peoples worldwide suggests they are at "particular risk for both acute and more chronic and insidious climatic changes". (Redvers et al. 2023)

Imagining a way forward: clinician and advocate

Psychiatry as a discipline will play a significant role in responding to the impacts of climate change. As clinicians, psychiatrists will increasingly encounter climate-related anxiety, depression, and psychological distress for which standard therapies (evidence-based psychological and pharmacological treatments) should be used in conjunction with new initiatives focussed on building individual and community resilience and maintaining hope. Community-

driven tree planting and mahinga kai restoration are examples of collective agency which have been shown to enhance resilience for communities. (Carmen et al. 2022) A practical suggestion for psychiatrists would be to incorporate climate change as an indicator in patient health assessments, and on a wider scale advocate for the inclusion of a mental health indicator in systems tracking climate change, such as in the Lancet Countdown. (Hayes and Poland 2018; Romanello et al. 2023) Furthermore, prior to, during, and following climate change related weather events psychiatrists will have a role in planning and providing treatment for those at risk of developing mental health disorders. This includes debriefing healthcare and emergency workers following such events. (Hawker et al. 2011).

Climate change has previously been described as 'ongoing colonisation'. Therefore, it stands to reason that a Eurocentric approach to addressing the mental health impacts of climate change will be fraught with the same influences that have led us to this point in history. 'Culturally adapted interventions' are designed for a specific cultural group and adapted or tailored to fit another. (Yamane and Helm 2022) A major criticism of this approach is that the worldview and biases of the originally targeted group are retained; therefore it should be of no surprise that this approach has been shown to have limited effectiveness for Indigenous and minority populations. (Okamoto et al. 2014) In order to develop meaningful interventions that don't further perpetuate and entrench existing inequities, it will be vital these programmes are developed by Māori for Māori, following culture-as-health principles. (Yamane and Helm 2022) Suggestions by Māori researchers include the development of iwi-led programmes that promote the restoration of ecosystems and cultural practice, such as initiatives that capture the waiata, whakataukī and karakia associated with various landscapes.

The acronym CARE has been suggested as a framework for how psychiatry can contribute to addressing climate change – contributing through clinical, administrative, research, and educational means. (Coverdale et al. 2018) This will require upskilling, staying up to date regarding the complex relationship between mental health and climate change, and stepping into leadership roles in public health discussions. Ultimately, whether in the consultation room or in advocacy spaces, a key role of psychiatry will be to foster hope even in the face of humanity's most dire threat to survival. Psychiatrist and anthropologist Arthur Kleinman writes "...amidst great danger and huge uncertainty, hope is what makes the human condition liveable." (Kleinman 2008)

Conclusion

The word 'solastalgia' originated in 2003 from an Australian environmental philosopher, and yet the feeling it describes has been felt across the globe. (Albrecht et al. 2007) There is no antidote for solastalgia as we cannot bring back what has been lost, however taking action – and doing so with the principles of decolonisation and re-indigenisation – is a way to sustain hope. As the whakataukī above advises, effective change is only possible by embracing collective action. Psychiatrists have a role to play through addressing climate change-related mental illness, collaboratively developing resilience-building initiatives, and stepping into the role of leaders of climate activism. While reading a 2018 paper by Melissa Taitimu regarding Māori understanding of what Western psychiatry calls 'schizophrenia', I was struck by the beauty of the phrase 'Ngā Whakāwhitinga' (meaning to stand at crossroads). (Taitimu et al. 2018) It is my belief that as a nation we are currently at a crossroads – both for whether we meaningfully address climate change and its effects and whether we do so in isolation or in partnership – and, in the words of Glenn Colquhoun, what we do next will define us.

Glossary

Aotearoa: Māori name for New Zealand

Hoiho: yellow-eyed penguin

Karakia: to recite ritual chants, say grace, pray, recite a prayer, chant

Kina: sea egg, common sea urchin

Kotahitanga: unity, togetherness, solidarity, collective action Mahinga kai: garden, cultivation, food-gathering place

Mātauranga Māori: Māori knowledge - the body of knowledge originating from Māori ancestors

Mauri: life principle, life force, vital essence Ngā Whakāwhitinga: standing at crossroads

Solastalgia: melancholia or homesickness produced by the negative transformation of a loved

home environment (Albrecht et al. 2007)

Te ao Māori: the Māori world Te ao Pakehā: the western world Waiata: song, chant, psalm Whakataukī: proverb Whenua: land

From Te Aka Māori Dictionary

References

Affairs, U.N.D. of E. and S. and Jerez, M.M. 2021. Challenges and Opportunities for Indigenous Peoples' Sustainability. Available at: https://www.un-

ilibrary.org/content/papers/10.18356/27081990-101 [Accessed: 14 January 2024].

Te Ahukaramū Charles Royal. 2007. *Te Ao Mārama – the natural world - Mana, tapu and mauri*.

Albrecht, G. et al. 2007. Solastalgia: The Distress Caused by Environmental Change. *Australasian Psychiatry* 15(1 suppl), pp. S95–S98. doi: 10.1080/10398560701701288.

Awatere, S. et al. 2021. He huringa āhuarangi, he huringa ao: a changing climate, a changing world.

Barber, I. 2004. Sea, land and fish: spatial relationships and the archaeology of South Island Maori fishing. *World Archaeology* 35(3), pp. 434–448. doi: 10.1080/0043824042000185829. Calvin, K. et al. 2023. *IPCC*, 2023: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. *IPCC*, Geneva, Switzerland. doi: 10.59327/IPCC/AR6-9789291691647.

Carmen, E. et al. 2022. Building community resilience in a context of climate change: The role of social capital. *Ambio* 51(6), pp. 1371–1387. doi: 10.1007/s13280-021-01678-9.

Charlson, F., Ali, S., Benmarhnia, T., Pearl, M., Massazza, A., Augustinavicius, J. and Scott, J.G. 2021. Climate Change and Mental Health: A Scoping Review. *International Journal of Environmental Research and Public Health* 18(9), p. 4486. doi: 10.3390/ijerph18094486.

Colquhoun, G. 2012. *Jumping Ship and other essays*. Wellington: Steele Roberts & Associates. Coverdale, J., Balon, R., Beresin, E. V., Brenner, A.M., Guerrero, A.P.S., Louie, A.K. and Roberts, L.W. 2018. Climate Change: A Call to Action for the Psychiatric Profession. *Academic*

Psychiatry 42(3), pp. 317–323. doi: 10.1007/s40596-018-0885-7.

Grieve, J., Nini, A. and Guo, D. 2017. Analyzing lexical emergence in Modern American English online. *English Language and Linguistics* 21(1), pp. 99–127. doi: 10.1017/S1360674316000113. Harris, P., Matamua, R., Smith, T., Kerr, H. and Waaka, T. 2013. A review of Māori astronomy in Aotearoa-New Zealand. *Journal of Astronomical History and Heritage* 16(03), pp. 325–336. doi: 10.3724/SP.J.1440-2807.2013.03.08.

Hawker, D.M., Durkin, J. and Hawker, D.S.J. 2011. To debrief or not to debrief our heroes: that is the question. *Clinical Psychology & Psychotherapy* 18(6), pp. 453–463. doi: 10.1002/cpp.730. Hayes, K., Blashki, G., Wiseman, J., Burke, S. and Reifels, L. 2018. Climate change and mental health: risks, impacts and priority actions. *International Journal of Mental Health Systems* 12(1), p. 28. doi: 10.1186/s13033-018-0210-6.

Hayes, K. and Poland, B. 2018. Addressing Mental Health in a Changing Climate: Incorporating Mental Health Indicators into Climate Change and Health Vulnerability and Adaptation Assessments. *International Journal of Environmental Research and Public Health* 15(9), p. 1806. doi: 10.3390/ijerph15091806.

How Climate Change Affects Mental Health in Australia. 2021

King, D.N.T., Goff, J. and Skipper, A. 2007. Māori environmental knowledge and natural hazards in Aotearoa-New Zealand. *Journal of the Royal Society of New Zealand* 37(2), pp. 59–73. doi: 10.1080/03014220709510536.

Kleinman, A. 2008. What Really Matters: Living a Moral Life amidst Uncertainty and Danger. New Zealand's Environmental Reporting Series: Our land. 2021

Okamoto, S.K., Kulis, S., Marsiglia, F.F., Holleran Steiker, L.K. and Dustman, P. 2014. A Continuum of Approaches Toward Developing Culturally Focused Prevention Interventions: From Adaptation to Grounding. *The Journal of Primary Prevention* 35(2), pp. 103–112. doi: 10.1007/s10935-013-0334-z.

Redvers, N., Aubrey, P., Celidwen, Y. and Hill, K. 2023. Indigenous Peoples: Traditional knowledges, climate change, and health. *PLOS global public health* 3(10), p. e0002474. doi: 10.1371/journal.pgph.0002474.

Romanello, M. et al. 2023. The 2023 report of the Lancet Countdown on health and climate change: the imperative for a health-centred response in a world facing irreversible harms. *The Lancet* 402(10419), pp. 2346–2394. doi: 10.1016/S0140-6736(23)01859-7.

Rua, M., Hodgetts, D., Groot, S., Blake, D., Karapu, R. and Neha, E. 2023. A Kaupapa Māori conceptualization and efforts to address the needs of the growing precariat in Aotearoa New Zealand: A situated focus on Māori. *British Journal of Social Psychology* 62(S1), pp. 39–55. doi: 10.1111/bjso.12598.

Taitimu, M., Read, J. and McIntosh, T. 2018. Ngā Whakāwhitinga (standing at the crossroads): How Māori understand what Western psychiatry calls "schizophrenia". *Transcultural Psychiatry* 55(2), pp. 153–177. doi: 10.1177/1363461518757800.

United States Magazine of Science, Art, Manufactures, Agriculture, Commerce and Trade. 1854. New York: J. M. Emerson and Company, 1854.

Whaanga, H., Wehi, P., Cox, M., Roa, T. and Kusabs, I. 2018. Māori oral traditions record and convey indigenous knowledge of marine and freshwater resources. *New Zealand Journal of Marine and Freshwater Research* 52(4), pp. 487–496. doi: 10.1080/00288330.2018.1488749. Yamane, C.Y.E.W. and Helm, S. 2022. Indigenous Culture-as-Health: A Systematized Literature Review. *Journal of Prevention* 43(2), pp. 167–190. doi: 10.1007/s10935-022-00666-3.