He Korowai Manaaki: mapping assets to inform a strengths-based, Indigenous-led wrap-around maternity pathway

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Abstract. A research partnership between Iwi (tribal group) Ngāti Pāhauwera and a university-based research centre specialising in Kaupapa Māori (by Māori, for Māori) research was formed in response to an invitation from Ngāti Pāhauwera. The initial partnership goal was to address health inequities experienced by Māori women and infants in Te Wairoa (the home place of the Iwi), a predominantly Māori, rural region in Aotearoa (New Zealand). The research developed by the partnership is an example of a culturally responsive research methodology. Key features include: being Iwi-initiated; community identification of strengths and assets; guidance by a community steering group; contribution to local Māori research capacity; and the development of a community-led augmented maternity care pathway that is now being delivered through primary care. These features have strengthened the engagement of the Iwi, researchers and community, and provided opportunities for transformative change.

Introduction

Aotearoa (New Zealand) has a unique primary maternity care model, with women able to choose their lead maternity carer (LMC) (Barnes et al. 2013). The majority of LMCs are midwives, caring for women from early pregnancy until 6 weeks after birth, facilitated by a flexible primary and secondary care interface and specialist care, as needed (Grigg and Tracy 2013). This maternity care model promotes continuity of midwifery care for all women and claims to hold the potential to improve health outcomes for Māori (Guilliland 1999). However, promises of equity through this care model have not been realised.

Maternal health inequities between Māori (the Indigenous peoples) and New Zealand European (NZE) women are well documented (Mantell et al. 2004; Robson and Harris 2007; Ministry of Health 2018). Māori women are three-fold more likely to have a maternal death compared with NZE women, and have a higher rate of preterm delivery, stillbirth and neonatal death, with Māori women aged <20 years identified as being at added risk (Perinatal and Maternal Mortality Review Committee 2015). Beyond birth, Māori children experience more health inequities compared with non-Māori children (Blakely et al. 2007; Craig et al. 2012; Health Committee 2013).

The seemingly intractable inequities for Māori women and their children are unacceptable. These inequities cannot be explained solely by socioeconomic status, nor can they be eliminated by exogenous solutions (Berends and Roberts 2003; Letiecq and Bailey 2004). Rather, these inequities are part of a wider picture that includes colonisation, racism, education system failures, financial hardship and housing disparities (Robson and Harris 2007; Harris et al. 2012; Bécares et al. 2013; Perry 2013). This complex ecology requires multi-layered solutions that are designed in collaboration with local communities, and reflect their needs, priorities and aspirations. Such solutions must be cognisant of culture, people and place, and support Indigenous self-determination and nation building (Labonte 2004; LaFrance 2004).

Kaupapa Māori Research (KMR), research conducted in a Māori way (Henry and Pene 2001), respects and prioritises Māori...
What is known about this topic?
- Māori health inequities are unacceptable and are part of a wider picture that includes racism and financial disparities. Too often, research blames victims rather than focusing on system transformation.

What does this paper add?
- A strengths-based approach to forming community health collaborations with Indigenous peoples can build trust relationships. These then facilitate collective action to reduce health inequities through evidence-informed system transformation.

ways of knowing and being, and aims to benefit Māori communities (Smith 2012). It puts whānau (family), hapū (sub-tribe) and Iwi (tribal) relationships and health/wellbeing at the centre, promotes a structural analysis of inequities and has the ultimate goal of societal transformation (Cram 2001; Smith 2012). KMR practices highlight the importance of relationships and Māori self-determination, and support the researchers to be anti-deficit and decolonising in their thoughts and actions (Cram 2001; Smith 2012).

Aka Mātua (community identification of strengths and assets) and He Korowai Manaaki (HKM) (a wrap-around approach) are research projects developed from the partnership between an Iwi - Ngāti Pāhauwera, and a university-based research centre specialising in KMR. The partnership was formed in response to an invitation from Ngāti Pāhauwera, to address health inequities experienced by Māori women and infants in Te Wairoa – a rural, lower socioeconomic, predominantly Māori region in Aotearoa. The research is steered by the Iwi, with those involved in the partnership sharing their expertise and knowledge.

This paper discusses the Iwi-initiated, strengths-based research model that has been developed. This model is put forward as an example of culturally responsive research and is a tool to enforce and maintain colonial processes, with Indigenous peoples portrayed as perpetually inferior to their settler counterparts (Te Awekotuku 1991; Cram 2001; Mahuika 2008; Smith 2012). However, KMR allows us to acknowledge that the research we undertake as Māori researchers has a different ontological (i.e. theory about the nature of reality) and epistemological (i.e. theory of knowledge) foundation than Western-oriented research (Smith 1997). Within a Māori worldview, epistemological and ontological assumptions are similar; meaning, the ways of knowing and ways of being are alike (Stevenson 2018). This is because whakapapa (process of ongoing foundations/genealogy) is a key lens through which Māori understand and know the world. Through whakapapa, we can trace and understand Māori cosmogony, which informs our epistemology and ontology. It is through whanauagatanga (relationships, kinships) that we maintain these connections with every aspect of our world (Smith 1997; Marsden and Royal 2003; Smith 2012).

Two Pakeke (Elder) knowledge holders of Ngāti Pāhauwera whakapapa are active members of the research team. They have expertise in Ngāti Pāhauwera customary and contemporary practices, considerations and obligations related to pregnancy and whānau health. They enable the research partnership to navigate communities and they support appropriate research decision-making within these contexts. Decisions about the research from conception to implementation to analysis and dissemination are facilitated by the Pakeke, and the continual process of relationship building has enabled whanauagatanga between the research partners to flourish.

Leading appropriate cultural protocols, such as rituals of encounter (Cram 2001), is part of this navigation. In order to create the right space for discussions and information sharing, the Pakeke clear the way through karakia (prayers) and facilitate mihihi (greetings), waiata (songs) and sharing of kai (food). The tone of the discussions, and hence the relationships that are formed, are set by these rituals of encounter, which traverse the sacred and profane realms in order to achieve the intended objectives safely and meaningfully.

Aka Mātua: community identification of strengths and assets

The foundation project of the research partnership was an asset mapping exercise named Aka Mātua. While ‘asset mapping’ originated in the United States of America in the 1990s, it aligns with Kaupapa Māori Research and ‘Whānau Ora’ (Māori family wellness) – an approach that places whānau, hapū, and Iwi in the centre of decision-making and promotes self-determination. Asset mapping acknowledges that the greatest assets in a community are the people (Kretzmann and McKnight 1996), and this was the guiding principle of Aka Mātua, as envisioned by Ngāti Pāhauwera. Not only are people today our greatest assets, but so too are those who came before us, passing down their whakapapa (genealogy) and their knowledge (Te Awekotuku 1991). Hence, the name ‘Aka Mātua’ reflects the guidance and support of parents and ancestors.
High levels of deprivation in the home place of Ngāti Pāhauwera impact on general healthcare accessibility — adversely affecting families in the area (Hawke’s Bay District Health Board 2016). The community is served by a small primary hospital, three general practices and a team of salaried, caseload loading midwives. When required, maternity care and neonatal care are shared with the District Health Board’s (DHB) secondary care service (130 km away), its tertiary care service (430 km away) or, in cases of limited space, any of the tertiary units across Aotearoa (Ministry of Health 2004). It was agreed that by mapping the strengths and assets of the region, better connections could be made between the services that already exist to support, develop or sustain whānau — including physical, mental, spiritual/cultural and whānau/social health.

Asset mapping challenges traditional needs-based approaches to tackling ‘deficiencies’ and ‘problems’ in a community by taking a strengths-based approach, starting with a commitment to gleaning a community’s capacities, strengths and assets, as identified by the community (Kretzmann and McKnight 1993). Assets can be anything that the community identifies as such (i.e. resources, individuals, community organisations and institutions). Identifying assets also allows a community to talk about challenges, gaps and structural barriers to the community fulfilling its potential. Once assets are mapped and understood, they can be strengthened and built upon to address need. This approach does not remove the need for outside resources, but makes their use more effective (Kretzmann and McKnight 1993).

The research partnership spent time together in Te Wairoa facilitating 10 gatherings with stakeholder groups that had been identified by Ngāti Pāhauwera as important for the research. Stakeholders were community members working in social, health or education services; local government; and young Māori mothers and their whānau.

Pakeke led the gatherings with appropriate rituals of encounter (as discussed earlier). Stakeholders were asked what they saw as their community’s assets; in particular, for young pregnant Māori women and their whānau. Discussions were noted by hand, and the asset map and themes from the discussions were shared back to the community and Iwi at further gatherings.

The stakeholders identified many different services as assets (Fig. 1). Within these services, specific programs and support groups were also discussed; for example, peer support for young mothers, Māori-centred relationship support and counselling, gym and fitness classes (including mau rakau – a Māori martial art) and a youth leadership program. Whānau support and community connectivity were also frequently cited as assets. A major theme from the gatherings was the positive energy of people and organisations keen to work together to support the health and wellbeing of whānau.

Although this project takes a strengths-based approach, the asset mapping also enabled the research team to hear about what things the community would like to see change. For pregnant whānau, the most common issues identified were the lack of adequate housing (including emergency housing and Women’s Refuge), a need for accessible oral health care and a lack of adequate mental health services (including relationship and addiction services). The isolation of rural communities, including poor telephone reception, Internet access and lack of transport options, was also highlighted.

Where gaps were identified, the asset map provides a reference for navigation to existing services, and a discussion point for areas to improve. It is a living document, belonging to the Iwi, and has been utilised in the implementation of the next phase of the research partnership model – He Korowai Manaaki.

He Korowai Manaaki (HKM)

A strengths-based, Indigenous-led wrap-around maternity pathway

The next challenge for our research partnership was to address the health and structural needs of pregnant Māori women and infants in Te Wairoa.

When presented with the findings of Aka Mātua, Ngāti Pāhauwera leaders gave guidance and approval for developing a
maternity wrap-around approach that, in addition to promoting evidence-based care, would work towards supporting all areas identified by the community as needing improvement. Transport support, increased housing, improving access to oral healthcare and addiction services, and enhancing navigation of pregnant women to current providers were the foremost priorities determined by the Iwi. How this might work in practice was then taken forward by the research partnership for discussion with community, service providers and other key stakeholders (i.e. addiction services, government agencies). What emerged was a general desire to see greater connectivity and integration between services for the benefit of pregnant Māori women and infants.

The research partnership agreed on the development of an augmented maternity pathway that would put whanau at the centre; strengthen the involvement of primary care general practices in the pathway; support increased collaboration between care providers; moderate the impact of negative determinants of health along the pathway; and seek improved maternal and child health outcomes. This agenda guided a successful collaborative grant application for HKM.

**Community steering group**

To guide the implementation of HKM and keep the partnership accountable to the community, a community-driven project steering group was formed. Representatives invited to join the steering group included: recently pregnant women, health services (primary care providers, LMCs and hospital managers), Māori non-governmental organisations and the primary health funding organisation. As the project gained wider interest, the group expanded to include a representative from the local DHB, the local smoking cessation provider and the community social worker, with the majority of the committee identifying as Māori.

The community steering group guides and advises on the implementation of HKM. Meetings are held monthly or bimonthly to share updates on the project and pathway, providing additional input and feedback. As with Aka Mātua, Pakeke lead the meetings according to appropriate cultural protocols. Steering group members (including Pakeke) share their views on the current and changing needs of the community’s pregnant women to inform the research pathway. This supports a core Kaupapa Māori principle: Kaupapa – the principle of collective philosophy, whereby the collective aspirations/vision of the community drive the research (Rautaki Ltd and Nga Pae o te Māramatanga n.d.).

As the project is ongoing, there is regular engagement with the project steering group, which is pivotal to understanding the project impact and potential subsequent augmentation of the wrap-around approach. Meeting minutes are shared with the local District Council, DHB and Iwi leaders.

The resulting HKM pathway (Fig. 2) emulates best practice and, in augmenting the standard maternity care model, provides additional appointments for the pregnant woman with the primary care practice she is enrolled with. As a result, in partnership with the LMCs, primary care is included in the care pathway of the pregnant woman up until 6 weeks after delivery, with opportunities throughout to improve connectivity to services identified through Aka Mātua as beneficial to support, develop or sustain whanau. The HKM pathway supports providers to ask after and respond, at each appointment, to issues that are prioritised by women and their families (i.e. oral health, driver licensing).

Both the DHB that employs the midwives and the primary care practices consented to be involved in the practice change. Individual consent from the pregnant woman is required for the researchers to obtain de-identified encrypted outcome data at study end; comparisons will be made between a retrospective control cohort and the study cohort. Primary outcomes include timely vaccinations and avoidable hospital admissions for the infant in the first year of life. Secondary outcomes include smoking prevalence, oral health, timely contraception and enrolment and attendance to services. Although the primary outcomes are used as surrogates for health improvement and

![He Korowai Manaaki pathway](image-url)
Engaging local Māori

The partnership model has supported local Māori research engagement through the steering group and individually employed participants (a Māori midwife to the role of research midwife assisting with developing the HKM model, two recently pregnant Māori women to the role of health consumer representatives, and the Pakeke as community health researchers).

The HKM partnership has motivated a new funding application for Nicotine Replacement Therapy from a Māori healthcare provider and has gained the interest of Māori medical students seeking summer studentships. It has grown and strengthened local Māori research capacity, with proposals for further projects seeking to support whānau health and wellbeing in Te Wairoa currently underway, and further opportunities being investigated.

Additional health initiatives being investigated include: a locally based antenatal ultrasound service; oral healthcare support for pregnant women and their partners; increased opportunities for driver licensing; assistance with procurement of adequate housing; and increasing access to addiction support services. The Iwi and community continue their overarching leadership of the project and its direction. This is constantly being reinforced.

Discussion

The collaboration between the Iwi and the research centre has seen several stakeholders working together in a strengths-based way to address the inequitable health outcomes experienced by Māori women and infants in Te Wairoa.

Key learnings from this research partnership journey include:

1. Strengths-based asset mapping supported the development of a research relationship with a community that was fed-up with being viewed through a deficit lens. Aka Mātua revealed the strengths of the community, as expressed by the community. It improved connectivity between existing services; highlighted gaps and challenges; and provided a platform for community ownership of the next phase of collaborative action (HKM).

2. Walking with an Iwi and community takes time, resources (especially funding to enable researchers to travel and stay) and dedication, so that trust relationships can be built and commitments that are made can be fulfilled. It is not a one-off but rather it is about ‘he kanohi kitea’ – the researchers being seen and known in the community and undertaking a research journey with them.

3. Community development. Through the partnership, the research group has supported the research agenda of the Iwi, to improve health outcomes for women and infants in their home place. At the same time, the researchers have been building local Māori research capacity so that the community becomes more adept at telling its own strengths-based stories.

4. A community-based steering group helps keep the partnership accountable to the community, making sure that any research is ‘with/for’, and not ‘on/about’, the people in the community. The expertise and knowledge of local people, who live and breathe their community, has been invaluable in ensuring the validity and integrity of the research (the group wish to continue meeting after study end).

5. Increased collaboration has been established between maternity care providers (and other services) through the steering group meetings and the process of undertaking HKM. ‘We’ve improved our relationships, [HKM] has created a valuable team approach.’ This quote from a conversation between a GP and midwife exemplifies the increased collaboration fostered through the research.

6. Intellectual property arising from Aka Mātua and HKM remains with the Iwi, while the outcomes of the research rest within the community. The research centre’s ultimate goal for itself is to be redundant in the community because maternal and infant health inequities have been eliminated. Overall, this strengths-based research collaboration between an Iwi and a university-based research centre challenges exogenous models of health disparity intervention. It upholds the right of Māori to be and to act sovereign. A quote from a respected Whaea (Elder woman) at a community HKM meeting with a prominent parliamentarian illustrates this – ‘We [the community] know what we want. They [the research partnership] just open the doors.’

The Iwi-research centre partnership – through Aka Mātua and He Korowai Manaaki – is demonstrating that intervention can be both community owned and evidence informed. Nāku te rourou, nā au to rourou, ka ora ai te Iwi (with your basket and my basket the people will prosper) – a Māori whakatauki (proverb).

Conflicts of interest

Some of the authors have tribal affiliations to the place of research. However, the authors deem that this is not a conflict of interest.

Acknowledgements

This paper discusses an Iwi-research centre collaboration journey between Ngāti Pahauwera and Te Tātai Hauora o Hine Centre for Women’s Health Research (CWHR). The authors wish to acknowledge their tribal affiliations to the place of research. However, the authors deem that this is not a conflict of interest.

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References
