

doi: 10.1111/1753-6405.12979

The case for a Torres Strait Islander-driven, long-term research agenda for environment, health and wellbeing

Karen Cheer,^{1,2} Felecia Watkin Lui,^{1,2} Sanchia Shibasaki,³ Alistair Harvey,⁴ Daniel Grainger,¹ Komla Tsey²

1. Indigenous Education and Research Centre, James Cook University, Cairns, Queensland
2. The Cairns Institute and the College of Arts, Society and Education, James Cook University, Cairns, Queensland
3. The Lowitja Institute, Melbourne, Victoria
4. School of Languages and Culture, Faculty of Humanities and Social Sciences; and School of Business, Faculty of Business, Economics and Law, University of Queensland, Brisbane, Queensland

Researchers and communities are seeking strategies to manage complex challenges regarding positive health for Torres Strait Islanders – a ‘wicked problem’ for which there is no straightforward solution.¹ Proposed models for Torres Strait Islander-driven research and policy analysis are not new.² Yet a coordinated model for achieving synergy of multidisciplinary teams and stakeholders for environment, health and wellbeing has remained elusive. Partnerships between researchers and communities are typically limited by project scope and funding duration. Research capacity-building efforts have focused on individual researchers. This has successfully produced a new generation of Torres Strait Islander researchers across disciplines, including Meriba buay-ngalpan wakaythoemamy (also known as the Torres Strait Islander Researchers’ Community of Practice or CoP). However, support for local community organisations to drive their own long-term research agenda is found wanting. Given Torres Strait Islanders’ previous and current calls for autonomy, the community itself is best positioned to determine key priorities and to understand the context for decision making.³⁻⁵ How can Torres Strait Islander communities leverage research that properly informs decision-making and action towards positive health and wellbeing?

Indigenous Australians experience poorer health and lower life expectancy compared with the Australian population. Chronic diseases including diabetes, respiratory and cardiovascular diseases, and mental disorders account for 70% of health inequity.⁶ Existing health frameworks identify cultural

competency as crucial for patient-centred care: strategies to increase the number of Indigenous health personnel and build a workforce with cultural capabilities aim to increase the effectiveness of health care.⁷⁻⁹

The significant body of research regarding Indigenous health has produced few improvements to overall health and wellbeing for Indigenous peoples.¹⁰ The lack of research translation and impact is a global challenge.¹¹ A major reason for the poor translation of research findings into indicators of positive health is that Indigenous health is often viewed as a “problem to be solved” with “assistance from external experts.”¹²

Strengthening capacity for positive health outcomes in the Torres Strait involves balancing environmental needs, human needs and multiple perspectives. Barriers exist in the translation of research knowledge to the Torres Strait context. These relate to the cultural construction of knowledge and the need for novel strategies that facilitate the integration of research findings into the corpus of Torres Strait knowledge. For Torres Strait Islanders, the transformation of information into knowledge is a process that occurs through discussion, acceptance and adoption. Effective knowledge translation therefore needs to support the empowerment of Torres Strait Islander people to seek the research information most useful for decision-making.¹³

Researchers working in Indigenous research contexts, including the Torres Strait, have used participatory approaches and interdisciplinary methods to strengthen capacity to assist decision-making for action

related to positive health.^{14,15} However, challenges regarding research engagement, differing philosophies, knowledge translation, social relationships and sustainability remain. We argue that the messy, dynamic aspects of the wicked problem of positive health are best understood through an interdisciplinary research approach that integrates knowledge from across multiple disciplines with the experiential knowledge of stakeholders.^{16,17} The synergy of an interdisciplinary and community-led approach enables transformation of “information from different disciplinary sources into pictures that make sense to people sufficiently to inform their decision.”¹⁶

Business-as-usual and current research approaches are no longer options for Torres Strait Islanders seeking improved health and wellbeing. Longer-term, sustainable partnerships that facilitate community-driven approaches and enhance Torres Strait research infrastructure are necessary. To this end, we outline the rationale for a Torres Strait Islander-driven, long-term research agenda by using two examples: (1) the CoP as a participatory research model for achieving synergy in the translation of research and experiential knowledge; and (2) climate change and health planning for the Torres Strait.

Torres Strait Islander Researchers’ Community of Practice – a participatory model of synergy for translation

Research design incorporating participatory processes helps balance community values, knowledge and preferences with scientific dimensions, promotes ownership by those affected by a phenomenon and, importantly in Indigenous settings, can ensure democratic integrity in problem-solving and policy implementation.¹⁸⁻²⁰ However, there is no consensus about what participation means and how it may be achieved.^{21,22} Researchers discuss varying levels of participation, each level progressively increasing power sharing; these often overlook cultural variations to engagement and participation.²³ The question arises of how to engage Indigenous communities in knowledge translation that leads to better decision-making and real benefit.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

The CoP adopted a participatory approach in the development of a community of practice, comprised of Torres Strait Islander researchers with interdisciplinary backgrounds and community members. With involvement in multiple stages of the research, CoP members strengthened their capacity to undertake collaborative research, constructing a framework for Torres Strait Islanders' to define and control the key health risks of climate change. The CoP *Know the Risk, Own the Risk, Flip the Risk* framework guided development of knowledge translation activities in Torres Strait communities in the Torres Strait and on the Australian mainland. CoP members explored innovative and different modes to undertake knowledge translation.¹³ In the process, members were involved in the co-production of the knowledge they wanted to translate for the wider community. The research found that co-production and integration of traditional/experiential and Western scientific knowledge can raise awareness about climate change and health and wellbeing, help manage climate-related uncertainty and reconcile global concepts of climate change such as the Paris Climate Agreement with local, place-based understandings of weather and climate.^{24,25}

Participatory approaches can assist Torres Strait Islanders to create their own meaning of health and find creative solutions to achieve positive health outcomes. However, participatory approaches depend on human and financial resources and political will.¹³ Achieving representative participation can be problematic in settings such as the Torres Strait where relationships are complex, debate about options can be divisive and potential change threatens people's values, customs and livelihoods.¹³ Local approaches that engage the community, policy makers and researchers and facilitate co-production of new knowledge may assist in overcoming these issues but require ongoing, longer term financial and organisational commitments.¹⁹

Utilising a foundational model such as the CoP goes beyond mere collaboration between stakeholders. Torres Strait knowledge translation is a blend and not a dividing line of experiential and research knowledge, offering opportunities for social capital enhancement. The CoP has successfully improved the capacity of individual researchers to plan and enact research translation focused on climate change and health. There remains a lack of research infrastructure to facilitate

collaborative knowledge mobilisation with communities for the longer term. Such infrastructure is needed to provide research governance that is community-led and driven and enables Torres Strait Islanders to seek the information they require to ensure a sustainable future constructed by, and for, the Torres Strait.

Climate Change – a case study for community-led health research

We envisage a Torres Strait Islander community-led research approach to understand local concerns regarding health and wellbeing using climate change as a case study. The health impacts of climate change for Indigenous Australians living in remote communities are notably higher due to social and economic status, chronic health conditions, limited access to health services and disruption to traditional connections to Country.^{19,26} Torres Strait communities are among the most vulnerable when the projected impacts of climate change in Australia's remote north are considered alongside the region's unique natural, social and cultural characteristics.²⁷ The Torres Strait diaspora share this vulnerability because of their deep kinship, cultural ties and bequest values for future generations.²⁸

The Torres Strait Regional Adaptation and Resilience Plan 2016-2021 considers the impacts of climate change on Torres Strait communities, their land and sea Country, and proposes strategies and actions to reduce the likely impacts to ensure a strong and viable future for the region.²⁹ Climate projections for the Torres Strait include continuing sea level rise; rising sea surface temperature and ocean acidity; weather and season variability with hotter days, longer dry seasons and more intense weather events such as storm surges and cyclones.²⁹ While the effects of climate change are uncertain, the plan identifies significant health risks for Torres Strait Islanders including, inter alia, insecure food and water supplies, land and housing, as well as increases in heat-related illness, vector-borne diseases and psychological stress.²⁹ Recognising these risks, the plan also focuses on building resilience to reduce vulnerability to climate impacts.²⁹ The current plan, already half way through its life, presents an opportunity to build the foundation for a longer-term agenda.

Australia's peak Aboriginal health body, The National Aboriginal and Torres Strait Islander Community Controlled Health Organisation

(NACCO), provides a holistic and positively framed meaning of health for Indigenous Australians:

... health means not just the physical well-being of an individual but refers to the social, emotional and cultural well-being of the whole Community in which each individual is able to achieve their full potential as a human being thereby bringing about the total well-being of their Community. It is a whole of life view and includes the cyclical concept of life-death-life.³⁰

These interrelated characteristics underpin notions of health and wellbeing for Torres Strait Islanders. Health approaches that neglect to consider the relationship between health, Country and community do little to close the (health) gap between Indigenous and Non-Indigenous Australians. While regional adaptation and resilience strategies identify the impacts of climate change for Torres Strait Islanders and measures to reduce impacts and improve outcomes, there are no programs in place that address health and wellbeing in a holistic sense.^{29,31}

The Torres Strait Regional Adaptation and Resilience Plan represents a significant way forward. It represents an opportunity for stakeholders to establish a Torres Strait Islander-driven research agenda, from the individual to the institutional scale, to inform climate change policy and practice at all levels of government. Yet, there is no easy solution to this wicked problem. While climate change will exacerbate existing health issues for Torres Strait Islanders, it is one of many concerns requiring consideration and resources. The pathways Torres Strait Islanders choose regarding the risks to health from climate change will be determined not only by scientific facts but also by complex social processes.⁴ A community-driven research model would address these complex processes, and provide a foundation for a sustainable, longer-term health research agenda. As Smith³² explains: "[w]hen Indigenous people become the researchers and not merely the researched, the activity of research is transformed. Questions are framed differently, priorities are ranked differently, problems are defined differently, people participate on different terms."

Conclusion

Securing a better future for Torres Strait Islanders requires sustained commitment from researchers, academic institutions, community organisations and other

interested people, and importantly, stable financial support. The current short-term funding environment is misaligned with the type of longer-term partnership required to properly address positive health for the Torres Strait. The CoP model has potential to facilitate the synergy required across communities, disciplines and stakeholders. Implementation and evaluation of the Torres Strait Regional Adaptation and Resilience Plan provides opportunity for research partners including the TSI CoP to work collaboratively with local organisations and other researchers to build the foundation for a suitable Torres Strait research agenda over a 10–20-year period. This begs the question: *How can we properly align health research funding to play the long game, i.e. enact a sustainable model for a Torres Strait community-led health research agenda?*

Acknowledgements

The Torres Strait Islander Researchers' CoP is supported by funding from the National Aboriginal and Torres Strait Islander Health Research Institute, the Lowitja Institute and the Australian Research Council Discovery Indigenous scheme IN190100061.

Role of the Authors

A/Prof Felecia Watkin Lui, Dr Sanchia Shibasaki and Mr Al Harvey are Torres Strait Islander researchers and founding members of the TSI CoP. They provided intellectual input including the Know, Own and Flip KT framework and the overall concept for the paper. Dr Karen Cheer is a non-Indigenous researcher responsible for intellectual input, literature review and developing the manuscript. Dr Daniel Grainger is an Indigenous researcher and provided intellectual input. Prof Komla Tsey provided intellectual input and mentorship to the authors. All authors edited the paper.

References

1. Peters BG. What is so wicked about wicked problems? A conceptual analysis and a research program. *Policy Soc.* 2017;36(3):385-96.
2. Torres Strait Islanders Regional Education Council. *Torres Strait Institute for Policy and Research: A Business Case.* Thursday Island (AUST): James Cook University; 2009.
3. Arthur WS. Autonomy and identity in Torres Strait, a borderline case? *J Pac Hist.* 2001;36(2):215-24.
4. Green D, Alexander L, McInnes K, Church J, Nicholls N, White N. An assessment of climate change impacts and adaptation for the Torres Strait Islands, Australia. *Clim Change.* 2010;102:405-33.

5. Smith A. Torres Strait Push for Regional Autonomy echo[es] Sentiment Across Nation. *NITV* [Internet]. 2019, May 20: 5:23 AM. [cited 2019 May 24]. Available from: <https://www.sbs.com.au/nitv/article/2019/05/20/torres-strait-push-regional-autonomy-echos-sentiment-across-nation>
6. Australian Institute of Health and Welfare. *Aboriginal and Torres Strait Islander Health Performance Framework 2016–2023.* Queensland. Catalogue No.: IHW 184. Canberra (AUST): AIHW; 2017.
7. Aboriginal and Torres Strait Islander Health Workforce Working Group. *National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework 2016–2023.* Canberra AUST: Australian Health Ministers' Advisory Council; 2017.
8. Queensland Health. *Aboriginal and Torres Strait Islander Cultural Capability Framework 2010–2033.* Brisbane (AUST): State Government of Queensland; 2010.
9. Queensland Health. *Aboriginal and Torres Strait Islander Health Workforce Strategic Framework 2016–2026.* Brisbane (AUST): State Government of Queensland; 2016.
10. Bainbridge R, Tsey K, McCalman J, Kinchin I, Saunders V, Watkin Lui F, et al. No one's discussing the elephant in the room: Contemplating questions of research impact and benefit in Aboriginal and Torres Strait Islander Australian health research. *BMC Public Health.* 2015;15:696.
11. Martin K, Mullan Z, Horton R. Overcoming the research to policy gap. *Lancet Glob Health.* 2019;7:51-52.
12. Cochran PA, Marshall CA, Garcia-Downing C, Kendall E, Cook D, McCubbin L, et al. Indigenous ways of knowing: Implications for participatory research and community. *Am J Public Health.* 2008;98(1):22-7.
13. Shibasaki S, Sibthorpe B, Watkin Lui F, Harvey A, Grainger D, Hunter C, Tsey K. Flipping the researcher knowledge translation perspective on knowledge use: A scoping study. *AlterNative: An International Journal of Indigenous Peoples.* 2019;15(3):271-80.
14. Meiklejohn JA, Arley BD, Pratt G, Valery PC, Bernades CM. 'We just don't talk about it': Aboriginal and Torres Strait Islander peoples' perceptions of cancer in regional Queensland. *Rural Remote Health.* 2019;19:4789.
15. Miller A, Massey PD, Judd J, Kelly J, Durrhein DN, Clough AR, et al. Using a participatory action research framework to listen to Aboriginal and Torres Strait Islander people in Australia about pandemic influenza. *Rural Remote Health.* 2015;15:2923.
16. Bammer G. The challenge and a new approach. In: Bammer G, Bronitt S, Brown LD, Bursztyrn M, Maury MB, Cram L, et al, editors. *Disciplining Interdisciplinarity: Integration and Implementation Sciences for Researching Complex Real World Problems.* Canberra (AUST): ANU Press; 2013. p.3-13.
17. Bhaskar R, Frank C, Hoyer KG, Parker J, Naess P, editors. *Interdisciplinarity and Climate Change: Transforming Knowledge and Practice for our Global Future.* London (UK): Taylor & Francis; 2010.
18. Leitch A, Robinson C. Shifting Sands: Uncertainty and a local community response to sea levels and policy in Australia. In: Measham T, Lockie S, editors. *Risk and Social Theory in Environmental Management.* Collingwood (AUST): CSIRO Publishing; 2012. p. 117-31.
19. Reisinger A, Kitching RL, Chiew F, Hughes L, Newton PCD, Schuster SS, et al. Australasia. In: Barros VR, Field CB, Dokken DJ, Mastrandrea MD, Mach KJ, Bilir TE, et al, editors. *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.* Cambridge (UK): Cambridge University Press; 2014. p. 1371-438.
20. Weber EP, Memon A, Painter B. Science, society, and water resources in New Zealand: Recognizing and overcoming a societal impasse. *J Environ Policy Plan.* 2011;13(1):49-69.
21. Bass S, Dalal-Clayton B, Pretty J. *Participation in Strategies for Sustainable Development.* London (UK): International Institute for Environment and Development; 1995.
22. Pagatpatan CP, Ward PR. Understanding the factors that make public participation effective in health policy and planning: A realist synthesis. *Aust J Prim Health.* 2017;23(6):516-30.
23. Rouse H, Blackett P. *Coastal Adaptation to Climate Change. Engaging Communities: Making it Work.* Christchurch (NZ): National Institute of Water and Atmospheric Research; 2011.
24. Adamson GCD, Hannaford MJ, Rohland EJ. Re-thinking the present: The role of a historical focus in climate change adaptation research. *Global Environ Change.* 2018;48:195-205.
25. Brugnach M, Craps M, Dewulf A. Including Indigenous peoples in climate change mitigation: Addressing issues of scale, knowledge and power. *Clim Change.* 2017;140(1):19-32.
26. Hughes L, McMichael T. *The Critical Decade: Climate Change and Health.* Canberra (AUST): Australian Climate Commission; 2011.
27. Torres Strait Regional Authority. *Torres Strait Climate Change Strategy 2014–2018* [Internet]. Canberra (AUST): Government of Australia; 2014 [cited 2019 April 11]. Available from: http://www.tsra.gov.au/_data/assets/pdf_file/0003/7419/TSRA-Climate-Change-Strategy-2014-2018-Upload4.pdf
28. Watkin Lui F. My island home: Re-presenting identities for Torres Strait Islanders living outside the Torres Strait. *J Aust Stud.* 2012;36(2):141-53.
29. Torres Strait Regional Authority. *Torres Strait Regional Adaptation and Resilience Plan 2016–2021* [Internet]. Canberra (AUST): Government of Australia; 2016 [cited 2019 April 11]. Available from: http://www.tsra.gov.au/_data/assets/pdf_file/0015/12372/TS-Regional-Adaptation-and-Resilience-Plan-Final.pdf
30. National Aboriginal Community Controlled Health Organisation. *Constitution for the National Aboriginal Community Controlled Health Organisation* [Internet]. Canberra (AUST): NACCHO; 2011 [cited 2019 May 13]. Available from: <http://www.naccho.org.au/wp-content/uploads/NACCHO-CONSTITUTION-Ratified-Ver-151111-for-ASIC-.pdf>
31. Torres Strait Regional Authority. *Torres Strait Regional Authority Annual Report 2017–2018* [Internet]. Canberra (AUST): Government of Australia; 2018 [cited 2019 May 8]. Available from: <http://www.tsra.gov.au/news-and-resources/annual-reports/annual-report-2017-2018>
32. Smith LT. *Decolonizing Methodologies: Research and Indigenous peoples.* Dunedin (NZ): University of Otago Press; 1999.

Correspondence to: Associate Professor Felecia Watkin Lui, Indigenous Education and Research Centre, James Cook University, 14-88 McGregor Road, Smithfield, Cairns, QLD 4878; e-mail: felecia.watkin@jcu.edu.au