

Integration of kaupapa Māori concepts in health research: a way forward for Māori cardiovascular health?

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Introduction

Kaupapa Māori is a research methodology underpinned by critical theory in which Māori beliefs and values are the central focus and findings are applied based on a Māori worldview. Kaupapa Māori research emphasises relationships and is cross-disciplinary rather than based on categorisations and disciplinary divisions. In New Zealand, research using Māori methods is important for equity, especially in an environment where Māori have poor health outcomes. Integration of Māori methods into western medical research and practice is a challenge because of divergent philosophies. Using the concept of an interface space where researchers draw the best from both Māori and western medicine concepts and then combine the two, a new way forward is created that provides Māori, as well as western medical, appropriate outcomes. This essay discusses this integrated research approach, using a cardiovascular research project as an exemplar.

Key Māori health concepts

Māori health is holistic and several Māori health models exist.^{1–3} In Durie's Whare Tapa Whā model (Fig. 1)² the four walls of a wharenui

(meeting house) represent the four dimensions of Māori health: Hinengaro (mental health), Wairua (spiritual health), Whānau (health of the family) and Tinana (physical health). Each wall is essential for the strength and symmetry of the whare, symbolising that each dimension must be balanced for individuals to be well.

Kaupapa Māori practice and research

Kaupapa Māori is 'the conceptualisation of Māori knowledge'.⁴ It is seeing the world from a Māori perspective, unconstrained by western values, attitudes or social structures. Kaupapa Māori research is where 'all aspects of the study and the process of the research are informed by kaupapa Māori'.⁵ Bishop states:⁶

"Kaupapa Māori research is collectivistic and is oriented toward benefiting all the research participants and their collectively determined agendas, defining and acknowledging Māori aspirations for research, while developing and implementing Māori theoretical and methodological preference and practices for research"

Kaupapa Māori research arose as an assault on a system that placed no value on Māori beliefs and

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Pounamu

MAORI PRIMARY HEALTH CARE TREASURES

Pounamu (greenstone) is the most precious of stones to Māori.

'Ahakoa he iti, he pounamu'

(Although it is small, it is valuable)

ideologies. In a western medical world, focussed on physical aspects of self, kaupapa Māori health research was a political tool to instigate change, as it was in other areas of society. There is an historical mistrust of research among Māori which arose from the earliest research by Europeans in New Zealand.

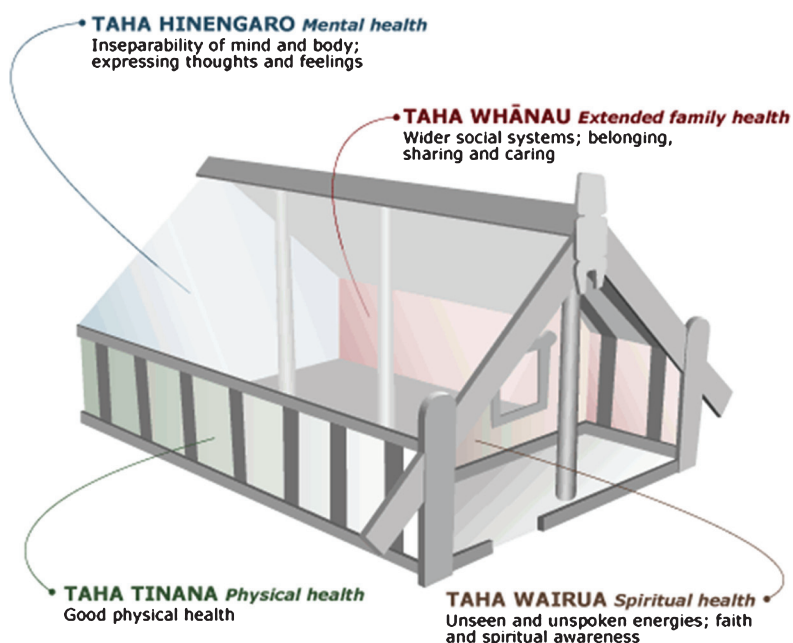
To date most New Zealand research has privileged western knowledge and denied the validity of Māori knowledge, language and culture.⁷ An example was the research by Elsdon Best with the Tuhoe people. From Best's reports about Māori life and knowledge, he became acclaimed as an expert on Māori people, customs, traditions and history, while the subjects of his inquiry, who gifted him the knowledge he sought, were left unnamed and unknown. Historian Michael King said that Best 'took fragments of tribal traditions from different places and sought to weave them into a single Western-style chronological history'.⁸ Research has traditionally been by non-Māori who identify 'problems', research those problems and then propose solutions based on a worldview that is disparate from the worldview of their participants. Kaupapa Māori research seeks redress and prioritises tino rangatiratanga (self-determination) for Māori. Implicit in the concept of kaupapa Māori research is the notion that Māori determine the research question and are critical in the development of solutions based on the research findings.

The Treaty of Waitangi sets principles for ensuring that Māori are acknowledged in social processes and that the Māori way of life is protected. Kaupapa Māori and concepts associated with Māori health are accepted frameworks for health research and service provision in New Zealand. Critical theory underpins kaupapa Māori research methodology that works intrinsically with a Māori model of health. Māori beliefs and values are central to the research and interpretation is based on the Māori worldview,⁷ emphasising relationships, collectivism and cross-disciplinarity. It is founded on, and accountable to, whakapapa (genealogical) relationships. If research provides the evidence that informs health service provision then kaupapa Māori research is essential for improving Māori health outcomes.

Western medicine

Western medicine can be described as a series of independent silos that function according to distinct specialist divisions. The individualistic western medical system is philosophically in contrast to a collectivistic Māori worldview. Western medicine is based on scientific investigations of illness, aiming to relieve and eliminate symptoms of classified medical conditions.⁹ Western medicine is founded on applied science whereby research and technologies are used to diagnose and treat injury and disease, typically through pharmacological and surgical intervention. Physical and physiological attributes are the central focus. The concept of personalised medicine is an evolution of western medicine. Personalised medicine aspires to create efficient and effective care by tailoring evidence-based interventions to individuals.¹⁰ Personalised medicine remains largely focussed on people's physical aspects. Although patient-centred, personalised medicine does not readily accommodate cultural, environmental, sociologic or spiritual based dimensions of health.

Figure 1. Māori health expert Professor Sir Mason Durie developed the whare tapa whā model of health in 1982⁵



Integration of Māori values with western medicine

New Zealand society is based on a western system, yet Māori people may interact with their environment and navigate this society while engaged in the traditions of an ancient Māori worldview.

Durie introduced the concept of an interface space¹¹ that describes a 'third space' between the Māori world and, in this case, the western medical world where a 'new' philosophy is created that takes aspects of both worlds and moulds them to suit the situation. Durie asserts that it is possible for western science and indigenous paradigms to find common ground without compromising the foundations of either world view. In healthcare, where the uptake of alternative and complementary therapies is increasing and an anecdotal dissatisfaction with a rigid western medical model is becoming apparent, understanding different approaches to improve health can only be positive. This is especially the case for Māori in whom health outcomes are poor in comparison to people of most other ethnicities.

Exemplar: The effect of a 12-week exercise and lifestyle management programme on cardiac risk reduction: A Pilot using a kaupapa Māori philosophy¹²

We use as an exemplar the kaupapa Māori approach used in the above project, outlining how Māori ideals were applied within a western medical care setting. The project used a Māori methodological approach and consultation began before any formal proposal or ethics process. A Māori Primary Health Organisation (MPHO) was interested in how a kaupapa Māori approach could be useful to manage lifestyle-related diseases. A lifestyle management programme for chronic conditions already existed and although holistic, and therefore somewhat aligned to Māori values, it was still based within a western medical setting. A decision was made to use the 'interface space' ideal to produce a programme that was grounded in Māori values but also produced measurable clinical outcomes.

Consultation

Consultation is integral to kaupapa Māori research and includes assessing the requirement for research, input into the methodology, and guidance regarding dissemination. All tools, documents and forms for this project were reviewed by the MPHO and assessed for their appropriateness for a Māori population. The initial consultation process took ~6 weeks with frequent contact between the research team and the MPHO. The participants became the main stakeholders during the project, guiding the research process. Alongside the consultation process, a western medical and research process was also followed.

Recruitment

Participant recruitment for the study involved staff at a hauora (Māori health clinic) approaching individuals they thought would benefit from involvement, by telephone or face-to-face. Informal recruitment also occurred through whānau networks. Collectivism and a strong commitment to whānau are key concepts of the Māori world. Within a western medical model, calling on family connections to recruit for a research project may be considered unethical or unscientific. For Māori, this type of approach is expected and reflects the importance of imbedded whakapapa relationships. Most individuals recruited for the project did not know each other at the outset but were able to connect based on whakapapa. The project was a pilot and 12 participants were recruited.

Programme development

The western medical, usual care (UC) programme that was used in the project is an exercise and lifestyle management programme following guidelines of the American College of Sports Medicine (ACSM).¹³ The principal clinician for the UC programme is Māori so it was inevitable that her culture influenced the programme. Integration of Māori values into more traditional western medicine facilities may be difficult when Māori leadership is absent. However space needs to be provided for the acknowledgement of culture in medical settings especially as the Treaty of Waitangi promises

tino rangatiratanga. The UC programme, although holistic, is based on clinical measurements and framed to suit western medical system reporting. Individualised exercise, nutrition and stress management programmes are prescribed based on an enrolment assessment and clinical measures have been fully described elsewhere.¹²

The UC programme's framework was explained to participants and how to ground the programme in Māori beliefs and values was discussed with them. Within the interface space the 'new' programme was created and underpinned by Māori values while maintaining important clinical aspects including exercise prescription (frequency, intensity, modality), exercise supervision, education, and clinical measurements (e.g. stress test, blood pressure, cholesterol, lung function, anthropometric measures). The programme needed to be easily reported to Māori participants and stakeholders through a Māori lens but also in medical and academic terms. The research team suggested imbedding Māori values by attending group instead of individual exercise, offering whānau the opportunity to attend exercise sessions with participants, whānau focussed nutrition plans instead of individual plans, and sole use of the clinic facilities. As part of the exercise component of the programme participants were also offered traditional Māori physical activities, including waka ama (outrigger canoeing) and kapa haka (Māori performing arts), and to replace the UC education programme, alternative education sessions on topics such as rongoā Māori (Māori medicine) and Māori models of health. The opportunity to have education sessions at an alternate venue was also suggested, to acknowledge the Māori worldview that it can be helpful to facilitate learning in an environment to which a person feels connected.¹⁴

Blood and tissue sampling in research is a contentious issue for Māori. Body parts and bodily fluids are tapu (sacred) and therefore if they need to be separated from people appropriate tikanga (protocols) must be observed. In this study, pre- and post-programme assessments involved blood samples taken from the fingertip for cholesterol measurement. Participants were invited to instruct the research team about management of the blood sampling process.

Structure of 'new' programme

The structure of the 'new' programme was similar to the UC programme (Table 1). Participants attended exercise sessions as a group. This was an example of manākitanga (kindness and support) and supported the Māori collectivistic approach despite individualised exercise prescription for each person. Participants were invited to include whānau at exercise sessions, in respect of the importance of families in the Māori world. However, the group acted as a whānau collective in itself so inclusion of other whānau members was not considered a requirement.

Participants were offered the sole use of the clinic for their group, without other clients attending during their sessions. The group declined the offer for 'Māori-only' time and were happy to interact with others because their non-Māori counterparts were experiencing similar health challenges.

The opportunity to engage in traditional Māori activities in place of prescribed exercise was also declined by the group. Some literature suggests that engaging Māori in physical activity is more successful when programmes employ traditional physical activity methods.¹⁵ The participants were all well connected to their Māori identity and classified the outside activities as pursuits they could enjoy in their own time. Disenfranchised Māori, or those seeking to reconnect, may have accepted the offer of Māori based exercise modalities as a way of supporting their health.

Participants also declined the Māori knowledge content offered for the six education sessions, perhaps for the same reasons as cited above. They asked for the topics to remain the same as in the UC programme but for Māori examples to be used and for sessions to allow multi-modal information delivery, shared kai (food), and whānau attendance. Education sessions therefore remained as the UC programme except one session on 'goal setting' was replaced with a cooking demonstration. Participants were happy to keep a classroom style of education, saying they preferred the formal environment.

Participants agreed to blood being taken but expressed gratitude for the research team's

respect and their engagement in conversations about their values before taking blood. Some participants performed a karakia (prayer) before blood being taken. All blood was used so a protocol for returning samples to participants was not developed.

Nutrition programmes were tailored for whānau involvement. Meal plans and recommendations were based on seasonal foods, traditional Māori food choices, and whānau size and composition (e.g. elderly, children etc). The structure of meal plans and recommendations was agreed to by participants.

Finally, the UC programme used the SF-36 to assess quality of life (QoL).¹⁶ In the consultation process, participants decided that the SF-36 did not accurately assess QoL from a Māori worldview. Another validated tool, the WHOQOL-SRPB¹⁷ was also critiqued, and participants decided that it did not reflect their worldview either. Keen to have a measure of QoL, the research team, in collaboration with the MPH and participants, developed a new questionnaire that was written in plain New Zealand English. The questionnaire contained 10 questions under sections: 1) Physical, 2) Mental and Emotional, 3) Stress, 4) Life Enjoyment and 5) Overall

Table 1. Comparison of the usual care 12-week programme with the pilot Māori 12-week programme

	Usual Care Programme	Māori Programme
Contribution by community into programme structure	None	Full involvement
Exercise sessions	Mon / Wed / Fri	Mon / Wed / Fri
	Attend as an individual	Attend as a collective
	Ex prescription based on ACSM guidelines	Whānau welcome to attend
		Option to have sole use of the facility
Nutrition	3-day written food recall	3-day written or verbal food recall
	Individualised menu plan and recommendations	Whānau focussed menu plan and recommendations
Education sessions	Standard, classroom based sessions: exercise, nutrition, breathing, stress management, yoga and goal setting	Options for specific Māori content
		Kai included after each session
		Māori examples used
		Classroom based sessions: exercise, nutrition, breathing, stress management and yoga
Clinical assessment	Standard	Standard with acknowledgement of cultural values around blood collection and appropriate practices allowed as requested
		QoL questionnaire re-written
Post-programme debrief	Standard report	Standard report
		Focus group and celebration
		Whānau action plan

Quality of Life. The questionnaire is not validated but provided QoL information for the study while acknowledging tino rangatiratanga.

The clinical findings from the pilot project support the kaupapa Māori 12-week programme structure with statistically significant improvements in systolic blood pressure, waist circumference, high-density lipoprotein cholesterol and QoL.¹²

Summary

Western medicine and kaupapa Māori are distinctive frameworks for health assessment, management, and understanding. While health disparities between Māori and non-Māori remain, finding innovative healthcare approaches is essential. Māori experience poor health and there is evidence to suggest that physicians attribute this directly to patients' non-compliance with treatment regimens, among other factors.¹⁸ However Māori are known to be engaged, proactive and mindful about their health¹⁹ but from a context that is not often considered by western medicine. Understanding that Māori want their healthcare to respect their belief system is the first step forward. Even though the exemplar programme was designed by Māori, within the interface space, was similar in structure to the UC programme, an important distinction was that Māori stakeholders were able to contribute to its development. Therefore a programme was produced that supported a Māori worldview, while still maintaining key elements of western medicine. If healthcare can be developed in this way for Māori then maybe the same process could be applied to other cultural groups.

Acknowledging that culture is important to health is a good first step to engaging and empowering Māori. However there is learning for Māori health practitioners also, who should not assume that Māori patients or research participants want Māori-specific content. The purpose of the consultative processes in research with Māori is to give the power of decision-making to the people, so they can determine their own way forward. In this research, several Māori-specific options were offered but most were declined by participants. It is the acknowledgement of cultural context that is key. Western medicine usually does

not acknowledge a Māori worldview, so the power of self-determination for Māori is diminished. The concept of acknowledgement can be extended to other cultural groups and belief systems and raises the question whether the western medical system could do more for patients simply by acknowledging that there are a variety of ways that people view their health.

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COMPETING INTERESTS

No conflicts.