Māori Indigenous Health Framework in action: addressing ethnic disparities in healthcare

Ibrahim S Al-Busaidi, Tania Huria, Suzanne Pitama, Cameron Lacey

ABSTRACT

There has been a steady increase in cultural competency training in medical education programmes worldwide. To provide high-quality culturally competent care and reduce health disparities between Māori and non-Māori in New Zealand, several health models have been devised. The Indigenous Health Framework (IHF), currently taught at the University of Otago, Christchurch undergraduate medical programme, is a tool developed to assist health professionals to broaden their range of clinical assessment and communicate effectively with Māori patients and whānau, thereby improving health outcomes and reducing disparities. The authors of this article present a Māori health case study written from the observations of a trainee intern (first author) using components from the IHF to address health disparities between Māori and non-Māori.

Cultural competency education has been integrated in medical schools' curricula worldwide¹ and in New Zealand.² Effective doctor-patient interaction is one factor associated with favourable health outcomes.³ To optimise both communication and clinical interaction with Māori patients/ whānau (support networks) during consultations, and therefore contribute to improved health outcomes, the Indigenous Health Framework² (IHF) was developed at the University of Otago, Christchurch, New Zealand.

The IHF components and their clinical applications are described in detail elsewhere.² In brief, the IHF adapts and builds on the Calgary-Cambridge model for use with Māori patients and their whānau. It is comprised of two conceptualisations: the Hui Process and the Meihana model (Figure 1).² The Hui Process is a set of recommendations used to enhance Māori patients' engagement during clinical encounters, and consists of four parts: mihimihi (initial greeting engagement), Whakawhānaungatanga (making a connection), Kaupapa (purpose of the encounter) and Poroporoaki (closing the session). The Meihana model, based on the Māori health framework Te Whare Tapa Wha, is a clinical history-taking model that supports health practitioners to gain a broader understanding of Māori patients' presentations (Figure 1).²

At the Christchurch campus of the Otago Medical School, medical students are introduced to the IHF and its components during a three-day Māori/indigenous health orientation programme based in a local marae (an indigenous meeting place). Throughout the Advanced Learning in Medicine Hauora Māori module (years 4 to 6), students continue to be exposed to concepts of Māori health status and health disparities through tutorials, lectures and summative assessments coordinated and convened by The Māori Indigenous Health Institute (MIHI), University of Otago, Christchurch.

Written initially by the first author of this article (author ISA) during his trainee intern (TI) year as part of the Hauora Māori module, Christchurch clinical campus, this case study highlights how components from the IHF were effectively utilised with a Māori patient and how this correlated to improving clinical outcomes for this Māori patient.



Figure 1: Diagram of the Indigenous Health Framework.²

Case study

The following case study outlines a clinical encounter that occurred between a TI (trainee intern) and a Māori patient.

Mihimihi (initial greeting engagement). A three-year-old boy, Hahona (pseudonym), was admitted under the paediatric surgical services in our Hospital. I (author ISA, a TI and member of the surgical paediatric team caring for Hahona) met with him and his whaea (mother), Miss Aroha, who had a tā moko (traditional Māori tattoo), on the paediatric ward after undergoing an open appendectomy. As I entered the room, I greeted them with kia ora (hello). Although they currently reside in Nelson, they identified with the Ngāpuhi^{*} iwi (tribe) in Northland (on the paternal side).

Whakawhānaungatanga (making a connection). Given this was my first encounter with Hahona and his mother, I was slightly nervous as to how to approach interviewing him. I thought it was important to review the medical notes to familiarise myself with his admission details. I had learned from the notes that Hahona identified as New Zealand Māori. I proceeded to develop a relationship with Hahona's mother by enquiring about where they were from to explore components of both whenua (land) and migration (components of the IHF). This led to a discussion about Hahona's whānau Marae and I was able to reciprocate



within the interaction by sharing with the whānau that I had visited a local Marae as part of my medical training.

As the interview went on, it became a little easier to relate to the patient and share experiences, which I reflected had been made easier using the Hui process.² During this encounter, I became more confident to use Te Reo Māori (the Māori language) when referring to body organs and by mirroring Aroha's use of Māori words throughout the consultation. This was key in connecting with Hahona and his family; using Māori words put Hahona at ease and created an atmosphere of trust. This enabled for the exchange of further clinical information and improved the flow of the interview. Hahona mentioned how he felt sad and was missing his whānau up in Northland. I again was able to further establish my relationship with him as I mentioned that I could relate to this as my family is overseas.

Kaupapa (purpose of the encounter). Hahona was admitted with a week's history of increasing abdominal pain, fevers, anorexia and lethargy. This was associated with diarrhoea and vomiting. Although Hahona had no cough, shortness of breath or chest pain, a general practitioner prescribed antibiotics for a possible chest infection two days before admission. On admission he was afebrile, however, the abdomen was moderately distended and tender, especially over the left iliac fossa. Investigations showed markedly elevated inflammatory markers. Appendicitis was suspected, and he underwent a routine open appendectomy. The post-operative course was unremarkable.

Poroporoaki (closing the session). I thanked them both for allowing me to be part of their stay in the hospital. After a careful assessment by other members of the multidisciplinary team (eg, social worker), a comprehensive discharge plan was devised for ongoing care and support in the community. Hahona and his mother were advised to see their GP in one to two weeks' time for a routine review.

Marginalisation data

Marginalisation data is defined as knowledge of current Māori health status, which includes health disparities and gains.² Increased awareness of the epidemiology and outcomes of diseases affecting Māori children may direct health professionals to choose a different, more favourable line of management.

Abdominal pain is one of the most common symptoms of children brought to the attention of health professionals. Best practice guidelines recommend primary care providers to urgently refer children under 12 years with moderate to severe pain to secondary care for specialist management.⁴ During 2006–2010, abdominal pain was one of the top 10 leading reasons for acute hospital admissions among Māori children aged 0–14 years in New Zealand.⁵ However, data on misdiagnosis of paediatric abdominal pain by ethnicity is lacking in New Zealand.

Readmission has been found to be a strong predictor of one-year all-cause mortality among medical patients in New Zealand.⁶ Studies from New Zealand^{6,7} and overseas⁸ identified factors associated with medical readmissions, which include male sex, older age, low level of education, polypharmacy and certain ethnicities. In New Zealand, surgical readmissions in patients undergoing elective procedures were found to be associated with men, older age, and Māori and Pacific people.⁹

Analysis of Whakatere options (navigation and clinical reasoning)

Existing literature regarding disparities in emergency surgical readmission and mortality among Māori children is very limited. Surgical and medical readmissions are thought to be preventable.⁶ Providing optimal in-hospital care, effective discharge planning and adequate post-discharge care and follow-up in the community could potentially prevent subsequent readmission.⁷

Given this information, the medical team caring for Hahona made sure that all issues that may precipitate a readmission, both medical and social, were carefully addressed.

Discussion

From the TI's perspective, the utilisation of the IHF facilitated effective patient-doctor communication, and provided a framework for a wider range of assessment questions (inclusive of Nga Hau e Wha), which led to an optimal assessment for readiness for discharge to the community. This resulted



in avoiding a potential hospital readmission (no admission was recorded 12 months after discharge).

This case study outlines how the IHF, alongside the Calgary-Cambridge model, broadened the TI's knowledge of certain aspects of Māori health and enabled him to address existing disparities in Māori health through effective communication and a clear structure of how to implement cultural competency into his practice through the Meihana Model.² Early in the interview, the TI was able to establish Whakawhānaungatanga and engage with the patient and his whānau; and appropriately identify and explore values and experiences of importance to the patient and their whānau member. The use of Te Reo during the encounter, and the sharing of personal information related to their experiences during the Whakawhānaungatanga process contributed immensely in connecting with the patient and his family at a personal level. Establishing a therapeutic relationship as well as being equipped with Māori health information related to surgical hospital readmission influenced the way the TI approached this case. In addition to providing optimal inpatient care, the appropriateness of discharge back to the community was assessed and measures were put in place to prevent hospital readmission.

To conclude, we, the authors of this article, urge healthcare professionals, hospital and community based, to utilise the above-described framework when working alongside Māori patients.

Competing interests: Nil.

Acknowledgements:

The authors would like to thank the patient described in this report for giving us written permission to discuss his case.

Author information:

Ibrahim S Al-Busaidi, Medical Registrar, Department of General Medicine, Canterbury District Health Board, Christchurch; Tania Huria, Senior Lecturer, Māori/Indigenous Health Institute, University of Otago, Christchurch; Suzanne Pitama, Associate Professor and Associate Dean Māori, Māori/Indigenous Health Institute, University of Otago, Christchurch; Cameron Lacey, Senior Lecturer, Māori/Indigenous Health Institute, University of Otago, Christchurch.

Corresponding author:

Ibrahim S Al-Busaidi, Medical Registrar, Department of General Medicine, Canterbury District Health Board, Christchurch. ibrahim.al-busaidi@cdhb.health.nz

URL:

http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2018/vol-131-no-1470-23-february-2018/7500

REFERENCES:

- Kripalani S, Bussey-Jones J, Katz MG, Genao I. A prescription for cultural competence in medical education. J Gen Intern Med. 2006 Oct; 21(10):1116–20.
- 2. Pitama S, Huria T, Lacey C. Improving Maori health through clinical assessment: Waikare o teWaka o Meihana. N Z Med J. 2014 May 2; 127(1393):107–19.
- Teutsch C. Patient-doctor communication. Med Clin North Am. 2003 Sep; 87(5):1115–45.
- 4. Best Practice Advocacy Centre. Managing pain in children aged under 12 years. Best Practice Journal. 2014; 59:16–24. Available from: http:// www.bpac.org.nz/BPJ/2014/ March/pain.aspx
- Craig E, Oben G, Adams J, et al. Te Ohonga Ake: The Health Status of Māori Children and Young People in New Zealand. Dunedin: New Zealand Child and Youth Epidemiology Service; 2012. Available from: http://ourarchive. otago.ac.nz/bitstream/ handle/10523/6136/ Health_Status_of_Maori_ Children_and_Young_



People_in_New_Zealand. pdf?sequence=1&is-Allowed=y

- 6. Aljishi M, Parekh K. Risk factors for general medicine readmissions and association with mortality. N Z Med J. 2014 May 23; 127(1394):42–50.
- 7. Robinson T, Kerse N. Medical readmissions

amongst older New Zealanders: a descriptive analysis. N Z Med J. 2012 Dec 14; 125(1367):24–34.

8. Franchi C, Nobili A, Mari D, Tettamanti M, Djade CD, Pasina L, Salerno F, Corrao S, Marengoni A, Iorio A, Marcucci M, Mannucci PM. Risk factors for hospital readmission of elderly patients. Eur J Intern Med. 2013 Jan; 24(1):45–51.

9. Rumball-Smith J, Hider P, Graham P. The readmission rate as an indicator of the quality of elective surgical inpatient care for the elderly in New Zealand. N Z Med J. 2009 Feb 13; 122(1289):32–9.