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"Nan had it, Dad had it, so you're going to get it": Intergenerational Indigenous heart health in Aotearoa New Zealand

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ABSTRACT

Cardiovascular disease is the leading cause of death worldwide. To date, very little qualitative research has focused on understanding how those most 'at risk' of cardiovascular disease, and those most impacted by systemic inequities and insufficiently resourced health systems, are experiencing heart health. In this paper, we centre the lived experiences of elderly Māori (Kaumātua) and Pacific people living in Te Tairāwhiti, a remote region on the east coast of the North Island of New Zealand with the country's highest heart health mortality rates. Drawing upon focus groups with 54 patients and 24 staff (predominantly Māori and Pacific) in an Iwi [tribal] health provider, we reveal how intergenerational trauma associated with heart health and negative experiences with the medical system continue to prevent many patients and whānau [extended family] from seeking early support from their general practitioners. With such insight, we identify the need for local health services to better recognize intergenerational heart health knowledge and practices (including silencing and fear), and the need for more culturally responsive systems that will not only prevent premature cardiovascular disease and death but also improve the quality of life for current and future generations. Ultimately, this paper encourages a shifting of attention beyond individual disease management and towards intergenerational knowledge, historical trauma, family relationships, trust, and Indigenous understandings of heart health.

1. Introduction

Globally, cardiovascular disease has significant impacts on individual and family health and wellbeing, and on governmental health systems (Deaton et al., 2011; Marquina et al., 2022; Tarride et al., 2009). The Global Burden of Disease study and the World Health Organization have reported cardiovascular disease (CVD) as the leading cause of death worldwide (Naghavi et al., 2024). In Aotearoa New Zealand (hereafter Aotearoa, the Indigenous name for New Zealand), cardiovascular disease is responsible for a third of all deaths and is the leading cause of health loss. Yet, as in many countries, such health risks and impacts are not felt evenly (Berning et al., 2025).

In Aotearoa, heart disease disproportionately impacts Māori and Pacific populations, and people living in areas of high deprivation or regions with lower health resources (Chan et al., 2008; Tane et al., 2024, 2025; Wheeler et al., 2025). Māori and Pacific Peoples have 30-50% higher CVD incidence (Miner-Williams, 2017; Selak et al., 2020) and are hospitalised or die from heart disease more than a decade earlier, on average, than other New Zealanders (Barnard, 2025). According to heart health researchers, the reasons for these disparities are complex, and include "historical injustices, prejudice and mistrust in the health system, struggles for resources including health workforce, health literacy and geographical isolation" (Devlin et al., 2023, p. 103). However, there are opportunities to achieve more equitable outcomes if effective interventions can be identified. Over a quarter of cardiovascular deaths in Aotearoa are considered 'avoidable' through prevention, and with early diagnosis or good clinical management, the number of preventable deaths for Māori and Pacific people rises to half (Devlin et al., 2023).

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Our study responds to such inequities by centring the lived experiences of elderly Māori (Kaumātua) and Pacific people living in Te Tairāwhiti, a remote region on the east coast of the North Island with the country's highest heart health mortality rates (Barnard, 2025). Drawing upon focus groups with 54 patients and 24 staff (predominantly Māori and Pacific) in Turanga Health, an Iwi [tribal] health provider in Te Tairāwhiti, we explored broad themes in heart health knowledge and experiences within and across the health care system and community. In so doing, this study did not focus specifically on their experiences of diagnosis or treatment, but rather broader understandings of cardiovascular disease at the interface with socio-cultural determinants of health. Our analysis revealed the pervasiveness of intergenerational trauma associated with heart health and negative experiences with the medical system that continues to prevent many patients and whānau [extended family] from seeking early support from their general practitioners. With such insight, we identify the need for local health services to better recognize intergenerational heart health knowledge and practices (including stigma, silencing and fear), and the need for more culturally responsive systems that will not only prevent premature cardiovascular disease and death but also improve the quality of life for current and future generations.

2. Literature

To date, most cardiovascular disease research has been dominated by quantitative and scientific methods. However, researchers are increasingly engaging an array of qualitative methods (i.e., interviews, surveys, focus groups) to understand the lived experiences, behavioural determinants, and contextual factors shaping cardiovascular disease (CVD) care, treatment and management (Madaudo et al., 2024). Recent studies emphasize patient-centred perspectives, highlighting how social, cultural, and emotional dimensions fundamentally influence disease progression, self-care, and engagement with treatment (Esmaeili et al., 2016; Habibi et al., 2025; Hagendijk et al., 2025; Jansen et al., 2019). Qualitative research on coronary heart disease (CHD) self-care practices has also highlighted the critical role of families and communities in influencing patient behaviours and experiences. Interviews with patients, family members, and community leaders have revealed how cultural beliefs, familial support, and traditional practices significantly shape self-care strategies and treatment adherence (Setyowati et al., 2024). Such insights reinforce that effective heart health and disease management must consider community-level influences rather than focusing solely on the individual patient.

While qualitative methods in cardiac-related research are growing, most heart health research has tended to prioritise the perspectives of patients (and the families of those) living with heart failure (Thornhill et al., 2008), recovering from surgery (Bäckström et al., 2006) or participating in cardiac rehabilitation programs (Jokar et al., 2017; Resurrección et al., 2018). To date, less is known about those who may be at 'high risk' of developing cardiovascular disease or already managing early symptoms. In response to such observations, some researchers are calling for more focus on cardiac patients with lower disease burden, and for more qualitative research that explores the lived experiences of those who are rarely heard or prioritised in cardiovascular disease research (Broschmann et al., 2026).

Globally, not enough is known about the lived experiences of those who are disproportionately impacted (directly or indirectly) by cardiovascular disease, particularly Indigenous and ethnic-minority groups. An important exception is Rottapel et al.'s (2021) qualitative study of African American women living a sedentary lifestyle and their perceptions of heart disease and prevention. Focus groups with participants highlight the key barriers to both an 'abundant life' and cardiovascular health include family caregiving burdens and the enduring legacies of racism which contributed to stress, environmental barriers to healthy eating and physical activity, and discriminatory experiences in the healthcare system. In so doing, this study highlights the value of creating space for the heart health experiences (including perceptions and prevention) of those who are at 'high risk' but not yet symptomatic of CVD, particularly Indigenous and ethnic minority groups. These are among the voices largely excluded from the cardiovascular disease research to date, but in-depth and nuanced understandings of such heart health experiences could support earlier culturally responsive support and intervention.

2.1. Indigenous heart health in Aotearoa

In the context of Aotearoa, there is a movement towards culturally and contextually specific heart health research in, with and for Indigenous communities. Māori are the Indigenous people of Aotearoa, and their rights to self-determination, land, resources, culture, and equitable treatment (including health care), are protected under te Tiriti o Waitangi [Treaty of Waitangi], signed on 6 February 1840 by Māori and the Crown. However, research has comprehensively evidenced that the public health system has failed to meet its obligations under te Tiriti o Waitangi, with Māori experiencing worse health statistics than Pākehā [non-Māori] (Brown & Bryder, 2023; Came et al., 2018), and the health sector continuing "to perpetuate notions of 'treating' Māori health more so than empowering Māori to control their own processes for being healthy" (Whitinui, 2011, p. 138). Pacific Peoples living in Aotearoa New Zealand are a pan-ethnic group associated with, and descended from, the Indigenous peoples of the Pacific Islands (e.g., Fiji, Samoa, Tonga). Whereas Māori, as tangata whenua (people of the land), have specific rights under te Tiriti o Waitangi, Pacific people, as tangata Tiriti (non- Māori, who belong to this land by right of te Tiriti o Waitangi), have different historical, political and social relationships with the state, including past and current traumatic experiences of migration (Anae, 1997; Naepi, 2025; Teaiwa & Mallon, 2005, pp. 207–229).

Māori and Pacific Peoples hold different positionings in Aotearoa society, but they have both experienced (and continue to experience) the effects of colonization and racial discrimination that structure their lived socio-economic conditions and shape health outcomes (e.g., deprivation, access to care, housing, and service provision) (Gurney et al., 2020; Harris et al., 2012; Kapeli et al., 2020; Walsh & Grey, 2019). The health injustices that Māori and Pacific people experience in Aotearoa New Zealand resulting from colonization and ongoing racism require "fierce urgency" to transform health and social systems (Goodyear-Smith & Stokes, 2025). The ethnic inequities in cardiovascular health statistics presented in the introduction clearly evidence this urgency (Chan et al., 2024).

Researchers are examining the social determinants of such ethnic disparities and evidencing the direct and indirect effects of colonization and racial discrimination on heart health in Aotearoa New Zealand (Chan et al., 2024; Wheeler et al., 2025). For example, Brewer and colleagues (2024) incorporated Kaupapa Māori Theory and Pacific conceptual frameworks and research methodologies to understand the reasons behind evidence-practice gaps and inequities in cardiovascular care for Māori and Pacific people. Interviewing Māori and Pacific people who had experienced a cardiovascular disease (CVD) risk assessment, acute coronary syndrome, and/or heart failure, the research demonstrates that Māori and Pacific people "want to take charge of their heart health but face challenges" (Brewer et al., 2024, p. 1), including important obligations to family, community and tikanga [the culturally correct way of doing things]. Participants described times when health care conflicted with their existing familial and cultural responsibilities, and how their negative experiences within the health system undermine their dignity and mana [pride and strength]. For many, whānau were integral to participants' heart health journeys, and key motivations to 'seek and accept care' (Brewer et al., 2024, p. 6).

Engaging culturally responsive methodologies, various researchers have identified racism, discrimination, and inadequate resourcing as systemic barriers negatively shaping Māori heart health journeys. For example, in their study of Māori patients and their families accessing

care for an acute out-of-hospital cardiac event, Newport and colleagues (2023) identified the need for "improving the cultural safety [practices] of health professionals, better access to community defibrillation, and improving understanding of the life-long impacts a cardiac event has on patients and whānau" (p.1). Tane and colleagues (2024; 2025) further extend this work with a focus on rural Māori who experienced additional barriers to treatment access, poorer health outcomes and a greater burden of CVD risk factors compared to non-Māori and Māori living in urban areas. Two strong themes across these studies are i) the acknowledgement of colonization and racial discrimination on heart health, and ii) the importance of whānau both in the heart health journey of patients, and in shaping individual heart health knowledge and care practices.

Place-based, culturally responsive qualitative research on heart health is thus important for moving beyond individualistic approaches to patient heart health diagnosis, treatment, management and recovery. The research reviewed above highlights the need for approaches that recognize the wider social determinants and direct and indirect effects of colonization and discrimination, and the roles of family and community in shaping heart health journeys. In our research, we build upon and extend such insights with findings that reveal the importance of intergenerational family heart health—past, present and future—for shaping how individuals, whānau and communities understand and experience their own and others' heart ill/health within systems of ongoing inequity.

3. Context

Our research was based in Te Tairāwhiti, a remote region on the east coast of the North Island of Aotearoa. The city of Gisborne is located more than 3 h (on challenging roads that are often closed due to slips) from the closest cities of Tauranga, Rotorua and Hawkes Bay, and more than 6 h to major cities of Auckland or Wellington. The remote location significantly impacts access to specialist health services. During the 2023 census, the population of Te Tairāwhiti was 51,134 (Stats NZ, 2025), with the highest proportion of Māori (Indigenous) (55%) residents, and lower proportions of New Zealand European (52%), Pacific (5.6%) and Asian (3.8%), relative to national averages. The median age was 37 years, and unemployment was 5.3% (Stats NZ, 2024). Two thirds of the Tairāwhiti population live with deprivation (Deciles 8-10), the highest proportion of any health district in Aotearoa (Young et al., 2017).

The health needs of Te Tairāwhiti are systemically underserved. The region reports the highest rates of morbidity and mortality, high rates of ambulatory sensitive hospitalisations (hospitalisations that are technically avoidable with community care) and the highest unmet need for health care such as cardiac and renal services (Te Whatu Ora Health New Zealand, 2024). According to The Heart of Aotearoa report, the Tairāwhiti region has among the worst heart disease mortality rates while being served by the fewest cardiac specialists. Heart failure hospitalisation rates were highest in the Tairāwhiti health district, with rates 60% higher than in the rest of the country (Barnard, 2025). Despite such troubling statistics, this is the first qualitative study to focus on the heart health experiences of the people of Te Tairāwhiti.

4. Methodology and methods

Our project is shaped by two interwoven aims, to both i) create space for Indigenous people's experiences of heart health, including the historical and contemporary systems that shape their heart health journeys, and ii) to conduct research in ways that support knowledge creation within and for local communities and Indigenous-led health organizations. A multi-paradigm conceptual model was appropriate for such dual purposes (Bogna et al., 2020). This research is broadly grounded in the critical constructivist paradigm—a merger of the critical and social constructivist paradigms—with an epistemological position that examines the processes by which knowledge is socially constructed (Kincheloe, 2005). Critical constructivist research is as concerned with the process of knowledge creation, and the transition of information into validated knowledge, as it is with truths and outcomes (Coghlan & Brydon-Miller, 2014). Research in the critical constructivist paradigm maintains that power plays an important role in all knowledge construction, including the processes of research production.

With a focus on the multiplicities of lived experience and different ways of knowing heart health, rather than singular objective truths, we adopted a qualitative methodology, refined/defined through a cross-cultural partnership with a local, Indigenous health provider. The project was a collaboration with Turanga Health, an Iwi-led health provider in Te Tairāwhiti, with Pākehā, Māori and Pacific health researchers working together to design a robust, culturally responsive, safe and supportive research experience for all participants. Throughout the project, senior researchers worked to mentor and support less-experienced community researchers, but the learning was two-directional, with the community researchers and the Iwi health provider providing critical cultural insight and knowledge throughout the project, from design to analysis to dissemination. In so doing, our approach was similar to the culturally responsive qualitative research methods co-developed by Boardsworth and colleagues (2024), who detail a collaboration between non-indigenous (tauiwi) and indigenous researchers, described as "a cyclical process of relationship building, engagement with mātauranga Māori, discussion and exploration of how indigenous knowledge and practices could inform and shape the existing study design" (p. 1).

This project received ethical approval from the University of Waikato Human Research Ethics Committee (Health) (2024#51), with all participants providing written consent to participate and for their anonymised data to be included in this study. All participants received an Information Sheet prior to participation and completed their Informed Consent forms at the beginning of the focus groups. This was an important opportunity for the research team to answer any questions about the project, as well as to explain the ethics forms in culturally appropriate and accessible language. Some elderly participants required additional support (reading, writing) from the research team to complete the ethics forms, and care was taken to do this in a supportive and mana (strength/power) enhancing manner.

Between October 2024 and April 2025, the research team conducted 10 focus groups with 54 patients/participants (often referred to by health staff in the organization as whānau rather than patients) and 24 staff participants (Māori and Pacific) from Turanga Health. Our approach to recruitment was informed by both convenience and strategic sampling, based on time, availability and priorities of the Iwi health provider. All patients were involved in at least one lifestyle intervention programme offered by the Iwi-health provider (e.g., nutrition, exercise, health education). The majority were involved in Kaumātua programmes designed for the elderly, reflected in the majority (90%) aged 60-70 years with a few in their 50s and 80s (5% each). The staff participants included nurses, programme leaders, and those working in an array of health support roles between 39 and 74 years.

Working within a predominantly Indigenous community in the context of Aotearoa, it was of utmost importance to ensure our methods were culturally responsive to both the Māori and Pacific participants (Jordan & Hall, 2025). In so doing, the project followed two sets of guidelines from the Health Research Council of New Zealand for ethical research practices with Māori or Pacific peoples living in Aotearoa New Zealand, including Te Ara Tika guidelines, prioritising tikanga (cultural customs), relationships and culturally responsive practices with Māori (Hudson et al., 2010), and the Guidelines on Pacific Health research (Mila-Schaaf, 2009). The focus groups—group interviews—were culturally-designed as wānanga (Māori) or Talanoa (Pacific) (Vaioletti, 2006), creating comfortable spaces for conversations. The organization of wānanga and talanoa was supported by Turanga Health staff, with transport offered, and the sessions held in locations and times that

would facilitate easy access and comfort in familiar surroundings. The Māori and Pacific researchers on our team led the wānanga and talanoa with their communities, drawing upon their extensive cultural knowledge (including customs and language) to create safe and comfortable environments for the participants. We adopted a team approach to the focus groups, so that one researcher could lead the conversation, and the other research team member could support participants with administration, food, and/or additional cultural or emotional support. All wānanga and talanoa were opened and closed with karakia [cultural incantation or prayer], with kai [food] and koha [a supermarket voucher] offered to all participants, in ways that were specific for the Māori or Pacific groups.

The focus group conversations were semi-structured with two key themes shaping the interview guides: 1) Individual and whānau understandings and experiences of heart health, and 2) Individual and whānau experiences of the medical system for heart health. Importantly, the quotes provided in this paper do not refer to participant experiences within Turanga Health lifestyle programs (which were overwhelmingly positive), but rather to the wider health system. The semi-structured format provided ample opportunity for participants to contribute as/where they felt willing, without putting pressure on anyone to answer a specific question. This informal and open format aligns with the highly relational culturally specific methods of wānanga (Komene et al., 2024; Mahuika & Mahuika, 2020) and talanoa (Fa'avae et al., 2016; Feetham et al., 2023). The researchers made efforts to ensure everyone had the opportunity to contribute, including in the language of their choice. Participants' comments in Pacific languages were translated during the talanoa into English by Turanga Health staff. The conversations were often free flowing, with participants knowing each other and building upon others' comments.

Following data collection, all transcripts were professionally transcribed. Aligned with our qualitative methodology and methods, data analysis broadly followed a thematic analysis approach (Braun & Clarke, 2022). The first author conducted the initial data familiarization and developed a code framework. This framework consisted of 25 first level codes, and >50 second level codes. This framework was refined in dialogue with the wider research team, with a workshop held to discuss the code and share strategies for individually and collectively coding the transcripts. The Māori and Pacific researchers then led the analysis of the wānanga and talanoa that they conducted, with cross-coding and dialogue across the research team. The cross-cultural team approach to coding and analysis was integral to capacity building and supporting the development of local researchers working with and for the Indigenous health provider. This multi-phased approach to analysis was integral for ensuring the qualitative data was appropriately considered with care, context and cultural knowledge.

5. Analysis

In the remainder of this paper, we present three high level themes across our data set: 1) Holistic ways of knowing heart health, 2) Key learnings and proactive approaches being adopted within some Māori and Pacific families, and 3) The struggles of many Māori Kaumātua and Pacific elders in accessing culturally safe heart health care and treatment, and the various forms of discrimination and marginalization experienced within the health system. Importantly, the three themes are interconnected and build upon the other. The first theme reveals how heart health knowledge is formed through intergenerational, cultural, and familial experience. The second theme then shows how this knowledge can support proactive action and intergenerational change. In the third and final theme, we demonstrate how health systems may either enable or disrupt these processes. Across these sections, we weave culturally and contextually nuanced insights throughout, with the implicit aim of centring the voices and knowledge of Māori Kaumātua and Pacific elders. We do not engage in comparisons between Māori and Pacific participants, as this was not the intent of this study. Rather, we identify both high-level themes (across both Māori and Pacific participants) and acknowledge cultural nuances where evident in our data. We deepen the analysis of our findings with connections to relevant literature throughout. Collectively, the three thematic sections highlight the complex relationships between intergenerational trauma, heart health knowledge, trust, and culturally responsive care.

5.1. *"A healthy heart is a happy heart": Whānau heart health knowledge*

When asked what a 'healthy heart' meant to them, participants had very holistic understandings of the heart, including physical, social, cultural and spiritual dimensions. Many participants considered heart health as integral for their overall health and wellbeing (or Hauora). For example, participants explained:

> What I know about a healthy heart is [that the] heart is what we need to keep ourselves alive, to get the blood pumping through our bodies, and by doing that, we need to exercise, by doing Tai Chi, whether we're doing walking or biking or other physical activities … to keep our heart pumping. And I'm basing this on I've had whānau members pass away from heart attacks and stuff like that, and my brother's just had his new pacemaker put in and so he's coping now with trying to get himself better and he is walking just to get that blood pumping around the heart. (Māori Kaumātua)

> I know that the heart is the boss of our body. If every part of our body is healthy but when the heart stop, that means that's the end of our life. I look for three things: my body, my mind, and my spirit. If I got a healthy body … I look after my diet … I do not get any high blood pressure or diabetes. … In my mind, I think it's helping my mind and my heart if I live in a clean life, not gossiping or look at someone and make my heart beating fast. There's other things I'm thinking about, my [heart] don't be stressful. (Pacific elder)

While few of our Māori participants spoke of religion, many of our Pacific participants acknowledged spirituality and religion as integral to their heart health: "I think the heart is on the spiritual side, I think it's the ability to withstand anything that life throws at you and to stay calm when the storm hits you", "I have a strong heart because I have a healthy spiritual side". Such findings align with research by Neville and colleagues (2022) that reveals the significant influence of spirituality and religion on the health and wellbeing for older Pacific Peoples. Our research expands such insights to specifically reveal culturally specific, holistic, and more-than-physiological, understandings of heart health.

Some acknowledge that, because we cannot 'see' the heart, it is important to 'listen to the body' for signs of an un/healthy heart. As the following comment suggests, listening includes attending carefully to when and why a heart is 'beating so fast', 'chest pain', and not dismissing feelings of 'indigestion':

> You've got to listen to your body. Your body will tell your heart what you've been doing, what you're supposed to be doing or why is it beating so fast. Why is it doing that? Analyse … that sort of thing, listening to your body, listening to your heart, and your heart is a big factor in the human body. I think another thing too, like if you get chest pain people think, 'oh, it's probably just indigestion, she'll be right', but [need] to listen to what your body's telling you, get it checked. Whether it's serious or not, go to the doctor, get the thing checked out, and make sure it's not your heart. It could be just indigestion, but … read your body, you know your body so, do it good. (Māori Kaumātua)

Participants also recognize that everyday practices contribute towards health (i.e., discipline, eating well, listening to the doctor, taking medicine) as well as actions that contribute to poor heart health (i.e., smoking, vaping, alcohol). For example, a Pacific elder explained:

> Being able to have a healthy heart is discipline, so she has to discipline the way that she eats, listen to what the doctor says, take

> medicine. If she doesn't do that, then her heart will be affected and then she won't have a healthy heart, then it will give her heaps of limitations to do things, like just every day daily living. (Pacific elder)

Yet, while a healthy heart is widely considered critical to 'everyday living', some participants do not feel that they have enough knowledge, awareness or attention to the heart. As one Māori Kaumātua asked: "How do we know if our heart is working properly? Are we looking at our heart rates? Are we looking at breathing?" As various Indigenous health researchers have acknowledged, "poor cultural health literacy on the part of organizations has likely impacted on late access to or avoidance" of medical support, impacting both patients and whānau (Kidd et al., 2018, p. 15; Lilo et al., 2020), with some advocating the importance of Indigenous-led cultural heart health literacy initiatives (Carlson et al., 2019). Indeed, many of our participants expressed an interest in more heart health knowledge delivered in culturally safe and responsive contexts. As our research suggests, it can be helpful to start such conversations with existing heart health knowledge and its multiplicity of sources.

Among all participants, there was a widespread perception that heart health concerns are too often overlooked or ignored until it is too late. Māori participants, in particular, spoke of feelings of fear leading to medical avoidance:

> Sometimes we fear the unknown, we fear that it could be your heart. We think we don't really want to know that information, so I won't go to the doctor, so I won't know the outcome. We fear it might be something really bad, you know, I'm going to die or whatever. (Māori Kaumātua)

Others experienced feelings of fear due to a perception of 'inevitability' due to 'genetics', as one participant explained:

> When you go to the doctor's and they say to you "has any member of your family had heart attacks?" … I think that could be a tough thing for someone to say, "oh, man, I didn't ask to have this but it's genetically from my father, from his father's father or whatever and now I'm going to get it". It's just one of those things. (Māori Kaumātua)

Many participants explained that their families do not talk about heart health even when cardiovascular disease is 'in the family'. For many, such intergenerational silencing and fear is limiting heart health awareness and preventing patients from seeking early medical support. In a study of Māori patients' experiences and perspectives of chronic kidney disease, Walker et al. (2017) similarly identified the multi-layered effects of disease stigma (multigenerational trepidation; shame and embarrassment; fear and denial), including whakamā (disempowerment and embarrassment) and late diagnosis. Our research highlights that the multi-layered effects of disease stigma are also significant in relation to heart health.

Some Māori participants noted that when heart health issues are 'in the family', there is often a feeling of inevitability rather than options for change, intervention, or alternative health pathways:

> Your mum had it, nan had that, your dad had that, so you're going to get it; "oh, you're just like dad", is quite a typical kōrero in whānau conversations. Do you think they get that from the whānau or do you think it was led or fed from anywhere else? Could have been conversations at the doctors, conversations with the nurse, when we talk about whakapapa and the labelling, that your family has diabetes, your family has … there's an acceptance there. It is acceptance but there's no sort of drive to change your health story. My dad ate red meat and smoked all day every day, so I'm gonna … I think there is a sort of acceptance or surrender to that type of thing. (Māori health staff)

> It's almost like it can be a prediction if there has been an unhealthy heart in the family. To me, sometimes you predict what's going to happen to that person in their life as opposed to perhaps saying what were some of the contributing factors and changing your thought patterns around the whole process. Most of us just seem to accept, well, my father had a heart condition, I'll have a heart condition, and that's not necessarily true because you can reprogram yourself. It does not necessarily mean just because your father had it, you're going to get it. (Māori Kaumātua)

As such comments suggest, in many families, intergenerational experiences of cardiovascular disease and heart ill/health have created a culture of fear and silencing. While some acknowledge the power in lifestyle interventions to disrupt such patterns ("you can reprogram yourself"), others remain fearful of history, "genetics", repeating, with such deep, unspoken worries contributing to an "acceptance or surrender to that type of thing". Such fears are the embodiment of intergenerational heart disease stigma.

Other participants spoke of a cultural attitude of 'she'll be right', a normalization that one must quietly accept risk, pain and ill-health as part of life. Some noted that such attitudes were particularly strongly connected to older generations, and older men who have internalized a particular version of rural masculinity (Hiebert et al., 2018; Xiao et al., 2022). As the following health staff explained:

> Just that old school stuff with that 'she'll be right', 'she'll be right', 'can't teach an old dog new tricks', all of that stuff. But yet, I know in whānau's, particularly heart conditions, there'll be a whakapapa [genealogy / family history] there and it's not until someone passes that they go, "oh", and then they'll rush to seek some support. Not generally a GP support, but they'll get some information, but then it fizzes out until the next one passes in the same manner.

> We see very late presentations in the older people. I think it's because of their culture, how they were raised up, like we have to be strong and if we're sick it means that we're not [strong] – we're like weak.

As these comments reveal, the pervasiveness of "she'll be right" attitudes within older generations are contributing to avoidance and late presentations of heart health concerns.

In their research on the health care needs for older Māori, Hirini et al., 1999 revealed "generational differences in attitudes … among Māori due to different experiences within mainstream health institutions such as hospitals" (p. 138). Researchers examining an array of health conditions (i.e., diabetes, cancer) among older Māori and Pacific Peoples further highlight how such experiences contribute to delays in presentation often leading to more late-stage diagnoses and worse health outcomes among older generations (Kidd et al., 2018). Importantly, the key point here is not that Māori Kaumātua or Pacific elders are at fault for not seeking out earlier medical support, but rather that intergenerational effects of colonization (that directly shape health practices, including socio-economic and lifestyle factors, cultural attitudes that normalize enduring pain in silence, and distrust of the medical system) are negatively impacting their willingness to express heart health concerns and vulnerabilities early, and seek appropriate medical support. As this section has revealed, Māori Kaumātua or Pacific elders draw upon an array of knowledge and experiences to shape their understandings of, and responses to, heart health, often in ways not considered by the contemporary medical system.

5.2. *"Listen to your wakeup call": Proactive approaches to heart health*

As illustrated in the previous section, heart health knowledge is formed through intergenerational, cultural, and familial experience. In the second thematic section, we explain how that knowledge can support proactive action and intergenerational change among Māori Kaumātua and Pacific elders. Indeed, among some of our participants, there was a strong awareness of the need to 'listen to your wakeup call',

and to learn from health professionals. Having their own heart health 'scare', or of a close loved one (e.g., husband or wife), some participants described themselves as "on a journey" to becoming much more knowledgeable and proactive in their own heart health management:

> I can't rely totally on others to give me my health. I've got to do my bit too. … I go swimming … three, four times a week and I'm happy doing that. You've got to be happy in what you do too, not just do things, so your wellbeing is taken care of by you as well as supported by the others. (Māori Kaumātua)

As such comments illustrate ("I've got to do my bit"), some participants are demonstrating agency in their own heart health, finding activities and programmes (i.e., exercise, nutrition programs, regular monitoring) that work for them. In so doing, many described the value in the lifestyle programmes offered by Turanga Health. Others spoke of their learning journeys with health professionals, finding their own strategies to navigate the health system with autonomy and seeking advice from health workers as needed. As a Pacific elder explained:

> Going to the doctors, yeah, I find that I'm the boss. I walk into the doctors, and I say, "I want this, this, and this", and if they can't help me, I go to the specialist. But mainly, it's been a good experience in terms of if I take responsibility for myself, I cannot blame doctors or specialists.

As illustrated herein, a few Māori Kaumātua and Pacific elders are practicing self-determination ("I'm the boss", "I take responsibility") and actively navigating the health system to "define for themselves their needs and their experiences" of cardiovascular health (Tautolo et al., 2017, p. 134).

Some Māori Kaumātua and Pacific elders are also using their own experiences and learnings of heart health to share knowledge with their whānau and community:

> I get chest pains and have the red spray, and I see some of the whānau with it, they've got them too. With my own family, I sort of talk to them about if they get chest pains, you let us know, things like that. (Māori Kaumātua)

However, in so doing, some noted that not all members of their families were receptive to hearing about heart health. Some raised concerns about their children (working adults) not being willing to listen and failing to access medical care and knowledge until it is too late. Some referred to them as the 'too busy generation' and expressed concerns for their current and future heart health:

> Talking to our kids … I don't know that they're really listening. We weren't. Maybe not now, but when they get a little warning sign, they might. … When we go for our walk, our son lives just down the road for us, we wave out to him. Come for a walk [we say], hoping he might get some energy and go for it, but not yet. (Māori Kaumātua)

> Even though they're not going to listen, time will come when they say, "oh, [mum and dad] talked about this". [But] at the moment, there's nothing stopping them to hold up and listen. But having that knowledge passed on to them about the health and stuff like that, they will connect when they get a bit older … and then they'll start doing something about it. At the moment, no [they're not listening], but it's there for them. We're going to provide all this knowledge for them. (Māori Kaumātua)

In such cases, we see older family members living with cardiovascular-related conditions becoming heart health 'ambassadors', finding strategies to connect with, support and educate younger family members of the importance of a healthy and active lifestyle, and seeking early medical support and intervention. Among our sample, we heard from Māori Kaumātua and Pacific elders who are taking learnings from Turanga Health programmes and working to role-model healthy lifestyles (exercise and nutrition) and proactive approaches for their tamariki [children] and mokopuna [grandchildren]. Our findings support research that shows the power in intergenerational health literacy initiatives among Indigenous communities, including among Māori Kaumātua (Oetzel et al., 2024; Simpson et al., 2021) and Pacific grandparents (Alefaio-Tugia et al., 2023; Tautolo et al., 2017).

5.3. "Sometimes you feel like a burden": Accessing culturally safe heart health care and treatment

While heart health knowledge formed through cultural and familial experience can support proactive action and intergenerational change, health systems may either enable or disrupt these processes. Only three participants across the sample spoke of having positive experiences with doctors and specialists. This was the case when they perceived there to be a strong relationship between doctor and patient, and that their GP took time to listen to them in an accepting and open manner. For example, one participant explained:

> I've got a very, very good GP. I like the idea of going to him every year for a check-up. He actually makes that compulsory for me anyway. He says, 'you need to come', I say 'okay, okay'. But I like the contact, to talk to him like this, face-to-face, and I can feel that energy coming towards me. He's honest … he wants to listen to this human … I love that … I like that contact, eye contact. I suppose I'm from the old school, online is no good, I like to talk to people (Māori Kaumātua)

Many older patients commented that online medical options are "stressful". Preferring personal relationships with their GPs, many older participants in our study were highly uncomfortable with the move to online doctor support and what one referred to as 'keyboard doctors'. Previous research with older Māori and Pacific people has highlighted the importance of relationships with health care providers (Neville et al., 2022). Our research similarly shows that time, care, and connection (eye contact and "energy coming towards me") are critical in building rapport and a meaningful relationship with medical professionals, and particularly important in a context in which many Māori patients have little trust in the medical system due to past and ongoing experiences of discrimination and marginalization.

A strong finding across our data is that past trauma with the medical system is preventing many older Māori from seeking medical support. The following comments from three Māori health staff are based on years of observation and interaction within their own families and the communities they serve:

> A lot of our whānau have trauma related to conversations with health professionals. They would say, last time I went to see the specialist, he just put me down for 20 minutes about my weight and I never felt so bad about myself … There's trauma attached to health professionals for some of our whānau which stops them from getting health checks, because they don't want to revisit that trauma. … They don't go to the health professional to feel supported, they go there to feel worse about themselves.

> They deserve to have their mana kept intact when they visit health professionals, because for some it's been destroyed. It's very sad that a group that should be offering us guidance can have that effect on some of our whānau. Yes. Judgement, shaming, making them feel worse, and giving them that trauma. And then they won't take their children, because they have so much trauma attached to medical professionals.

> … what runs parallel with that is also a whakapapa [used here to refer to long history / genealogy] of healthy distrust in a westernised model of health that traditionally has always been quite harmful for our people, and so those two things running alongside, kaboom! Bad experiences with the GP. It could just have been one person.

Such comments reflect findings in previous research that has revealed

the impacts of longstanding systemic inequities and mistreatment in the medical system (Graham & Masters-Awatere, 2020), and the loss of trust that many Māori and Pacific peoples have in the health system because of such inadequacies and racial injustices (Walker et al., 2023). When Māori and Pacific patients are treated with less respect and dignity, the effects are 'disrupted mana' and 'feelings of personal disempowerment' in the medical system (Bourke et al., 2023).

As the quotes above suggest, current and past feelings of judgement, shame, guilt and/or being treated as a 'burden' within the medical system are preventing many from seeking medical advice. Often Māori and Pacific patients do not feel listened to or respected when interacting with GPs and specialists, with participants speaking of a widespread loss of trust in the wider medical system:

> The nurses will come and they're too busy … to stay too long. You know what I mean? Sometimes you kind of feel like a burden. (Māori Kaumātua)

> When I've taken my husband to a specialist, that you sometimes come across some very arrogant specialists that don't want to listen and don't want you to tell them anything. So that hasn't been a pleasant experience, and you leave not quite knowing exactly what's going on, especially when you have a husband that has had heart problems. (Pacific elder)

> I went to a cardiologist once. it was a long time ago now, and the first thing he said to me was I think you're in the wrong clinic and you need to lose weight, and that's what I got out of that. (Māori Kaumātua)

"Feeling like a burden", and experiences with "very arrogant specialists", that dismiss patients for "being in the wrong clinic" and "needing to lose weight", do not help rebuild trust in the medical profession. Rather, such experiences reiterate feelings of being an 'inconvenience' and treated as 'less than' and marginalized in the current health system. Our findings align with research by Brewer and colleagues (2024) that revealed how Māori and Pacific families' felt that cardiovascular care undermined their dignity and/or mana, such that they often felt excluded from their own treatment journey.

Furthermore, many continue to experience significant challenges accessing GPs that then become additional barriers to seeking early medical advice. Our participants spoke of experiencing considerable difficulties making timely appointments, as well as the cost of medical care even within a publicly funded health model:

> It's not that we don't want to know; it's just that, if we don't need to go, we won't. … because of their [work] hours and they're making that choice to either put a kai on the table than go and take a whole day out [from work]. That's $200 a day that they're losing potentially. (Māori health staff)

> Waste of time at [local GP practice] because you get in there and you can't get through. Now, with my prescription, it's 72 hours you have to wait … [and]they charge you $17 for a piece of paper … so I'm paying $26 all up [for my prescription]. I think that's a rip off, and that's why a lot of our people … especially on the kaumātua program, that's why they don't go to the doctors, is because they can't afford it. (Māori Kaumātua)

As a result of the long-lasting effects of colonization and ongoing impacts of racial discrimination, Māori and Pacific Peoples in Aotearoa continue to experience significant pay gaps when compared to European workers (Cochrane & Pacheco, 2022). Such inequities are further exacerbated in Te Tairāwhiti, where the mean annual earnings for Māori and Pacific Peoples are considerably less than national averages (Stats, 2026). As such, financial barriers continue to be significant obstacles for both Māori Kaumātua and Pacific elders accessing heart health support in the region.

In a qualitative study of Pacific elders' access to general practice, Ludeke and colleagues (2012) identify language and communication, rushed consultations, appointment availability, reception and Pacific presence as other significant considerations when accessing medical services. In another qualitative study of Pacific adults and families living with CVD and the support they received from community pharmacists, language barriers were identified as posing serious challenges to building positive relationships with health professionals and ultimately, autonomy (Hutchings et al., 2025). For some in the Pacific communities of Te Tairāwhiti, language is a critical issue for heart health care:

> It [language] is a big barrier. I come across it a lot, and it does help knowing to speak your mother tongue just to converse with them in what we usually call it dumbing it down – somewhat easier for them to more understand the information that we still don't even understand in English (Pacific health staff)

Our research thus identifies the need for culturally designed educational materials and health staff with Pacific language skills when working with Pacific communities (Te Mana Ola, 2023). This aligns strongly with recent findings of heart health providers (Taueetia-Su'a et al., 2026).

In a context in which many older patients (particularly Māori) do not have trust in the Western medical system, whakawhanaungatanga [building trust and connections] is critical for engagement (Komene et al., 2024). However, the current medical system is plagued with long waiting lists, short appointment times (10-15 min), and GP models of practice that do not prioritise continuity of care such that many patients must see any doctor available. While such government-led initiatives may seem logical if the aim is efficiencies and cutting costs, a medical system under such conditions fails to meet the health needs of many whānau who need to re/build trust through connection and meaningful relationships with their GP. The following quote from a Māori Kaumātua is representative of a commonly expressed concern:

> Yeah, they get 10 minutes, oh, got to get onto the next one, get onto the next one. … I try and avoid going to the doctor's if I have to because it's a time thing. I said, well, hang on, you didn't even look into my situation! (Māori Kaumātua)

With the constraints on the health system, some participants were disappointed in their GPs' tendency to prescribe medication rather than to explore lifestyle options, with a lack of follow-up common with so much staff turn-over. The following representative quotes are illustrative of such concerns:

> With that 15-minute gap, it doesn't leave you time to connect and so the first line generally seems to be medication and so it's not alternative things you can do, coming to Tai Chi, change your diet; it's being given a pill, and you've got to seek it out outside of your GP, like the chemist. Yeah, they don't offer the lifestyle interventions. (Māori Kaumātua)

> I think it's important to get good follow up. A lot of the doctors don't follow up. When you go to your GP, your own GP, it's good because they know your history, but just of late, I go to another doctor, I said, "you don't know anything about me". So I always try and get to my own GP because he knows my history, he knows if my blood pressure's good or not. But doctors that just fill in just for a time just really don't care, they're just a fill in. (Māori Kaumātua)

For many Māori Kaumātua and Pacific elders, the limited time "to connect" through an in-depth conversation during consultation, the lack of follow-up, and the tendency to be "given a pill" were felt deeply as medical professionals who "just don't care" about their patients.

With trust and connection so central to health care relationships, many participants spoke of their preference to go to a pharmacist instead of a GP because of the timelier and more relational approach offered:

> For the blood pressure thing, you can go to certain chemists too. I'd rather go to them. They are more help than trying to get in to see the doctor, and it's not their fault, it's what's happening. Totally not their

> fault. We've got a good doctor but yeah, it's just the 15-minute thing. So, I'd rather go to the chemist first. They are very, very helpful. If they think you need to go to the doctor, they'll refer you too. (Māori Kaumātua)

For some, relationships with their pharmacist are important in creating a more accessible and culturally safe environment to seek medical support. Thus, our findings provide further support for the important work of Hikaka and colleagues (2020, 2022) and Hutchings and colleagues (2025) that reveal the importance of culturally responsive, relational community pharmacy provisions for older Māori and other ethnic groups, including Pacific elders (also see Chiu et al., 2024; Ludeke et al., 2012).

As our research highlights, to address the significant past and ongoing inequities in cardiovascular health, local health providers (including specialists) would do well to prioritise whakawhanaungatanga (process of establishing relationships): taking the time and care to help rebuild trust in the medical system through meaningful relationships, connections and active power sharing (Curtis et al., 2025; Komene et al., 2024; Lacey et al., 2011; Wilson et al., 2021). Alongside prevention, early diagnosis and medical intervention and support will be critical to improving heart health and wellbeing. If a patient feels confident that they (or their family member) will be treated with respect, and their mana and dignity upheld in the process, they are more likely to seek early medical support. Creating culturally safe and respectful medical spaces, and reducing financial barriers to primary care, are important steps to improving access and engagement with heart health knowledge, support and treatment (Brewer et al., 2024; Taueetia-Su'a et al., 2026). The effects of such investments have the potential to contribute towards intergenerational change for whānau heart health and wellbeing (Oetzel et al., 2023, 2024), and thus, help address the "unfathomable inequity" in heart health in Aotearoa (Berning et al., 2025)

6. Conclusion: Toward healthy heart futures

Te Tairāwhiti is a remote and predominantly Māori region experiencing significant cardiovascular inequities alongside longstanding under-resourcing and limited access to specialist cardiac care. In such communities, prevention and early diagnosis are key to lowering mortality rates and improving quality of life. As our study reveals, qualitative methods with Māori and Pacific communities disproportionately impacted by cardiovascular disease are an important first step towards better understanding the ways in which these communities conceptualize and experience heart health, as well as some of the barriers to seeking medical advice and support. Creating culturally safe spaces to listen carefully to Māori and Pacific elders, we heard of the powerful effects of intergenerational experiences of heart disease, and how family members' experiences of cardiovascular disease and poor medical treatment causes feelings of fear and avoidance. Past and current experiences of discrimination and marginalization within the health system prevent many from seeking early medical treatment.

To reduce the rates and severity of cardiovascular disease, it is important that local health care providers recognize the damage that past trauma and discrimination within the medical system may be having on contemporary generations. We heard of the importance of GPs and medical staff building relationships and connecting with their patients and carefully listening to and respecting their lived experiences of heart health. Questions about family histories should be treated with care, acknowledging that such lines of inquiry may trigger trauma, stress, shame and fear that may prevent or delay seeking medical support in the future. Importantly, some participants are empowering themselves through knowledge from a range of sources (including lifestyle programmes offered by Iwi-led health providers) and finding strategies to pass on this information to their wider families. In so doing, Māori kaumātua and Pacific elders are playing a key role in interrupting intergenerational patterns of heart disease and cycles of loss, grief and fear. Arguably, there is the potential for health providers to work more closely, and in collaboration, with Māori kaumātua and Pacific elders to better understand their experiences, improve systems and processes, and to amplify their stories to improve heart health care and treatment for future generations.

Our research is specific to Te Tairāwhiti, a region with a predominantly Māori population and significant heart health inequities. While the findings cannot be simply generalized to other Indigenous communities across the country or world, there are broader lessons of relevance for Indigenous cardiovascular research and care in other settings. In particular, this paper encourages a shifting of attention beyond individual disease management and towards intergenerational knowledge, historical trauma, family relationships, trust, and Indigenous understandings of heart health. It also reveals the value in place-based and culturally responsive research collaborations with Indigenous communities and health providers for developing more nuanced understandings of heart health, treatment and care. We thus conclude by calling for more culturally safe and place-based heart health research in collaboration with Indigenous health providers, amplifying knowledge in, with and for their own communities.

CRediT authorship contribution statement

Holly Thorpe: Writing – review & editing, Writing – original draft, Supervision, Project administration, Methodology, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Oka Sanerivi:** Writing – review & editing, Methodology, Formal analysis, Data curation. **Hadyn Pomana:** Writing – review & editing, Methodology, Formal analysis, Data curation. **Patrick McHugh:** Writing – review & editing, Supervision, Methodology, Funding acquisition. **Andrew Lowe:** Writing – review & editing, Supervision, Funding acquisition, Conceptualization. **Fiona McBryde:** Writing – review & editing, Supervision, Funding acquisition, Conceptualization.

Ethics declaration

Written informed consent to take part in the study and to publish the article has been obtained from all participants or their legal representatives. The privacy rights of participants have been observed.

This study was performed in compliance with relevant laws, regulatory frameworks and guidelines where the research took place. This study was approved by the University of Waikato Human Research Ethics Committee (Health). (Approval No. HREC2024#51)

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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