



Medical education to improve Māori health

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Abstract

Medical education in Aotearoa/New Zealand has a critical role to play in producing a health professional workforce that is prepared to meet the challenge of addressing a Māori health. While cultural competence is an important aspect of this, we argue that Māori health is an educational domain in its own right with distinct learning objectives and educational approaches. An emerging consensus as to the optimal graduate outcomes and key components of a Māori health curriculum is supported by a growing international evidence base in indigenous health education. Several significant challenges exist, many of which can be overcome by reorienting institutional systems, structures and processes to support effective Māori health teaching and learning. We recommend a combination of immersed, integrated and independent teaching and learning approaches in order to promote high-quality outcomes.

This article looks at the role of medical education in preparing current and future doctors for the challenge of improving Māori health and eliminating health inequities. While acknowledging the need for all health professionals to be able to work safely and effectively in a multicultural, global context; the focus here is explicitly on Māori health in Aotearoa/New Zealand.

We outline the key components of a Māori health curriculum and suggest how these can be most effectively incorporated in health professional education, using examples from New Zealand's undergraduate medical education programmes. Key issues are identified and recommendations for advancing Māori health education are provided.

Why do we need Māori health in health professional curricula?

Equity is a key foundation of New Zealand social policy, including health policy.^{1, 2} Despite this high-level goal, ethnic disparities in health remain entrenched with Māori experiencing poorer health and shorter life expectancies than non-Māori.³⁻⁶ The conditions contributing to and maintaining health inequities in New Zealand are in direct contravention of the Treaty of Waitangi,⁷ as well as being a breach of human rights and indigenous rights.⁸⁻¹⁰ Urgent action is required at all levels of society, including the health sector, to reduce and eliminate these inequities.¹¹

Health professional education and training has an important role to play in improving Māori health and promoting equitable outcomes. In line with similar international experience, Māori tend to receive poorer quality care than non-Māori across a range of different health sector contexts.¹²⁻¹⁶

While many factors are responsible, it is clear that health professionals contribute to this differential quality of care.¹⁷⁻¹⁹ To address this, health professional training, including medical education, in New Zealand needs to ensure that all learners have the necessary competencies to improve Māori health and reduce inequities.²⁰ This requires not only generic professional knowledge and skills including cultural competence, but also an understanding of specific issues related to Māori health in Aotearoa including a critical awareness of historical contexts, colonisation and indigenous rights.

What is the relationship between Māori health and cultural competence?

Cultural competence is established as an integral part of medical curricula.²¹⁻²⁵ Within this field it is recognised that culture is a multi-dimensional construct that includes age, gender, ethnicity, spiritual beliefs and sexual orientation.²⁶ However in health professional education the documented emphasis of culture has tended to be more on ethnicity/race than on other dimensions.²⁷⁻²⁹

In medical education in New Zealand, cultural elements of the curriculum have traditionally focused on teaching about Māori. The relative lack of attention to other aspects of culture has often led to an expectation that Māori 'cultural' teaching should be inclusive of other ethnic groups. There is clearly a need to strengthen cultural competence teaching and learning, but responsibility for this should not rest with Māori health academic units.

Indeed, more recent educational developments have seen Hauora Māori (Māori health) established as a discrete thread or domain in undergraduate curricula at both the University of Auckland and the University of Otago, to reinforce the need to explicitly address Māori health.³⁰ In this context it draws on elements of cultural competence, but is an educational subject in its own right, defined from the perspective of Māori as tangata whenua, the indigenous population. Educational developments within this domain to date have been commended by the Australian Medical Council and further developments encouraged.^{31,32}

What are the key elements of a Māori health curriculum?

The Committee of Deans of Australian Medical Schools (CDAMS, now MDANZ, the Medical Deans of Australia and New Zealand) has adopted an Indigenous Health Curriculum Framework.³³ First published in 2004, it has been endorsed by the Australian Medical Council, so that all medical schools in Australia and New Zealand are required to report on the implementation of the Framework as part of regular accreditation requirements. The Framework has also been used by specialist medical colleges to inform the development of indigenous health curricula.

Recent work at both the University of Auckland³⁰ and the University of Otago has used the Framework³³ as the basis for defining the scope and content of Māori health curricula. This has resulted in the following graduate attributes being used to drive Hauora Māori teaching and learning development in the respective programmes.

Te Ara Graduate Learning Outcomes (University of Auckland)

In respect to Hauora Maori, graduates of the Faculty of Medical and Health Sciences will be able to:

- Engage appropriately in interactions with Maori individuals, whānau and communities.
- Explain the historic, demographic, socioeconomic, and policy influences on health status.
- Explain how ethnic inequalities in health are created and maintained and how they may be reduced and eliminated.
- Identify approaches to reducing and eliminating inequalities including actively challenging racism.
- Explain the influence of one's own culture and that of the health system on patient and population health outcomes.
- Engage in a continuous process of reflection on one's practice and actively participate in self-audit in respect of the Treaty of Waitangi.
- Identify and address professional development needs as a basis for life-long learning about Maori health.

University of Otago, Hauora Maori Graduate Learning Outcomes

- Describe the determinants of health disparities between Maori and non-Maori and describe approaches to addressing disparities.
 - Demonstrate the principles of cultural safety, competency and literacy within the health environment.
 - Demonstrate appropriate engagement in communication skills with Maori patients, whānau and community.
 - Describe Maori health status and the health disparities that exist for Maori—both within a national and international context.
 - Identify the principles of Maori Beliefs, Values and Experiences (MBVEs) and their application to Hauora Maori.
 - Identify and apply a Hauora Maori model to clinical cases.
 - Identify evidence based skills when undertaking critical appraisal of epidemiology, clinical research and qualitative research in Maori Health.
- The two graduate profiles have a number of common elements, with a focus on critically analysing ethnic inequalities in health, understanding how to reduce health inequalities, engaging appropriately with Maori patients, whānau and communities, and culturally safe practice. In general, the areas of divergence reflect differences in emphasis rather than any fundamental inconsistency in the desired attributes. These differences are largely attributable to the way curricula have developed historically, shaped by a range of institutional and other factors.

Incorporating Māori health teaching and learning in curricula

While Hauora Māori is positioned as a domain or thread in its own right, it may be incorporated into curricula in a variety of ways. This section provides a broad discussion of different approaches. While context will vary, current developments generally seek to integrate Hauora Māori throughout all stages of educational programmes, as well as within the various components at each stage. Different teaching and learning approaches may be characterised as immersed, integrated or independent, as discussed below together with examples from undergraduate medical education in New Zealand.

Immersed—Immersed approaches involve time allocated solely for Hauora Māori

content, as opposed to teaching Hauora Māori within other components of the curriculum. Examples include the University of Auckland's 'Māori Health Week',³⁴ (an interprofessional programme for 2nd year medical, nursing and pharmacy students) and the 'Introduction to Hauora Māori' for Year 2 medical students at the University of Otago. Both of these include experience on a marae and the focus is on engaging appropriately with Māori and understanding the context of Māori health and inequalities.

Other examples of immersed teaching and learning activities are evident in Year 4 at both universities. Whilst the approaches differ between the two programmes, the focus is on applying Māori health theory and concepts in clinical settings. At the University of Otago, a Māori Health day (involving student-led clinics at a marae) has been trialled with Year 5 students to increase contact time with Māori patients and to provide an opportunity to gain relevant Hauora Māori competencies as outlined in the previous section.

Immersed teaching components are consistently rated highly by students, who note that the advantages include adequate and appropriate space to learn the core principles of Hauora Māori.

Integrated—Integrated teaching involves incorporating Hauora Māori content into

other parts of the curriculum. The ubiquitous nature of Māori health requires that it be addressed within many different educational contexts. Examples include Māori health teaching and learning components in subject areas such as population health, communication skills and quality and safety.

The integration of Hauora Māori into clinical attachments allows for a more detailed examination of issues specific to Māori that may arise in different disciplines. At both the University of Auckland and the University of Otago, Hauora Māori learning objectives and specific teaching are included within clinical attachments. Students report that integrated components allow them to apply learning from immersed teaching in a clinically relevant setting.

Independent—Experience in undergraduate medical education has identified the importance of time allocated within curricula for students to engage in self-directed learning for Hauora Māori. This is being realised at the University of Auckland and the University of Otago by scheduling time to complete allocated readings and assessments and to access required Hauora Māori resources.

At the University of Auckland a teaching and learning resource that uses a short video as a foundation for reflection on a number of issues related to Māori health and cultural competence is also incorporated. Independent learning encourages self-reflection and provides a supported platform for integrating Hauora Māori theory and concepts with clinical experience.

Combining immersed, integrated and independent approaches—It is

recommended that a mixture of immersed, integrated and independent teaching and learning approaches are used. Each approach has strengths and weaknesses and may be more or less effective for certain types of learning than others. For example, immersed teaching can result in marginalisation if it becomes separated from 'real' clinical experience. Integration into other teaching components may have high clinical relevance but there is a risk that Hauora Māori learning gets overlooked among a range of competing priorities. It is our experience that the different approaches to Māori health teaching and learning complement each other and used in combination can mitigate these risks.

Key issues in Māori health teaching and learning

Assessment

As in other areas of education, assessment of Māori health learning should be defined by the desired learning outcomes.³⁵ The graduate profiles presented above indicate that one of the principal goals of Hauora Māori teaching and learning is to encourage the development of a "critical consciousness"³⁶ and associated behaviours. Although these learning outcomes are assessable, and must be assessed, conventional assessment tools have not been developed for this purpose. While this poses a challenge, formal assessment of Māori health in medical education is critical, otherwise it can lead to a perception among students and teachers that it is not important or valued.³⁷ Furthermore, if outcomes are not measured it is impossible to determine the effectiveness of the teaching and to identify where changes to the curriculum are required.

Kumas-Tan et al²⁸ conclude that there is a need for assessment of 'actual' practice within cultural competence in order to advance this discipline; the same is true of Hauora Māori. At the same time, assessment should extend beyond observable behaviours to include the attitudes, values and reasoning behind them.³⁸

Particular issues arise in clinical settings where students' supervisors are responsible for assessing Māori health competencies. Hauora Māori as a discipline has evolved considerably in recent times, and clinical supervisors may be unfamiliar with its curricular goals and may feel unprepared to assess students. This raises questions about the value of clinical supervisor reports in this area.

Undergraduate medical programmes are addressing these issues by developing, implementing and evaluating new and innovative assessment tools. Examples of current assessments include case reports on Māori patients and whānau,³⁹ Hauora Māori long cases, simulated Māori patient stations in OSCEs (Objective Structured Clinical Examinations), logbooks, reflective commentaries and multiple choice questions.

Achieving the goals of Māori health teaching and learning is critically dependent on the institutional context. Areas without large amounts of curriculum time, wide faculty engagement and established assessments may become marginalised with lip service being paid to the achievement of learning outcomes.

Meeting these challenges

The issues described here highlight the need for professional development for all teaching staff, to enable them to work with students on teaching and learning in Hauora Māori. This can be achieved through involvement in Māori health teaching activities as well as through designated staff development initiatives. Such interventions can improve the consistency of Hauora Māori teaching and learning, minimise the hidden curriculum effect, reduce dependence on Māori health academics and demonstrate the importance of teaching and learning in this area.

Unless a comprehensive approach is taken to curriculum development with appropriate Māori Health faculty input, students' experiences outside the formal Hauora Māori components can undermine effective learning. For example, senior practitioners' discourse or professional practice may be at odds with the principles underpinning Māori health teaching. This hidden curriculum can have a powerful influence on students' learning and ultimately on their practice.⁴⁵

One of the major challenges with Hauora Māori in medical education is managing learning that occurs outside the taught curriculum (the "hidden curriculum"⁴⁴).

The hidden curriculum

Although Hauora Māori is a speciality area in medical education and requires experts to lead curriculum development and oversee teaching and learning, it is important that Māori health academics do not have sole responsibility for this component of the curriculum. A 'whole of faculty' approach including appropriate professional development is needed to ensure that Hauora Māori teaching and learning does not become marginalised.

The Ministry of Health⁴³ has identified Māori health workforce development as a key strategy in addressing current health inequalities and many initiatives are in place to support Māori students and health professionals. Similarly, increasing the number and capability of Māori medical educators is crucial to ensure that New Zealand medical graduates are equipped to meet the challenge of improving Māori health.

The resources required for delivery of an effective Hauora Māori curriculum are extensive, yet there is a shortage of appropriately qualified staff in both undergraduate and postgraduate medical education.

Teaching capacity

Collectively these tools are designed to measure the application of Hauora Māori clinical skills and also to identify students' underlying attitudes (as manifest by behaviours) and values using evidence-based approaches.⁴⁰ It will be important that these developments occur in the context of programmatic assessment,⁴¹ which focuses on the utility of the assessment programme as a whole rather than evaluating individual methods or instruments.⁴²

Embedding Hauora Māori within the formal, stated curriculum through core learning outcomes and mandatory assessments is an educational approach to addressing some of the challenges identified above. However optimal educational outcomes cannot be achieved unless Māori health curricula are supported by appropriate institutional systems, policies and structures.

We endorse the principle of 'Indigenous leadership, faculty responsibility' articulated in the MDANZ Indigenous Health Project Critical Reflection Tool.⁴⁶ This requires faculty-wide commitment to Māori health, including faculty and programme leadership, Māori leadership within the faculty (e.g. Tūmaki and Associate Dean positions), meaningful influence at all levels including on curriculum committees and Boards of Studies, adequate resourcing and recognition, addressing institutional barriers to advancement⁴⁷ and staff development to enable all faculty members to effectively teach and assess Māori health.

—Key points—

- Māori health is an integral part of medical and other health professional education, and is a specialty area in its own right.
- Cultural competence is important for appropriate engagement with patients and communities, but is only one of the attributes required for health professionals to effectively address Māori health.
- There is broad agreement on the overall goals and key components of a Māori health curriculum, supported by a developing international evidence base in indigenous health education.
- A combination of immersed, integrated and independent teaching and learning approaches is required to address the range of learning outcomes in Māori health.
- Several challenges exist: however many of these can be effectively overcome by adopting a 'whole of faculty' approach, with appropriate responsibility, representation, recognition, resourcing, removal of barriers, and (re-)training of staff.

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References:

1. King A. The New Zealand Health Strategy. Wellington: Ministry of Health; 2000.
2. Ministry of Health. Reducing Inequalities in Health. Wellington: Ministry of Health; 2002.
3. Blakely T, Ajwani S, Robson B, et al. Decades of disparity: widening ethnic mortality gaps from 1980 to 1999. *NZ Med J.* 2004;117.
4. Bramley D, Hebert P, Tuzzio L, Chassin M. Disparities in Indigenous Health: A Cross-Country Comparison Between New Zealand and the United States. *Am J Public Health.* 2005;95:844-50.
5. Ministry of Health. Tātau Kahukura: Māori Health Chart Book. Public Health Intelligence Monitoring Report No. 5. Wellington: Ministry of Health; 2006.
6. Robson B, Harris R, eds. Hauora: Māori Standards of Health IV. A study of the years 2000-2005. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare; 2007.
7. Reid P, Robson B, Jones CP. Disparities in health: common myths and uncommon truths. *Pac Health Dialog.* 2000;7:38-47.
8. Human Rights Act. In: The statutes of New Zealand, 1993.
9. U.N. United Nations Declaration on the Rights of Indigenous Peoples. Geneva: United Nations; 2007.
10. U.N. Implementation of General Assembly Resolution 60/251 of 15 March 2006 Entitled "Human Rights Council". Report of the Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, Paul Hunt. Geneva: United Nations; 2007.
11. Reid P, Robson B. Understanding Health Inequities. In: Robson B, Harris R, eds. Hauora: Māori Standards of Health IV. A study of the years 2000-2005. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare; 2007:3-10.
12. Cervical Cancer Audit and the University of Auckland. Cervical Cancer Audit Report. Screening of Women with Cervical Cancer: 2000-2002. Wellington: Ministry of Health; 2004.
13. Crengle S. Primary Care and Māori: Findings from the National Primary Medical Care Survey. In: Robson B, Harris R, eds. Hauora: Māori Standards of Health IV. A study of the years 2000-2005. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare; 2007:225-8.
14. Davis P, Lay-Yee R, Dyal L, et al. Quality of hospital care for Māori patients in New Zealand: retrospective cross-sectional assessment. *Lancet.* 2006;367:1920-5.
15. Rumball-Smith JM. Not in my hospital? Ethnic disparities in quality of hospital care in New Zealand: a narrative review of the evidence. *N Z Med J.* 2009;122:68-83.
16. Westbrook I, Baxter J, Hogan J. Are Māori under-served for cardiac interventions? *N Z Med J.* 2001;114:484-7.
17. Kressin N, Petersen L. Racial differences in the use of invasive cardiovascular procedures: review of the literature and prescription for future research. *Ann Intern Med.* 2001;135:352-66.
18. Smedley B, Stith A, Nelson A, eds. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Washington: National Academy Press; 2002.
19. van Ryn M, Fu S. Paved with good intentions: do public health and human service providers contribute to racial/ethnic disparities in health? *Am J Public Health.* 2003;93:248-55.
20. Bacal K, Jansen P, Smith K. Developing cultural competency in accordance with the Health Practitioners Competence Assurance Act. *New Zealand Family Physician.* 2006;33:305-9.
21. Betancourt JR. Cultural competence--marginal or mainstream movement? *N Engl J Med.* 2004;351:953-5.

22. Braithwaite AC, Majumdar B. Evaluation of a cultural competence educational programme. *J Adv Nurs*. 2006;53:470-9.
23. Jansen P, Sorensen D. Culturally competent health care. *New Zealand Family Physician*. 2002;29:306-11.
24. Rust G, Kondwani K, Martinez R, et al. A crash-course in cultural competence. *Ethn Dis*. 2006;16:S3-29-36.
25. Whaley AL, Davis KE. Cultural competence and evidence-based practice in mental health services: a complementary perspective. *Am Psychol*. 2007;62:563-74.
26. Medical Council of New Zealand. Statement on cultural competence. Wellington: Medical Council of New Zealand; 2006.
27. Ferguson WJ, Candib LM. Culture, language, and the doctor-patient relationship. *Fam Med*. 2002;34:353-61.
28. Kumaras-Tan Z, Beagan B, Loppie C, et al. Measures of cultural competence: examining hidden assumptions. *Acad Med*. 2007;82:548-57.
29. Saha S, Beach MC, Cooper LA. Patient centeredness, cultural competence and healthcare quality. *J Natl Med Assoc*. 2008;100:1275-85.
30. Jones RG, Reid MP, O'Connor B, Poole PJ. Towards a core Maori health curriculum for undergraduate health professional programmes. Association for the Study of Medical Education Annual Scientific Meeting 2009, 15-17 July; Edinburgh. http://www.asme.org.uk/images/ABSTRACTS_09.pdf
31. Medical School Accreditation Committee. Accreditation of the Faculty of Medical and Health Sciences, University of Auckland. Canberra: AMC; 2005.
32. Medical School Accreditation Committee. Accreditation of the Faculty of Medicine, University of Otago. Canberra: AMC; 2008.
33. Phillips G. CDAMIS Indigenous health curriculum framework. Melbourne: VicHealth Koori Health Research and Community Development Unit, University of Melbourne; 2004.
34. Horsburgh M, Lamdin R. Maori health issues explored in an interprofessional learning context. *J Interprof Care*. 2004;18:279-87.
35. Biggs JB, Society for Research into Higher Education. Teaching for quality learning at university: what the student does. 2nd ed. Berkshire: Society for Research into Higher Education: Open University Press; 2003.
36. Kumagai AK, Lyson ML. Beyond Cultural Competence: Critical Consciousness, Social Justice, and Multicultural Education. *Acad Med*. 2009;84:782-7.
37. Lyson ML, Ross PT, Kumagai AK. Medical Students' Perspectives on a Multicultural Curriculum. *J Natl Med Assoc*. 2008;100:1078-83.
38. Ginsburg S, Regehr G, Lingard L. Basing the evaluation of professionalism on observable behaviors: a cautionary tale. *Acad Med*. 2004;79:S1-4.
39. Pinnock R, Jones R, Wearn A. Learning and assessing cultural competence in paediatrics. *Med Educ*. 2008;42:1124-5.
40. Jones RG, Barrow M, Poole PJ, et al. Assessing Hauora Maori in Medical Students in Clinical Settings. *Ako Aotearoa Research in Progress Colloquium* 2009, Auckland; 2009. <http://akoaoaotearoa.ac.nz/projects/assessing-hauora-maori-medical-students-clinical-settings>
41. Dijkstra J, Van der Vleuten CP, Schuwirth LW. A new framework for designing programmes of assessment. *Adv Health Sci Educ Theory Pract*. 2009; Published online 10 October 2009.
42. van der Vleuten CP, Schuwirth LW. Assessing professional competence: from methods to programmes. *Med Educ*. 2005;39:309-17.
43. Ministry of Health. Raranga Tupuake: Maori Health Workforce Development Plan 2006. Wellington: Ministry of Health; 2006.
44. Harden RM. Curriculum planning and development. In: Dent JA, Harden RM, eds. *A practical guide for medical teachers*. 2nd ed. Edinburgh: Elsevier Churchill Livingstone; 2005:10-8.

45. Hafferty FW. Beyond curriculum reform: confronting medicine's hidden curriculum. *Acad Med.* 1998;73:403-7.
46. MDANZ. Indigenous Health Project Critical Reflection Tool. Melbourne: Onemda VicHealth Koori Health Unit, University of Melbourne; 2007.
47. Ratima M, Brown R, Garrett N, et al. Rauringa Raupa: Recruitment and Retention of Māori in the Health and Disability Workforce. Auckland: Taupua Waiora: Division of Public Health and Psychosocial Studies, Faculty of Health and Environmental Sciences: AUT University; 2008.