

He Pūkenga Kōrero

*Rangatahi and sexually transmitted
infections in the Waikato*

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EXECUTIVE SUMMARY

This report presents the findings of a research study, He Pūkenga Kōrero: Rangatahi and Sexually Transmitted Infection in the Waikato.

Aim of the Research

The aim of the research was to generate an evidence base to inform the development of information resources to facilitate timely access for rangatahi Māori to effective STI testing and treatment, thereby improving their sexual and reproductive health and wellbeing.

Rationale

The priority population for the research focused on rangatahi who are most vulnerable to undetected and untreated STI, that is rangatahi who are either not in education, employment or training (NEET) or takataapui, aged 16-24, sexually active, and living in the wider Hamilton area. Statistics show that young Māori aged 16-25 years are over-represented in the national statistics for chlamydia and gonorrhoea. If left undiagnosed or untreated, these STI can have serious consequences, including infertility. Poor reproductive health is at odds with the aspirations of whānau, hapū, iwi and Māori communities for Pae Ora - flourishing future generations.

Methodology

Using a Kaupapa Māori approach, the development of the research project was informed by a review of relevant literature, interviews with STI service providers, and focus groups with 37 rangatahi NEET and takataapui.

Evidence Base

The literature review and interviews with service providers identified a systems health literacy approach to removing the barriers to STI testing and treatment for rangatahi NEET and takataapui (i.e. the priority population) as the best way forward.

An Evidence Base was generated with targeted actions that funders, STI service providers and the primary care sector can take to improve access for the priority population.

Key Findings

- Sooner, better access to STI testing and treatment for rangatahi NEET and takataapui can be achieved through collaboration with funders, DHB sexual health services, Family Planning, PHOs, GP medical centers and local sexual health promotion organisations.

- The health literacy of primary health care organisations delivering STI services should match the requirements of the priority population.
- Standardising access criteria and no cost or low cost STI-related appointments is key.
- Health professionals require professional development that includes cultural competency, understanding the determinants of poor sexual health, and providing information and resources tailored to the priority population.
- Culturally responsive comprehensive sexuality education in all schools helps build the health literacy of rangatahi and whānau for the future.
- IT resources should decrease rather than increase inequities between the priority population and other young people.
- Rangatahi NEET and takataapui value good sexual and reproductive health and want to stay STI-free.
- Rangatahi NEET and takataapui want to know when to get an STI test, where to go to get tested, how much it costs, the testing process, and what happens next.
- The cost of transport is a barrier to timely STI health care in the Waikato, particularly for rangatahi NEET and takataapui living in small towns and rural areas.

The Evidence Base is available via the Te Whāriki Takapou website: tewhariki.org.nz.

In summary, achieving better access to STI testing and treatment for rangatahi NEET and takataapui in the Waikato will require commitment to cross sectoral collaboration and comprehensive strategies at every level of the health system to address structural barriers to access for this priority population.

OVERVIEW OF REPORT

SECTION A: INTRODUCTION

This section provides an introduction to the research study, He Pūkenga Kōrero: Rangatahi and Sexually Transmitted Infections in the Waikato, including the research aim, rationale, scope, methodology, and analysis.

SECTION B: LITERATURE REVIEW

This section expands on the literature review introduced in the methods. It provides a review of relevant literature pertaining to Kaupapa Māori approaches to research; the New Zealand health policy context within which this research sits; Māori, fertility and STI and the key issues for priority populations; health equity as a national imperative; and the rationale for adopting a systems health literacy approach to STI prevention, testing and treatment for rangatahi. The section ends with a summary of the key issues identified.

SECTION C: FINDINGS - EVIDENCE BASE

This section presents the research findings in the form of a summarised version of the He Pūkenga Kōrero Evidence Base.

SECTION D: CONCLUSION

Finally, the conclusion section summarises and discusses the key findings of the research, and proposes recommendations for how the Evidence Base can best be used by STI funders and service providers to facilitate sooner, better access to STI testing and treatment for rangatahi NEET and takataapui in the Waikato.

SECTION A: INTRODUCTION

Background and rationale

This research project is concerned to improve access to STI prevention, testing and treatment for rangatahi in the Waikato. The burden of STI and their sequelae on rangatahi aged 15-25 years in the Waikato is unacceptable in terms of population health in general but more particularly the aspirations of whānau, hapū, iwi and communities for 'Pae Ora' - flourishing future generations.

In developing the proposal for this study in 2015, the research team consulted Maori and 'mainstream' sexual and reproductive health organisations in the Waikato about barriers and facilitators to rangatahi access to STI testing and treatment services. Organisations supported the need for improved access, particularly for rangatahi at greatest risk of poor sexual and reproductive health. Two consultation hui were held with rangatahi and rangatahi takataapui. The hui confirmed that as a result of a number of factors some rangatahi do not have access to accurate information about when and where to access STI testing and treatment services. It was also established at the proposal stage of the research process that evidence gaps exist in relation to organisation-level interventions that increase the uptake of STI testing and treatment among hard-to-reach and asymptomatic rangatahi and their sexual partners.

Aim

Initially, the aim of this study was to generate an evidence base which could be used to inform the development of STI information resources that would more effectively engage a priority population of rangatahi, and facilitate timely access to STI testing and treatment. During the research process, however, it became evident that access to health care for rangatahi, including sexual health care, is a complex issue. Ultimately, the barriers to access for this population are structural. Moreover, rangatahi are seemingly expected to navigate these barriers by themselves. Hence, the focus of the research shifted from the ability of rangatahi to engage with STI services, to STI services adopting a systems-level health literacy approach in order to improve access and treatment for rangatahi. The research aim was amended to reflect that shift and the aim of the study was to generate an evidence base to assist STI testing and treatment services to achieve sooner, better access to their services for a priority rangatahi population in the Waikato.

Scope of the research

He Pūkenga Kōrero set out to investigate the barriers and enablers to sooner, better STI

testing and treatment for young Māori people in the Waikato. The scope of the research was narrowed to focus on rangatahi who are most at risk of undiagnosed and untreated STI in the Waikato (see Priority population for research, below), and the most common STI affecting rangatahi in the Waikato: chlamydia and gonorrhoea. Due to budget limitations, access to HIV testing and treatment services was left out of the study, as were GP medical centres - arguably the biggest providers of STI testing and treatment services.

Priority population for research

This study focuses on rangatahi aged 16-24 (i.e. have not yet reached their 25th birthday) who are not in education, employment or training (NEET), are sexually active, and who live in the greater Hamilton area, and rangatahi who identify as takataapui, transgender or gender-fluid, are sexually active, and also live in the greater Hamilton area. The population was chosen based on: (a) studies that identify priority populations who are most vulnerable to STI in New Zealand; and (b) preliminary consultation that identified STI service providers as experiencing difficulty engaging with these rangatahi.

The Research Team were committed to ensuring that rangatahi takataapui were represented in the data collected. Research has found that takataapui, transgender and gender-fluid young people experience inconsistent or disrespectful treatment from health professionals (Human Rights Commission, 2008; Gender Minorities Aotearoa, 2016). It is our contention that STI services providers must address health equity for all rangatahi.

The rangatahi we sought to engage and give voice to in He Pūkenga Kōrero are among those identified as likely to have the poorest sexual and reproductive health in New Zealand. Despite the deficit discourse that accompanies young Māori in the health sector, a Kaupapa Māori critical lens identifies this priority population as a significant part of Māori communities whose sexual and reproductive health will shape the wellbeing of whānau, hapū, iwi and Māori communities in the future.

Methodology

This study is located within a Kaupapa Māori inquiry paradigm and employs a qualitative methodology. A key principle within Kaupapa Māori theory and research is transformation and in particular, transformative outcomes. A Kaupapa Māori approach to rangatahi sexual and reproductive health has the potential to transform outcomes for rangatahi, and also representations of rangatahi in the sexual and reproductive health sector. It is not uncommon for sexual and reproductive health policy and research to negatively represent rangatahi in terms of early onset of sexual initiation (Fenwicke & Purdie, 2000) and high rates of teenage pregnancy (Marie & Fergusson, 2011). These

views are not those of Māori communities; rather they are colonial representations of Māori (Pihama, 2010). Resisting the discourse that problematises rangatahi sexual and reproductive health creates space for Māori communities and rangatahi to engage with and work towards Māori understandings of good sexual and reproductive health and wellbeing.

Many of the key principles of Kaupapa Māori - e.g. whakapapa, whānau, Māori collectives, tino rangatiratanga, taonga tuku iho, te reo and tikanga Māori (Nepe, 1991; Pihama, 2001; Pohatu, 2004; Ratima, 2001; Smith, 1990; Smith, 1997) and its core values - e.g. whanaungatanga, manaaki tangata, aroha ki te tangata, kia tūpato (L. T. Smith, 2006) are consistent with the values and operating principles of the organisations who collaborated on He Pūkenga Kōrero. These principles and values have guided the research process and practice, as reflected in the methods (see below).

The factors that drive the decisions and actions that rangatahi Māori take about STI testing and treatment are complex. Qualitative research involves small numbers of participants and is context-sensitive, enabling the generation of in-depth and detailed data (Patton, 2002). Quite simply, it enables participants to tell their stories. The ecological nature of qualitative inquiry is consistent with the Kaupapa Māori principles employed on He Pūkenga Kōrero. The principle of tino rangatiratanga, for example, requires research findings to emerge from the views of research participants within their own lived realities. As well, principles such as taonga tuku iho and tikanga Māori require a methodological framework that enables understandings of the wider cultural and colonial context to inform interpretation of data.

Methods

Consultation and collaboration

He Pūkenga Kōrero was undertaken as a community-based collaboration between three organisations: Te Whāriki Takapou, a Kaupapa Māori sexual and reproductive health promotion organisation; Te Ahurei a Rangatahi, a Hamilton-based and iwi-responsive youth health provider; and Te Rākei Whakaehu, a Waikato-based network of Māori transgender people who provide advocacy, support and information. The collaboration, built on pre-existing relationships between the organisations (whanaungatanga), brought together the knowledge, skills, expertise and networks required to complete the project to a high cultural and research standard.

Another aspect of the collaboration was that three young Māori from within the collaborating organisations were mentored as community-based researchers (CBR). Each CBR held key roles in recruiting rangatahi, conducting Focus Groups and transcribing data, with the Lead CBR also involved in data analysis and dissemination of

the research. In addition, they received training in Kaupapa Māori research; STI testing and treatment processes; rangatahi safety protocols; interview technique; and transcribing and analysing data. In this way, while contributing to building capacity within the Māori community, empowering rangatahi and prioritising their voices and concerns, Te Whāriki Takapou also improved our own organisational health literacy.

An Expert Advisory Group, made up of experts in sexual health and Kaupapa Māori research from Te Whāriki Takapou, Te Ahurei a Rangatahi, and Te Rākei Whakaehu, as well as the Expert Advisor, Dr Leonie Pihama from Te Kotahi Research Institute at the University of Waikato, provided high-level advice and guidance throughout the duration of the project with regard to research design, data analysis, production of the Evidence Base, and reports and other forms of research dissemination.

In the formative stages of the project, a Rangatahi Advisory Group was established to help ensure that the aim, processes and outcomes of the research would achieve a good 'fit' with the needs and realities of the Māori community with whom the research was concerned, i.e., rangatahi NEET and takataapui. The Rangatahi Advisory Group comprised representatives of key organisations, including Te Kāhui Rangatahi (a Waikato-Tainui tribal rangatahi group that is recognised by the iwi as spokespeople for rangatahi), Te Ahurei a Rangatahi Leaders Advisory Group, and rangatahi from Te Rākei Whakaehu. A major benefit of having the Rangatahi Advisory Group was that its constituent members shared common characteristics with the identified priority population. The Group were therefore in a unique position to be able to provide the kind of detail required to optimise the planning and delivery of accessible STI testing and treatment services for young Māori who face multiple challenges in accessing health care

Literature review

A review of selected published and unpublished literature relating to the research was undertaken. A search strategy was developed by the Research Team with Expert Advisor input, to define the scope of the literature search (see [Literature Review](#) section for more detail). In addition, the Research Team was able to obtain relevant unpublished literature and non-identifiable client data from stakeholders, all of which contributed to a broader understanding of the context of sexual and reproductive health for rangatahi in the Waikato.

Ethical issues

Ethical approval for He Pūkenga Kōrero was granted by the Southern Health and Disability Ethics Committee on 15 January 2016. The key ethical issues for this research study were related to recruitment and interviewing of Rangatahi Focus Group participants. A recruitment strategy was developed collectively by the Research Team,

the Expert Advisory Group and Rangatahi Advisory Group. The risk around recruitment was mitigated by rangatahi participants being recruited by CBR with whom they already had a relationship through existing networks (whanaungatanga approach). CBR were supported in this process by Te Ahurei a Rangatahi and Te Rākei Whakaehu.

Potential risk factors for the Rangatahi Focus Groups pertained to interviewers being able to: maintain the safety and comfort of participants; maintain the anonymity of participants; and provide rangatahi participants with accurate information about STI testing and treatment for themselves and their partners.

In the first instance, the entire Research Team, including CBR, undertook a series of training wānanga. These were focused on: Kaupapa Māori research and its integral ethical principles; STI testing and treatment procedures (facilitated by Hamilton Sexual Health Services); rangatahi safety protocols related to suspected abuse and disclosure of abuse (facilitated by Rangatahi Safety Protocols facilitator, Rihi Te Nana); interviewing technique; and piloting the interview questions in a mock Focus Group.

In terms of maintaining the safety and comfort of the rangatahi participants, all aspects of the Focus Groups were carried out in a way that is consistent with tikanga Māori and Kaupapa Māori research principles, by culturally competent Māori Research Team members. No identifying information was collected that could link research data with particular individuals, thereby safeguarding the anonymity of participants in any study reporting. The team were fully aware that Focus Groups participants can be more comfortable discussing sensitive issues such as STI if the groups are organised into distinct cohorts, according to gender identity and sexual orientation. Hence, rangatahi were invited to attend the Focus Group of the gender cohort and sexual orientation cohort with which they self-identified. This was also relevant to protecting participant's anonymity, particularly takataapui participants. As well, both the CBR facilitator and their Research Team support member self-identified with the gender and sexual orientation of the participants they were interviewing.

Focus group recruitment

There were significant learnings for the Research Team with regard to the recruitment process. The initial goal was to recruit up to 50 rangatahi, spread relatively evenly between rangatahi tāne, wāhine and takataapui. Despite being briefed and having full acknowledgement of the difficulty of engaging rangatahi who are identified by the system as 'hard to reach', and despite carefully planned strategies to manage that difficulty, the Research Team had underestimated the reality of the task. Young Māori CBR recruited among their personal networks, from within their own communities and, in many cases, their own whānau. Even so, having recruited a particular cohort and arranged to pick

rangatahi up from their homes and transport them to the Focus Group venue, there was no guarantee that the rangatahi would be available or turn up on the day. As an example, one CBR had arranged to pick up 15 young tāne on the morning of his Focus Group. The night before, all 15 cancelled, leaving the CBR to scramble around the next morning to find replacements. The fact that he was able to recruit 12 rangatahi at short notice is a credit to his tenacity and the strength of his networks. It also highlights the somewhat unpredictable 'living life to the full' realities of rangatahi lives and, for researchers, the challenging reality of working with rangatahi!

The situation was no different for the other CBR; in fact, it was even more difficult to recruit rangatahi takataapui. Two rangatahi came to the first Takataapui Focus Group, from a potential 10 who had agreed to take part. When the CBR later contacted those who had not arrived to ask if they would attend a follow up Focus Group, all the rangatahi replied to the effect that, on reflection, they were not comfortable talking about sexual health in such a forum. This amounted to an issue of safety for these young people, and in this instance the Research Team were unable to bridge that gap. However, this scenario does serve as a valuable lesson in understanding the lived realities of rangatahi who identify as takataapui, trans or gender-fluid, and the challenges ahead for STI service providers delivering testing and treatment services.

Rangatahi focus groups

Focus group interviews were conducted with 37 rangatahi NEET and rangatahi takataapui in total and a great deal of planning was involved in the recruitment of the rangatahi. To ensure the safety and comfort of participants, each Focus Group session began with karakia and mihi, followed by a short summary of the research and Focus Group agenda. The rangatahi were informed of their rights as research participants and encouraged to ask questions. Food was provided for the rangatahi, both as manaakitanga and also to put them at their ease. Interviewing commenced naturally during the meal in a relaxed fashion. The safety of the CBR was ensured by the presence of a Research Team support person throughout the process and, as recommended by the Rangatahi Safety Protocols facilitator, a safety and disclosure management plan had been formulated should the need arise. All research questions asked about STI prevention, testing and treatment were posed as general questions, e.g.: 'What do your mates say about using condoms? (Positive, negative, other)'; 'Do young people talk with their partner about using a condom? What happens if one person wants to use a condom and one doesn't? Who starts the discussion about using a condom?' In this way, sharing information of a personal nature about sexual health was avoided.

Lastly, while the Focus Groups provided the Research Team with a better understanding of rangatahi knowledge of STI prevention, testing and treatment, there was also an ethical

responsibility upon the Research Team to ensure that within the interviewing process rangatahi participants were provided with accurate information about STIs and STI testing and treatment, including contact details for local services providing low cost and no cost STI testing, treatment and condoms. Researchers learned there were no New Zealand-produced video clips for young people that discussed when and where to access STI testing and treatment services. Consequently, researchers arranged for a 35 minute STI education session to be delivered to the participants of each cohort by an experienced young Māori sexual health promoter. Participants were able to ask questions freely, and were provided with information pamphlets and cards (for Family Planning and Hamilton Sexual Health Services), free condoms and lube, and samples of 'on-the-spot' STI self-swabs and urine sample kits to examine and take away with them. All participants received a koha at the close of the Focus Groups.

STI provider organisation interviews

Face-to-face, semi-structured interviews were conducted with two STI provider organisations. These interviews were important, not just from the perspective that STI testing and treatment providers are well positioned to provide insights into the service provision context, but also because any potential for transformative change to STI testing and treatment access for rangatahi NEET and takataapui relied on their support and assistance to make a difference. Recruitment of the participating organisations was facilitated through Te Whāriki Takapou's networks. Formal letters were sent to the relevant organisations explaining the aim, rationale and objectives of the research, and inviting the organisation to propose the most appropriate clinical personnel to consider participating in an interview, at a time and place of their choosing. A copy of the interview prompts was sent to participants in advance of the interviews. Each interview took approximately one hour and the research team provided snacks.

Analysis

The data collected through Focus Groups and STI Provider Interviews was transcribed by the lead interviewer for each cohort - Providers, Rangatahi Tāne, Rangatahi Wāhine and Rangatahi Takataapui, and analysed thematically (Patton, 2002), that is, inductive coding of data was undertaken which involved labelling and categorising the data into key areas of interest. Through the coding process, general patterns were identified in the data which gave rise to themes as the data was interpreted. This 'bottom-up' approach to identifying themes and patterns, grounded in the knowledge and experiences of STI services and rangatahi, was consistent with the research study's Kaupapa Māori approach. Data was classified by two researchers to enable analytical triangulation; that is, the two researchers classified the data separately, then the codes were compared and discussed.

Hui

Hui were an important feature of the research project, both in terms of honoring the collaborative nature of the work and also to facilitate dissemination of the research findings. Once the data analysis phase was completed and an initial draft of the Evidence Base formulated, hui were held with the collaborating organisations. Based on their feedback and input the draft Evidence Base was revised, before being presented at a hui of community stakeholders. Once again, valuable feedback enabled the Research Team to refine the Evidence Base so that it aligns with current policy directions, whilst proposing innovative strategies for STI funders and service providers that have the potential to improve rangatahi access to sooner, better STI testing and treatment in the Waikato.

Throughout the project's 18-month duration, members of the Research Team attended bi-monthly regional SRH promotion network hui, as well as national SRH promotion network hui to promote the research.

SECTION B: LITERATURE REVIEW

Introduction

This section of the report provides a review of literature that highlights key issues associated with the interface between rangatahi Māori, health literacy and STI testing and treatment. Beginning with a section on Health policy in New Zealand, the review moves on to Māori, fertility and STIs, with a focus on chlamydia and gonorrhoea, the two most prevalent STIs in New Zealand. The review then turns to relevant aspects of Kaupapa Māori theory and research and the importance of rangatahi voice. Following that is a section on health equity that leads into the rationale for a health literacy approach to the research topic, then a section on health literacy as it relates to the equitable provision of health care for Māori, with a particular focus on a systems approach to health literacy. The review concludes with a summary of key themes emerging from the literature that formed the basis of inquiry for the Rangatahi Focus Group and Stakeholder interviews.

Scope of literature review

Literature for this review has been sourced from a variety of databases and websites, including ProQuest, EBSCOhost, Te Puna, Index NZ, Medline, ERIC, NZCER Journals Online and Google Scholar. Key search terms included combinations of the following: health literacy, Māori, New Zealand, Australia, indigenous, health interventions, youth, rangatahi, STI, chlamydia, gonorrhoea, secondary school students, school leavers, sexual health clinic, STI clinic, primary health, health promotion, and health education.

A breadth of scholarship on Kaupapa Māori has been developed over the last three decades. Rather than provide an overview of Kaupapa Māori theory, however, this review will focus on selected literature that highlights key aspects and principles of Kaupapa Māori theory and research to contextualise the issues that impact rangatahi, their whānau and communities in relation to STI. In particular, the cultural values encapsulated in Tikanga Māori, the principles of Rangatiratanga and Transformation, and the cultural imperative of whānau and community aspirations for Tino Rangatiratanga will be highlighted.

It is argued in this study that organizational health literacy is a key factor in the high incidence of undiagnosed and untreated STI within rangatahi communities in the Waikato. In selecting health literacy literature for review, more recent studies (publication dates 2010–2016) that identify health literacy as a systems issue rather than simply an issue of individual responsibility were considered. Due to a dearth of literature pertaining to health literacy and rangatahi, the search was broadened to include publications on health literacy and young people in Indigenous Australian contexts. Of the STI literature relating to Māori and rangatahi, only the more recent studies

(publication dates 2012–2016) were considered for review.

Kaupapa Maori

At its simplest, Kaupapa Māori can be defined as what is ‘natural’ or ‘normal’ about being Māori. However, the complexity of that ‘normality’ is reflected in Nepe’s (1991, p.4, cited in Pihama, 2016, p. 230) explanation of Kaupapa Māori as referring to a ‘body of knowledge accumulated by the experiences through history of the Māori people’. A Kaupapa Māori theoretical approach to research provides an appropriate framework, informed by Māori knowledge and cultural values, within which to explore our experiences and practices as Māori.

Proponents of Kaupapa Māori theory assert that any theoretical framework must be located within Māori experiences and practices, and must be defined and controlled by Māori (Rangatiratanga) (Pihama, 2010; G.H. Smith, 1997; L. T. Smith, 1999). This is important because control is closely aligned to power (Moewaka Barnes, 2000; G. H. Smith, 1997), and power has been and continues to be the domain of dominant colonising forces. Māori having power and control over research about Māori and how we are represented in that research relates directly to Tino Rangatiratanga. Moreover, Māori ownership of the process and practice of research is critical if the goal is to make a positive difference to Māori health and wellbeing, i.e., to be transformative for Māori communities (L. T. Smith, 1999).

Kaupapa Māori theory and research has grown out of Māori struggles for self-determination and autonomy in the face of dominant ideologies that have not served the interests of Māori. It has evolved, and continues to evolve from whānau, hapū, iwi and community aspirations; the same aspirations that brought into being collective Māori movements of resistance and empowerment, such as Te Kōhanga Reo and Kura Kaupapa Māori (Pihama, 2010; L. T. Smith, 1999). In challenging dominant norms and assumptions, Kaupapa Māori theory and research inherently posits the importance of transformative systems change (Lee-Penehira, 2015).

Kaupapa Māori theory, as applied to this study, can be understood as a Māori analysis of the lived realities of rangatahi and whānau in the context of sexual health. In seeking to understand and represent Māori as Māori, and as ‘māori’ (the norm) rather than ‘a problem’ (Reid & Robson, 2006), Kaupapa Māori analysis incorporates a structural analysis of existing power structures, including the historical, political, social and economic determinants of Māori wellbeing (Pihama, 1993). Kaupapa Māori theory is posited as a form of resistance to colonial dominance (Pihama, 2010; G. H. Smith, 1997; Tiakiwai, 2001) and a valid basis from which to research and produce transformative interventions that validate Mātauranga Māori (L. T. Smith, 1999). This de-colonising aspect inherent in Kaupapa Māori is critical to enabling Māori to achieve Tino

Rangatiratanga (Moewaka Barnes, 2000; G. H. Smith, 1997).

A Kaupapa Māori-based approach to improving rangatahi STI prevention, testing and treatment can contribute toward a broader strategy for decolonising Māori sexual and reproductive health and wellbeing (Lee-Penehira, 2015). When being Māori is assumed to be the norm rather than the 'other' (L. T. Smith, 1999), then Māori knowledge, culture and language are viewed as central to the research methodology (Pihama, 2016). Drawing on Mātauranga Māori enables us to create culturally appropriate prevention strategies, interventions and policy that are likely to result in better health outcomes for Māori (Lee-Penehira, 2015; Te Whariki Takapou, 2017).

Rangatahi 'voice'

An important element of a Kaupapa Māori based research approach is the centralising of Māori articulations of experiences, or participant voice (Lee-Penehira, 2015; G. H. Smith, 1992; Tiakiwai, 2001). Research about rangatahi has seldom included rangatahi voices and perspectives (Tuhiwai-Smith, Smith, Boler, Kempton, Ormond, Cheuh & Waetford, 2002; Waetford, 2008). This can be seen as the perpetuation of a long history of hapū, iwi and whānau being positioned as objects of research, while their voices are silenced, marginalised and excluded from research contexts (L. T. Smith, 1999). Centralising the knowledge and perspectives shared by participants – in this case, rangatahi, validates their experiences and can render Kaupapa Māori research as an effective site of empowerment for young Māori (Tiakiwai, 2001).

In a study on the knowledge, attitudes and behavior of young Māori women in relation to sexual health, Waetford (2008) argues that for adolescent sexual health programmes and services to be developed, implemented and evaluated successfully, the participation of Māori youth is crucial. As noted by Tuhiwai-Smith and colleagues (2002), the voices of young people are too often discounted at decision-making and policy levels. The issue is also highlighted in a research study (Green & Waiti, 2014) in which rangatahi shared their knowledge and preferences in relation to design characteristics that would make a new national STI website more appealing and user-friendly for rangatahi. Incorporating the perspectives of rangatahi (no longer in school, living in urban and semi-urban areas) in the planning and development stages of initiatives aimed at their peer group was considered a critical feature of the research methodology (Green & Waiti, 2014).

Sexual and reproductive health policy in New Zealand

Four policies provide the framework for sexual and reproductive health services in New Zealand, including STI prevention and treatment services in the primary care sector. The Sexual and Reproductive Health Strategy: Phase One (Ministry of Health, 2001) and the

HIV / AIDS Action Plan: Sexual and Reproductive Health Strategy (Ministry of Health, 2003) are supported by an implementation document entitled Sexual and Reproductive Health: A Resource Book for New Zealand Health Care Organisations. All sexual and reproductive health organisations delivering STI testing and treatment services are expected to align their governance and operational functions to ensure that Māori individuals and collectives receive culturally responsive services, services match Māori priorities, disparities are reduced, and Māori health outcomes improve. The fourth policy, Te Korowai Oranga: Māori health strategy (Ministry of Health, 2003; Ministry of Health, 2014) was developed to guide all 'mainstream' and Māori public health organisations in New Zealand so that the government's objectives for Māori health are met. A task for the research team was to ensure that the research aims and the design of the study were situated in the context of these policies and that the outcomes of the research, at a minimum, addressed policy goals. That is, access to STI testing and treatment for rangatahi will be enhanced because services are culturally responsive, resources match Māori health priorities, and health professionals implement the Māori Health Strategy: Pathways to Action, in particular Pathways 3: 'Effective health and disability services. This pathway acknowledges the need for timely, high-quality, effective and culturally appropriate health and disability services for Māori as consumers of health services'; and 4 'Working across sectors: Everyone at all levels of the health system and wider social sector must work together to improve Māori health' (Ministry of Health, 2014).

Māori, fertility and STI

STI infection rates in New Zealand are considered to be among the worst in the OECD (Terry, Braun & Farvid, 2012). Chlamydia is the most commonly reported STI in New Zealand (ESR, 2011), with a prevalence of between 2% to 12%, depending on geographical location, age, gender, ethnicity, and the setting where testing occurs (Morgan, 2013). New Zealand has one of the highest rates of chlamydia in the developed world – four times the incidence of Australia or the UK, and twice that of the USA. National rates for gonorrhoea, while lower than US rates, are roughly twice the national rates in Australia (STI Surveillance Team, 2011, cited in Terry et al., 2012).

Notwithstanding significant gaps in currently reported surveillance data (Morgan, 2013), available data along with a small number of research studies indicate that Māori and Pacific peoples, as well as young people aged 15-25 years are over-represented in the statistics for chlamydia and gonorrhoea (Ekeroma, Pandit, Bartley, Ikenasio-Thorpe & Thompson, 2012; ESR, 2013; Morgan, 2013; Rose, Bromhead, Lawton, Zhang, Stanley & Baker, et al., 2012; Terry et al., 2012). This is borne out in the Waikato, where one in four young people are Māori and chlamydia and gonorrhoea rates are among the highest in the country. Regional STI data shows wide inequalities in the burden of chlamydia and gonorrhoea for both young Māori men and women aged 16-25 years (ESR, 2013).

STI and sequelae

The health significance of infections like chlamydia and gonorrhoea is magnified by their consequences. Bacterial STI can have long-term, and sometimes permanent, impacts on reproductive health (Terry et al., 2012). There is strong evidence internationally that links undiagnosed and untreated chlamydia and gonorrhoea in females with potentially preventable reproductive problems such as endometritis, ectopic pregnancy, pelvic inflammatory disease (PID), and associated infertility (Morgan, 2013; NZSHS, 2014). Epididymitis in men up to 35 years of age is commonly caused by chlamydia or gonorrhoea, and there are studies linking the condition to male infertility (Morgan, 2013, p. 12).

Chlamydia and gonorrhoea are a significant issue for Māori presenting for antenatal care, with Māori having the highest number of STI at the time of screening (10.3% Māori vs. 4.7% Pākehā) (Ekeroma et al., 2012). Undiagnosed and untreated chlamydia and gonorrhoea during pregnancy is associated with adverse outcomes for mother and baby, including preterm delivery, miscarriage, spontaneous abortion, and neonatal infections (Morgan, 2013; NZSHS, 2014), premature rupture of membranes, stillbirths, small for gestational age births, amnionitis, intrapartum fever, postpartum endometritis, and can also pose risks for newborns of contracting pneumonia and conjunctivitis through vaginal infection at birth (Ekeroma et al., 2012). Chlamydia and gonorrhoea are also associated with preventable subfertility, anogenital cancers, and transmission of HIV. Significantly, in approximately 80% of women and 50% of men, chlamydia infections are asymptomatic, meaning there are no clinically apparent symptoms. This creates a major issue in terms of detection and early treatment of the infection (Morgan, 2013).

It is estimated that in 2015, young people aged 15-24 years made up almost 20 percent of the overall Māori population (Statistics New Zealand, 2016). That number is projected to grow as the number of Māori younger than 15 years (currently around one-third of the Māori population) continues to grow (Statistics New Zealand, 2013). Given that young people and Māori are among the populations 'overrepresented' in national statistics for chlamydia and gonorrhoea, and that young Māori aged 15-24 make up a sizeable proportion of the Māori population, the links being drawn between untreated STI and potential infertility are of considerable concern.

In connection with Māori fertility, Lee-Penehira (2015) notes that whakapapa or identity is one of the most fundamental aspects of Māori health and wellbeing. STI prevention is essential to the maintenance of whakapapa and the overall health status of the Māori community.

Ethnic disparities in STI rates are not unique to New Zealand, with similarly higher rates

of chlamydia infection recorded for Indigenous populations in the United States, Australia and Canada (Rose et al., 2012). Ethnic disparities in the detection of sexually transmitted infection are thought to most likely reflect socio-economic factors and issues relating to access to health services (Rose, et al., 2012).

It is argued (Health Select Committee, 2013) that the research and policy focus on individual risk as an explanation for ethnic disparities masks the impact that the social determinants of health have upon the sexual and reproductive health of young people, and Māori and Pacific communities.^[11] It has been suggested that STI inequalities for rangatahi are due to multiple factors, including lack of access to information – particularly information about the asymptomatic nature of STI, and late testing or incomplete treatment, which are a result of structural and other determinants (Rose et al., 2012; Terry et al., 2012).

In connection with this, Morgan (2013) identifies the barriers to accessing STI testing and treatment for rangatahi as being primarily structural – e.g. lack of nearby services, lack of transport, and prescription costs, particularly for those living in rural or high deprivation areas. On a broader scale, however, inequality in wages, wealth and the distribution of resources between Māori and other New Zealanders contribute to intergenerational disadvantage for Māori whānau and communities. Consequently, some rangatahi are unable to access important health information or STI services (Robson, Purdie, Simmonds, Waa, Brownlee & Rameka, 2015).

A study that sought to develop a Kaupapa Māori model of resistance and wellbeing in relation to Māori sexual and reproductive health and STI prevention, Lee-Penehira (2015) advocates whānau being empowered with knowledge as a basis for improved Māori sexual health and wellbeing. In order to be empowered, however, whānau – including rangatahi – need to have access to ‘quality information and advice, necessary resources, healthy living, [and] a sense of personal and collective self-determination’ (Durie, 2009, p. 2, cited in Lee-Penehira, 2015).

It has been argued that sustained high rates of STIs among young people and Māori in particular indicates the need for new, evidence-based approaches to sexual and reproductive health. Importantly, given the key determinants of poor sexual health are socio-economic and mostly lie outside of the health sector, realising the goal of empowered whānau requires substantial policy alignment and funding across multiple sectors of government (KPMG, 2013).

Health equity

Despite a stated commitment to achieving equitable health care for Māori (Ministry of

Health, 2014, 2015b), there are numerous inequitable health outcomes currently experienced by Māori compared to other New Zealanders. The perpetuation of inequities in the sexual health outcomes of young Māori has been framed as a ‘denial of their right to make informed decisions about their own sexual and reproductive wellbeing’ (Lawton, Makowharemahihi, Cram, Robson & Ngata, 2016, p. 53) and therefore as impacting on the ability of young Māori to achieve tino rangatiratanga.

The issue has been addressed in the publication *Equity of Health Care for Māori: A Framework* (Ministry of Health, 2014). The purpose of the framework is to guide health practitioners, health organisations and the health system to take actions for more equitable outcomes for Māori, based around three key areas: Leadership (champion the provision of high quality healthcare that delivers equitable health outcomes for Māori), Knowledge (attain knowledge to monitor progress towards achieving health equity for Māori), and Commitment (reconfigure services to deliver high quality health care that meets the needs and aspirations of Māori.).

Rationale for health literacy approach

In the context of this research project there are three perspectives on the health literacy of rangatahi in the literature: the first is a deficit framing of young Māori (aged 16-24) as having ‘particularly poor health literacy’ (Ministry of Health, 2010); the second is an intentionally non-deficit framing of rangatahi as having ‘high health literacy needs’ (Lawton et al., 2016); and the third is the poor health literacy of health organisations and health professionals with regard to tailoring policy, services and programmes that reduce barriers to timely, affordable and safe sexual and reproductive health services for rangatahi (Jones et al, 2015; Lambert et al., 2014).

This study focuses on the poor health literacy of STI organisations rather than the health literacy of rangatahi. The reason for this is that STI testing and treatment services that were part of this study had already embarked upon assessing the health literacy of their organisations and aligning workforce training to achieving new organisational health literacy goals. Moreover, the Ministry of Health recently produced a number of organisational health literacy resources designed to support services to tailor publicity, websites, health resources, and professional development so that patients are better able to make informed and appropriate health decisions (Ministry of Health, 2010).

There may be multiple social barriers that prevent the uptake of health information by Māori under 25 years, for example, poverty related to low income and the complicated nature of many young peoples’ lives, both of which can be overwhelming and may take precedence over health issues. However, if we take Jones and colleagues’ (2015, p. 6) view of health literacy as “a complex interaction between the demands of the health system and the skills of those engaged with that system”, it is clear that health professionals and

organisations play a key role in the health literacy of rangatahi. Systemic barriers that impact on rangatahi health literacy include a lack of safe and affordable access to health services; the 'patient in, patient out' service delivery model; and the overall problematisation of Māori people and Māori health by the dominant culture (Lambert, Luke, Downey, Crengle, Kelaher, Reid & Smylie, 2014).

An example of systemic barriers to health literacy for Māori is offered by Lawton and colleagues' (2016) study on access to contraception for teenage Māori mothers. They found that most of the young mothers who participated in the research had actively sought contraception and/or advice before and after becoming pregnant. However, contraception uptake was compromised by a lack of information, negative side effects, and limited follow up by health professionals. Many of the young women experienced clinical and service delays, financial barriers, and a lack of integrated care between midwives and other primary care services (Lawton et al., 2016).

As highlighted in the literature, health professionals have a limited understanding of health literacy, and of the consequences of low health literacy, particularly for Indigenous patients (Lambert et al., 2014). This lack of understanding, combined with cultural, social and structural barriers, limits the degree to which health professionals are able to improve their Indigenous patients' health literacy skills (Lambert et al., 2014). Very few health professionals report having received any training in education or health literacy approaches (Jones et al., 2015), including the development of information resources (Witt & Barnett, 2012). Health literacy training that includes cultural competency (Jones et al., 2015; Workbase, 2013; Pitama, Cave, Huria, Lacey, Cuddy & Frizelle, 2012), developing accessible information resources that are tailored to populations with high health literacy needs, and minimising system barriers, such as time constraints on clinician-patient interactions and over-medicalised language, is imperative for health professionals (Lambert et al., 2014).

In connection with developing accessible information resources, a study on asthma health literacy for Māori (Jones et al., 2015) found that particularly in contexts where the focus is largely on medication compliance, GPs rely heavily on face-to-face verbal communication and rarely use pictures, audio-visual aids and models or internet technology.

In their study on access to contraception for Māori teenage mothers, Lawton and colleagues (2016) found that in most cases there was a lack of seamless care, integration and navigation along the maternity care pathway. It is health practitioners' responsibility to ensure that young Māori women fully understand how contraception works; in many cases, however, while advice might have been provided, there was no follow up to ensure that the young women had initiated or were managing their contraception. The study highlighted that for young women aged under 20, decisions relating to health care are

often impacted by limited financial resources. For the young Māori mothers in the study, the cost of contraception and associated health services created inequities in access to contraception care (Lawton et al., 2016).

A number of recent studies (Crengle et al., 2014; Jones et al., 2015) adopt a strength-based 'systems approach' to health literacy, rather than perpetuate the notion of 'low' or 'poor' health literacy underpinned by the discourse of 'individual blame and deficit' (Hunter & Franken, 2012, p. 26). Within a systems approach to health literacy, the objective becomes more about *building* the health literacy of organisations in order to *reduce* the demands on people and communities (Hunter & Franken, 2012).

Systems approach to health literacy

Some recent New Zealand studies (e.g. Jones et al., 2015; Ministry of Health, 2015a; 2015b; Walsh et al., 2015) resonate with international research that calls for a stronger focus on health literacy as a 'dynamic systems issue' (Jones et al., 2015), i.e. how health systems, health care providers and health practitioners can support consumers to better access and understand health services. In Health Literacy Review: A Guide (Ministry of Health, 2015a), the Ministry takes a provider-focused approach to improving health literacy, outlining a process of internal review that will assist organisations to gain a better understanding of the health literacy demands created ⁽¹⁾_(S) by a health service and how they affect consumers and families.

Drawing on international best practice and tailored for the New Zealand setting, the guide proposes 'Six Dimensions of a Health Literate Organisation.' These include:

1. **Leadership and management** – How is health literacy an organisational value, part of the culture and core business of an organisation or service? How is it reflected in strategic and operational plans?
2. **Consumer involvement** - How are consumers involved in designing, developing and evaluating the organisation's values, vision, structure and service delivery?
3. **Workforce** - How does the organisation encourage and support the health workforce to develop effective health literacy practices? Has it identified the workforce's needs for health literacy development and capacity? Has the organisation's health literacy performance been evaluated?
4. **Meeting the needs of the population** - How does service delivery make sure that consumers with low health literacy are able to participate effectively in their care and have their health literacy needs identified and met (without experiencing any stigma or being labelled as having low health literacy)? How is meeting the needs of the population monitored?
5. **Access and navigation** - How easy is it for consumers to find and engage with appropriate and timely health and related services? How are consumers helped to

find and engage with these services? How well are services coordinated and are services streamlined where possible?

6. **Communication** - How are information needs identified? How is information shared with consumers in ways that improve health literacy? How is information developed with consumers and evaluated?

(Ministry of Health, 2015a, cited in Walsh et al., 2015).

The six dimension of health literate organisations are of high relevance to this research project's focus on rangatahi and STIs. Also important is the need for evidence-informed, across sector policy that addresses the determinants of health that limit health literacy. Therefore, according to Witt and Barnett (2012), health literacy might best be regarded as a continuum, with the individual acquisition of information at one point; moving through stages of empowerment via acquisition of individual and community health literacy; and on to systems that improve organisational and workforce health literacy where the needs of populations are addressed (Witt & Barnett, 2012).

The Ministry of Health (2010) acknowledges that achieving any significant improvement in the health literacy of New Zealanders will require a collective effort from government agencies, schools and the health care system. However, it also identifies that many leaders and health practitioners are not familiar with research and developments in thinking about health literacy (Ministry of Health, 2015a). Perhaps in recognition of this fact, 'A Framework for Health Literacy' (Ministry of Health, 2015b) calls for a 'culture shift' within the health system, health organisations and the health workforce towards a more 'health-literate' health system. The rationale for the development of this framework is two-fold: on the one hand it is driven by a commitment to health equity – the notion that everyone living in New Zealand should be able to live well and keep well; and on the other it seeks to reduce health costs (Ministry of Health 2015b; Walsh et al., 2015).

Walsh and colleagues (2015) cite international research that emphatically states the key responsibility in lifting health literacy levels lies with health professionals. In New Zealand, it is acknowledged that health literacy should not depend on the skills of the individual patient and whānau alone. Health organisations and staff have a key role in whether patients, and their whānau, feel empowered or disempowered with regard to their self-care and management of their health (Signal, Martin, Cram & Robson, 2008; Walsh et al., 2015).

Summary of key issues

Rates of chlamydia and gonorrhoea in New Zealand are among the highest in the developed world, with wide inequalities in the burden of these two STI for young Māori men and women aged 15-25 years. The serious consequences of untreated or recurrent STIs, including reproductive problems and infertility, are incompatible with Māori

community aspirations for flourishing future generations.

They are also out of step with New Zealand SRH policy, which, requires all organisations that provide STI testing and treatment to reduce disparities, improve Māori health outcomes, and deliver culturally responsive services that match the needs and priorities of Māori consumers. In the context of He Pūkenga Kōrero, STI service organisations are expected to reconfigure their policy, services and programmes to deliver high quality healthcare that meets the needs and aspirations of rangatahi NEET and takataapui, and their sexual partners; and reduce the barriers to timely, affordable and safe services so that rangatahi feel empowered to make informed decisions about their sexual and reproductive well-being.

Empowering rangatahi and their whānau is a critical aspect of their right to self-determination over their sexual health. In order to feel empowered, however, rangatahi need access to quality information and advice, appropriate resources, a good standard of living, and to feel a sense of control over managing their health. Social barriers, such as poverty and the complicated nature of their lived realities, can prevent the uptake of health information by rangatahi NEET and takataapui, while systemic barriers, such as lack of safe, affordable access to culturally responsive health services, further hinders access for these rangatahi. Even if they were able to access an STI service, rangatahi are likely to experience a lack of seamless care across the health system.

Health literacy is a significant social determinant of health, and in order to support rangatahi NEET and takataapui to better access and understand health services, our health system, health care providers and health professionals need to improve their own health literacy by: committing to organisational health literacy as part of their culture and core business; involving consumers (rangatahi) in the design, implementation and evaluation of the organisation - values, vision structure - and its services; meeting the needs of the population (rangatahi NEET and takataapui); facilitating ease of access and navigation; and improving communication.

Good organisational health literacy also requires a well trained workforce. Identified training needs for SRH organisations are: a better understanding of the concept of health literacy; cultural competency; and how to develop accessible information resources that are tailored to populations with high needs (rangatahi NEET and takataapui) and matched to their level of health literacy.

Within a systems approach to health literacy, achieving a significant improvement in the health literacy of rangatahi NEET and takataapui will require the government to implement evidence-informed, across sector policy that addresses structural barriers, such as the determinants of health, that limit health literacy, and a commitment from

government agencies, schools and the health care system to a collective effort to achieving sooner, better access to STI testing and treatment for rangatahi NEET and takataapui.

SECTION C: FINDINGS - EVIDENCE BASE

This section presents the findings of the research as a modified version of He Pūkenga Kōrero Evidence Base available on Te Whāriki Takapou website.

Introduction

He Pūkenga Kōrero Evidence Base is an online information resource intended for SRH service funders, and STI testing and treatment providers. The aim of the Evidence Base is to support STI testing and treatment providers to reorient their services so that rangatahi access to their services, in particularly rangatahi NEET and takataapui access, is sooner and better. The Evidence Base consists of a series of statements. These are targeted actions that can be taken by funders and STI service providers to improve access to services for priority rangatahi in the Waikato. The statements have been formulated based on key findings from the research.

The online Evidence Base is organised into three sections or ‘tiers’:

Tier 1 - STI Policy and Funding

Tier 2 - STI Service Providers

Tier 3 - Rangatahi NEET, takataapui and STI

Each tier follows a similar format:

- Introduction;
- A series of evidence-based statements – actions that can be taken to improve early access to STI testing and treatment for rangatahi NEET and takataapui;
- Each statement has a rationale, which has been informed by the literature and interviews;
- Each statement has supporting quotes, taken from the STI service provider interviews and rangatahi focus group interviews;
- Statements have full references for citations.

The body of information collated in the Evidence Base has been summarised in the following section, and constitutes the findings of the He Pūkenga Kōrero research. The Evidence Base is currently live online and can be accessed via the Te Whāriki Takapou website: tewhariki.org.nz

Tier 1 - STI Policy and funding

Introduction

Current STI policy is derived from four Ministry of Health documents; *The Sexual and Reproductive Health Strategy: Phase One* (Ministry of Health, 2001), *Sexual and Reproductive Health: A Resource Book for New Zealand Health Care Organisations* (Ministry of Health, 2003), and the HIV/AIDS Action Plan (Ministry of Health, 2003). Overlooked by service providers is *He Korowai Oranga: Māori Health Strategy* (Ministry of Health, 2002), a key policy for all health and disability services, including STI service providers.

While an update of sexual and reproductive health policy is underway now, current policy goals are nonetheless helpful in terms of:

- supporting funders and STI service providers to use an equity lens to ensure STI services decrease rather than increase health inequities;
- promoting priority access to STI services for ‘at risk’ populations, i.e. rangatahi NEET and takataapui;
- advocating for young Māori who do not have ready access to services, i.e. rangatahi NEET and takataapui;
- encouraging STI service providers to adopt organisational health literacy approaches in the planning and delivery of services and information resources;
- incorporating He Korowai Oranga: Māori Health Strategy health systems guide to improving Māori health and realising Pae Ora – healthy Māori futures.

Evidence based statements

1. ‘Priority Population’ approach

New Zealand has one of the highest rates of chlamydia in the developed world and rates for gonorrhoea are approximately twice that of Australia and the UK (STI Surveillance Team, 2011, cited in Terry, Braun & Farvid, 2012). Of concern is the evidence indicating the high prevalence of chlamydia and gonorrhoea among young Māori aged 16-24 (Ekeroma, Pandit, Bartley, Ikenasio-Thorpe, & Thompson, 2012; ESR, 2013; Morgan, 2013). Untreated and reoccurring STI create an increased risk of infection and infertility among young people (Morgan, 2013). Those who are particularly vulnerable are rangatahi NEET and takataapui from high deprivation areas of the Waikato for whom access to the internet, mobile phones, the cost of transport, doctor visits and prescription costs may be prohibitive (Robson et al., 2015). Achieving equitable STI outcomes for

rangatahi NEET and takataapui requires funders and STI service providers to adopt a targeted, priority population approach alongside universal approaches.

The funding model is complex. A degree of complexity is required to deliver services to priority groups and to provide universal coverage. [However] the complexity of the SRH sector does not appear to be strategically driven (KPMG, 2013).

The strategy is very clearly saying 'Improve rural access' and 'Improve equity for Māori'; it's just that they're saying there's no money for it. [In our strategic framework] we're looking at commitment from policy and decision makers to assist us with . . . improving sexual and reproductive health equity with a focus on gender and ethnicity.

2. Primary care alliances to improve access and care

The new Youth Systems Level Measures Framework that focuses on youth access to and utilisation of youth-appropriate health services requires DHB-funded primary care services to report across one or more youth health domains. One of the five domains is that young people aged 15 – 24 years manage their sexual and reproductive health safely and receive youth-friendly care in order to improve chlamydia outcomes. The opportunity exists for all STI service providers in the Waikato, regardless of the source of their funding, to form an alliance that identifies shared goals and addresses barriers experienced by rangatahi NEET and takataapui.

Research shows that rangatahi commonly experience a lack of seamless care, integration and navigation (Lawton, Makowharemahihi, Cram, Robson, & Ngata, 2016). An alliance could provide the basis for standardising 'seamless care' across every stage along the care pathway. This is particularly important for rangatahi NEET and takataapui, but is also likely to be true for other young people: from rangatahi accessing testing services; to being tested; if test is positive, their sexual partner or partners being notified; both the rangatahi and their partner/s receiving treatment; both rangatahi and their partner/s practicing safe sex (i.e. using condoms) until they no longer test positive for the infection (to avoid re-infection); and a follow-up check after 3 months.

The people who are most at risk, their lives tend to be more chaotic . . . How that's reflected in accessing services is that they walk in through the door and say, 'Can I see someone?' Impulsivity . . . And so what we need to do is run a service that can accommodate that. So rather than . . . a service where you have to ring up, be interviewed by someone as to whether or not you fit the criteria for our service, how responsive are we . . . to somebody who just rocks in through the door.

[XX] was the one who started off presenting a few years ago at the Sexual Health conference, that the more steps you put in [to STI treatment] the better the outcomes. And one of the things was to follow up people a week later, after their

treatment . . . And then . . . in three months time the person has another check, and that's actually for re-infection.

Well [prioritising that priority group] is certainly something we keep talking about. I have to say that . . . people have got to find their way to us, so that's one of the issues . . . We keep talking about whether we can do some form of video consultations . . . and working with other providers perhaps, if they need the expertise that we work in with them. So those are all the ideas we've got.

3. Organisational health literacy

Within an organisational approach to health literacy, the objective is to build the health literacy of organisations in order to reduce health literacy demands on people and communities. Most sexual and reproductive health service providers across the country are only just starting to develop their organisational health literacy, particularly with regard to timely, affordable and safe health services for rangatahi (Hunter & Franken, 2012; Jones et al, 2015; Lambert et al., 2014). The government's Six Dimensions of a Health Literate Organisation (Ministry of Health, 2015) highlights the importance of improving organisation-level health literacy to support better access. Funders and professional organisations are ideally placed to encourage professional development and resources that more closely match the requirements of rangatahi NEET and takataapui.

I despair with how impossible it is to navigate the current system.

You know, as providers we don't fully understand [the system], so the patients haven't got a clue.

I have concern about . . . what is current health literacy amongst this priority group, and the ability to use the tools that [the organisation] is saying are . . . 'simple, easy, and exactly what people want'. So will people feel comfortable with it? Do people have smart phones? Do people have broadband access? And enough data? And, and, and . . . ?

4. Standardised access criteria and consultation fees

There are wide variations in terms of availability, quality, costs and access to sexual health services nationwide (KPMG, 2013), and in the Waikato. Research shows that there is a lack of affordable access to health services for rangatahi (Lambert, Luke, Downey, Crengle, Kelaher, Reid & Smylie, 2014). While health literacy has been identified as critical to being able to manage one's health, there are multiple health systemic barriers that prevent access to STI services. Standardising access criteria and costs for STI testing and treatment is one way that the health system and health providers can improve their own health literacy and in so doing, improve the access of rangatahi NEET and takataapui.

The business of the different costing structures is for us a real hassle, because

sexual health clinics are able to provide free services, and we can up to [age] 22, but beyond that we can't. And so, how do two organisations work together when they've got different pricing structures?

So it's one issue, one consult. And if you want to bring up something else . . . [if] they want an STI check . . . [they have to] either come back [for another appointment], or go to Sexual Health for a free check.

It's usually 5 dollars for a prescription, but some pharmacies charge more for handling a fax prescription . . . more like 10 or 15 dollars.

It's ludicrous the GP funding, and I know that the general public doesn't understand it. I don't think anyone understands it!

There's a low cost access practice in Ngāruawāhia. And so you're a millionaire farmer in Ngāruawāhia and you get pretty much free healthcare.

5. Sexuality education in school settings

Access to comprehensive sexuality education programmes that are culturally appropriate and provide accurate information and opportunities for skill-building are critical to reducing the prevalence of STI among rangatahi (Terry et al., 2012; Green, Tipene & Davis, 2016). Schools are an important source of evidence-based sexuality education. School-based programmes that are planned and delivered by a teaching workforce that understands the impact of the social determinants of health and are equipped to engage rangatahi NEET and takataapui into education – incorporating mātauranga Māori informed resources and te reo Māori where appropriate (Lee-Penehira, 2015) – are well placed to strengthen their knowledge. Achieving this vision needs policy and funder advocacy and engagement with the Ministry of Education regarding sexuality education in Māori and English-medium school settings.

I think one of the biggest steps this country needs to take is teaching sex[uality] education compulsory at schools. When you sit in a classroom . . . full of your friends and foes and you're only going into a subject that becomes normal, that generation will then grow up . . . understanding a lot more, a lot faster . . . So the best preventative measure would be to catch them when they are at school, when they are all together in their peer group, and teach them what it is. That would bring the best outcome.

6. Reduce health determinants

Ethnic disparities in the detection of sexually transmitted infections most likely reflect socio-economic factors and issues relating to access to health services (Rose et al., 2012). There are multiple social and structural barriers that make it difficult for rangatahi to access essential health information and services that would empower them to have a sense of control and practice tino rangatiratanga (self-determination) over their own

sexual and reproductive well-being. He Korowai Oranga: Māori Health Strategy (Ministry of Health, 2002) highlights the need for a cross-sectoral approach to addressing health disparities between Māori and other New Zealanders (Lee-Penehira, 2015). Advocacy across sectors is essential to reducing socio-economic barriers and addressing the broad determinants of health that act as a barrier to good sexual health and wellbeing for rangatahi NEET and takataapui in the Waikato.

This is where the socio-economic thing comes in: for some people, they would rather walk to the clinic and sit and wait for the next available slot to get the free treatment, versus others who, you know, the petrol cost of coming to see us. And you can hear people doing the sums in their heads.

[X Provider]'s good for low cost access . . . But again, it's back to: what can you get to? What fits with your hours? What fits with your transport?

7. National social marketing campaign to combat stigma and discrimination

High levels of stigma and discrimination exist regarding sexual orientation, gender identity and sexual health (NZSHS, 2011). This can be seen as endemic to a society where Māori people and Māori health are problematised by the dominant culture (Lambert, Luke, Downey, Crengle, Kelaher, Reid & Smylie, 2014), and an overall culture of sexual conservatism prevails (Terry et al., 2012). Stigma and discrimination are unacceptable. National social marketing campaigns can have a powerful influence on public awareness and attitudes towards, for example, mental health. A national campaign is needed to combat stigma and discrimination associated with sexual orientation, gender identity and STI.

People don't even want to go and get tested because, it's like they're ashamed.

You know how people are sometimes, like, I don't want to go [to sexual health clinic] because someone might think I have an STI or something.

[Getting tested] sounds pretty easy, but going in for it isn't . . . And that's just like all the other stigmas of going to get tested for something.

Some places are extremely rude . . . I've been to a few places where nurses are just very old school and think that homosexuality can be changed by dating some girl. So those nurses will then be very hard to talk to and be very rude about the whole situation.

Tier 2 - STI Service providers

Introduction

STI testing and treatment services take place across a range of primary care organisations,¹ some of which are specialised STI services, and others like GP medical centres that offer STI testing and treatment as part of a range of primary health services. In the greater Hamilton region, free STI testing and treatment services are available at Hamilton Sexual Health Services, while Family Planning, Hamilton offers free testing for young people up to 22 years of age. Meantime, the cost of an appointment at any of the GP medical centres that are part of the Midland Health Network and the Hauraki PHO varies depending upon the medical centre, the person's age, whether the person is enrolled, and whether the medical centre is part of a PHO.

Evidence based statements

1. Organisational health literacy strategy with priority population identified

Health professionals and organisations have a key role in building the health literacy of Māori communities as part of their efforts towards achieving health equity (Signal, Martin, Cram & Robson, 2008). However, in order to improve the health literacy of priority populations such as rangatahi NEET and takataapui, health organisations must improve their own health literacy. Sexual health organisations may have strategic plans that prioritise eliminating inequities but implementation will require plans that prioritise organisational health literacy so as to engage priority populations.

I think the major barrier is people navigating services; having the health literacy to self-care, but then also how to access care when you actually need help. And we had lots of great ideas and they looked at it all and said, 'There is no money for sexual health.'

I couldn't find anything for [organisational health literacy]. . . We've got various position statements . . . [but] we don't have one for health literacy.

2. Professional development advances organisational health literacy

Research shows that health professionals have a limited understanding of health literacy, and of the consequences of low health literacy, particularly for high priority populations (Lambert et al., 2014). Very few health professionals report having received any training in health literacy approaches (Jones et al., 2015), including the development of information resources that match priority population needs (Witt & Barnett, 2012). In order to improve their health literacy, health professionals require training that includes cultural competency, reducing systemic barriers, and developing accessible information

resources that are tailored to patients with high health literacy needs.

Last year, [XX] did a health literacy for clinicians, a 'train the trainers' session . . . Sometimes the training's been done with the health promoters, helping with the facilitation skills, because . . . our senior doctors and nurses . . . may not be particularly good facilitators. And so that's another thing, we need to make sure that they have some facilitation training.

In terms of the public facing information, we haven't followed that up as well. And trying to wean people away from providing reams of knowledge at a person, I'm finding really hard. And some people then, if they do cut it down, somebody says, 'Oh why didn't you talk to them about that?'

3. Information resources that match the health literacy of rangatahi NEET and takataapui

Health literacy is an important contributor to knowledge, self-management, and health outcomes (Crengle, Smylie, Kelaher, Lambert, Reid, Luke, Anderson, Harré, Hindmarsh & Harwood, 2014). A critical aspect of improving organisational health literacy is developing accessible information resources that are tailored to the the health literacy needs of the priority population (Cram, 2014; Lambert et al., 2014). Recent research shows that rangatahi NEET and takataapui respond to resources that provide succinct information about STI testing, treatment and where to find those services, ideally in an audio-visual format, rather than extensive text-based resources (Green & Waiti, 2014). Incorporating rangatahi NEET and takataapui perspectives into the planning and development of website narratives and information resources increases the likelihood of information uptake (Green & Waiti, 2014).

We have got a hand-out . . . it's not specifically about them, but it talks about the significance of a partner. It's pretty high literacy at the moment, and that's another of our projects we haven't got very far with yet, which is lowering the literacy level so that it's a bit easier for some people.

We've been doing quite a bit of health literacy training lately, and one of the things that I have been most struck with was the idea that there should be 3 to 5 key messages and no more than that. And I strongly believe that [our organisation] has become so keen that we know everything about whatever, that people lose the wood for the trees. And so that's the thing that we want to work out, what are your key messages when you've got chlamydia.

If they come to a drop-in . . . near the end of the time, when there just won't be time to see them, then we're hoping that we will be able to . . . get them to answer a questionnaire, which we tried really hard to keep simple, and we've tried it with some clients to see, as to whether they've got symptoms or not, and then they're going to be given instructions on how to do the test.

4. IT resources should reduce, not increase inequities

The health sector is currently trialing new or 'non-traditional' models of care. These include IT tools in the form of smart phone apps, online consultations and information portals. Rangatahi have identified audio visual resources as a preferred medium for accessing information, however it is imperative that IT resources are accessible to rangatahi NEET and takataapui and are effective in reducing rather than increasing inequalities. A report for Waikato District Health Board identified 33% of Maori households as having no internet access and 13% without a mobile phone (Robson et al, 2015).

You know, the technology is there, [but] . . . the clinicians aren't up to speed with it yet and the population certainly isn't. So I think . . . it'll be a lot of change coming up. There are definitely opportunities [with IT resources] for us to look at how we better deliver services, but I think we have to be really, really careful that it's not the people who already have advantage that get even more advantage. And I think that's a real risk.

So we've been asked to work with the tools that we have. This is why I have concern about whether what is current health literacy amongst this priority group, and the ability to use the [IT] tools that [the organisation] is saying are simple enough, are 'simple, easy and exactly what people want'. So, will people feel comfortable with the app? Do people have smart phones? Do people have broadband access? And enough data? And, and, and . . .

Tier 3 - Rangatahi NEET, Takataapui and STI

Introduction

Rangatahi are over-represented in the statistics for chlamydia and gonorrhoea (Ekeroma, Pandit, Bartley, Ikenasio-Thorpe, & Thompson, 2012; ESR, 2013; Morgan, 2013; Rose et al., 2012; Terry et al., 2012). Rangatahi most vulnerable to STI are young Māori, 16-24 years of age, and not in employment, education or training (NEET), and young Māori who are takataapui. A socio-economic profile of Māori in the Waikato region suggests that some rangatahi will be unable to utilise important health information or STI services, thus making it difficult to keep themselves and their sexual partners STI-free. Rangatahi NEET and takataapui constitute a priority population for access to free and low-cost STI testing and treatment services in the Waikato (Robson, 2015).

Evidence based statements

1. Rangatahi care about their sexual health

Research shows that Māori care about their health and wellbeing (Cram, 2014) and the thirty-seven rangatahi NEET interviewed for He Pūkenga Kōrero are no different. Rangatahi NEET and takataapui told us they value good sexual and reproductive health and want easy access to credible information and services in order to stay STI-free.

[The more we know] the better we can take care of ourselves.

Yeah, I like getting checked out, making sure that I'm good.

[Talking to a doctor or nurse about STIs] Then all good. They skilled up in knowledge, teach me . . . Yeah, otherwise how else are you going to find out?

One friend, she had [a STI] . . . She just told us, 'This is how it is and I'm being treated for it'. It's again going back to that whole looking after yourself – being [sexually] active, but looking after yourself at the same time.

2. Credible information about STI

As with many young people in New Zealand, knowledge of STI and associated risks appeared to be low amongst rangatahi NEET and takataapui interviewed for He Pūkenga Kōrero. Knowledge levels are likely associated with poor access to credible sources of information (Green & Waiti, 2014). Evidence-based sexuality education, an excellent source of credible information, is not available in all schools (KPMG, 2013). A study by Clark et al. (2008) found that most school-aged rangatahi reported consistent condom use (i.e. for preventing STIs and unplanned pregnancies), but little is known about

rangatahi reporting inconsistent use (Clark et al., 2008; Ministry of Health, 2005). Rangatahi NEET and takataapui told us that accessing credible STI information was not easy. Barriers typically include embarrassment, not feeling comfortable talking to someone, not knowing where to go or who to ask for help, and not having access to sexuality education or a school nurse while at school.

[STIs]’ll be the last subject anyone woulda talked about.

A lot of people are probably embarrassed to go to Family Planning just for condoms.

I think the younger Māori boys need more education about sexual health . . . Just educate them.

I wasn’t taught it at school . . . I guess it just comes back to the whole, you don’t want to talk about it to your parents, our teachers, our aunties.

3. When and where to get tested

There is a lack of information about STI services amongst most young people, particularly those living in rural locations (KPMG, 2013). Local youth services and school nurses (for those recently out of school) are an important source of credible STI information and support; however, many rangatahi rely on mis-information from less credible sources, such as their friends or ‘Dr Google’ (Green & Waiti, 2014). Rangatahi NEET and takataapui told us they want to know when and where to get tested, how much will it cost, how to make an appointment, how to get there, and what happens when you get tested.

*Depends though – do you have to call up, or do you just rock up?
I have no idea. Do they ring you now [with test results]? . . . Don’t they call you? . . . I prefer letter, telephone’s not the one. I’d like it in writing.`*

[What information about STI testing will be most helpful?] How to make the appointment . . . Where is Family Planning?

Probably not that easy, because there’s not a lot of information out there. Young people know about certain clinics, but they still don’t know what’s involved in going to these clinics, or how to get there or transport or booking an appointment time. You can’t just rock up . . .

Being told from school and stuff that it’s bad, that it hurts . . . Being told by the bros it was a disease.

Shove the old thing up the lux . . . Do they put it in, ow? Do they put it inside the eye? . . . Needle in the sac, eh . . . Might have to be like a violent one, like a fat-as swab . . . I heard of like a needle . . . Yeah, through the head [of the penis] . . .

4. Eliminate stigma and discrimination

High levels of stigma and discrimination exist in New Zealand with regard to sexuality and sexual health (NZSHS, 2011). Rangatahi experience stigma as a barrier to seeking STI information, support and services (Green & Waiti, 2014). Additional barriers to accessing STI services are experienced by rangatahi who are takataapui, in particular, fear of discrimination by health professionals as a result of their sexual orientation and gender identity. A recent study of MSM in New Zealand found that more than half did not tell a health care provider of their sexual orientation or gender identity for fear of discrimination. The study recommended that health professionals address their professional health literacy as a key step along the pathway to reducing HIV infections and STI (Ludlam et al., 2015). Health professionals should be comfortable asking rangatahi about their sexual orientation and gender identity.

It's out of it if you're like talking to an old lady [nurse/doctor] about it [STI test]. It's like getting judged as soon as you ask.

People don't even want to go and get tested because, it's like they're ashamed.

Just try not to let anyone else find out . . . Yeah, that's the main one. Gotta be . . . under the radar.

[Getting tested] sounds pretty easy, but going in for it isn't . . . And that's just like all the other stigmas of going to get tested for something.

Some places are extremely rude . . . I've been to a few places where nurses are just very old school and think that homosexuality can be changed by dating some girl. So those nurses will then be very hard to talk to and be very rude about the whole situation.

5. Rangatahi NEET and takataapui require free services

The cost of health services is identified as a significant barrier to accessing health care (Cram, 2014) and rangatahi interviewed for He Pūkenga Kōrero had direct experience of this. A study by KPMG (2013) found that providing free or low cost SRH services to populations with high needs and low income (e.g. rangatahi NEET and takataapui) is an important component of effective service delivery. In reality however, funders operate different funding formulae. This means that in the Waikato DHB region, consultation fees for rangatahi seeking an STI test will range from 'no cost' at Hamilton Sexual Health Services, 'no cost' up to 22 years for a consultation at Family Planning or a GP practice that is part of a primary health organisation (PHO), to a discounted part-charge for a rangatahi with a Community Services card attending a GP practice that is not part of a PHO, to a full after-hours consultation fee at the Anglesea Clinic, and a myriad of fee scales

in-between. Prescription fees are in addition to consultation fees.

[Did the old clinic used to charge a lot of money?] Nah it was just a koha . . . [but] now we gotta go to Dinsdale . . . I think it might charge now. Yeah, some of us do APs [automatic payments].

It's shame [to get condoms], sometimes they cost heaps.

I think it would be easy to go to any GP or practice to get [free] condoms, wouldn't it? It's just taking the time out to go get them, and all the young people will take time out . . . will seek to find them I guess, I'm not sure.

6. STI services 'closer to home'

Lack of transport is a significant barrier to Māori access to health care in the Waikato region (Robson et al., 2015). In a study on the health and wellbeing of secondary school students in New Zealand (Clark et al., 2008), 25.7% of respondents identified having no transport as a barrier to accessing health care. The issue is exacerbated for rangatahi living in small towns and rural areas where STI services are not readily available (KPMG, 2013). This highlights the importance of ensuring there are outreach services 'closer to home' (Ministry of Health, 2016). Rangatahi interviewed for He Pūkenga Kōrero mentioned transport issues, including having to rely on asking parents or whānau to transport them to STI services, as a barrier.

[T]here is not a lot of information out there. I guess young people know about certain clinics, but they still don't know what's involved in going to these clinics, or how to get there or transport or booking an appointment.

Yeah, it is pretty hard [asking someone to take you to a clinic] when you put all that in.

SECTION D: CONCLUSION

This study, He Pūkenga Kōrero, developed out of a shared concern amongst Māori and 'mainstream' sexual and reproductive health organisations in the Waikato to improve access to timely STI testing and treatment for rangatahi, particularly rangatahi who are at high risk of poor sexual and reproductive health. In the Waikato, and in New Zealand generally, young Māori aged 16-25 years are over-represented in the statistics for chlamydia and gonorrhoea. If left undiagnosed or untreated, the consequences of these STI are serious, with the potential for reproductive problems or infertility. Such outcomes are personally devastating but also totally at odds with the aspirations of whānau, hapū, iwi and Māori communities for Pae Ora, flourishing future generations.

The aim of the study was to generate an evidence base to assist STI testing and treatment services to achieve sooner, better access to their services for a priority segment of the rangatahi population in the Waikato.

The research focused on a 'priority population' of rangatahi identified as being most vulnerable to undetected and untreated STI, and with whom STI service providers identify having difficulty engaging: rangatahi NEET and takataapui, aged 16-24, who are sexually active and living in the wider Hamilton area. The research took a systems health literacy approach to removing barriers to accessing sooner, better STI testing and treatment for this priority population, who are identified as having high health literacy needs.

Health literacy is a significant social determinant of sexual and reproductive health, and SRH organisations, SRH professionals and STI service providers have a key role in building the health literacy of rangatahi NEET and takataapui so that they have equitable access to services. In order to do that effectively, however, SRH organisations must improve their own organisational health literacy with regard to meeting the needs of priority populations.

SRH organisations consulted on this project indicated that they are at the beginning stages of developing their organisational health literacy. The key output of this research, an online resource called He Pūkenga Kōrero Evidence Base, has been formulated to assist that process. While intended primarily for STI service organisations, the ideal outcome would be collaboration with primary care providers to standardise care pathways and organisational health literacy plans. By doing so, access to sooner and better STI testing and treatment will be improved for rangatahi NEET and takataapui, and arguably for all young people.

The Evidence Base provides a range of targeted actions that can be taken by those involved in the sexual and reproductive health sector.

TIER 1 encourages those involved in STI policy and funding to adopt a priority population approach so that the needs of those vulnerable to STI in the Waikato - rangatahi NEET and takataapui from high deprivation areas - are met, and equitable STI outcomes are achieved. In addition, primary care alliances should be formed to collectively address barriers to access and standardise services for rangatahi NEET and takataapui; policy and funding should assist health professionals to undertake professional development to improve their professional health literacy; and access criteria and consultation fees should be standardised so that the system is easier to navigate for rangatahi NEET and takataapui. Policy and funding should advocate for culturally-responsive sexuality education programmes in all schools and work cooperatively with the Ministry of Education to better facilitate that outcome. A cross sectoral approach is needed to address the broad determinants of health that act as a barrier to sexual health and wellbeing for rangatahi NEET and takataapui in the Waikato. Finally, high levels of stigma and discrimination experienced by rangatahi NEET and takataapui in connection to sexual health, sexual orientation and gender identity are unacceptable and must be addressed.

TIER 2 targets organisational health literacy development at the level of STI service providers. Service providers are encouraged to: have a strategy for increasing organisational health literacy that identifies a priority population, and is explicit about how improved organisational health literacy will better meet the needs of that population; undertake professional development that addresses cultural competency, reducing systemic barriers and developing accessible resources tailored to patients with high health literacy needs (i.e rangatahi NEET and takataapui); develop information resources - website narratives, pamphlets, apps, etc. - that are informed by rangatahi NEET and takataapui perspectives, and tailored to their health literacy levels and socio-economic realities, so that those who most need the resources actually get the benefit, and equitable STI outcomes are achieved.

The evidence-based statements in TIER 3 dovetail with the statements in TIERS 1 and 2, providing more context to the actions proposed for STI Policy and Funding and STI Service Providers, from a priority population perspective.

TIER 3 (Rangatahi NEET, Takataapui and STI) debunks a myth, affirming that rangatahi NEET and takataapui value good sexual and reproductive health and want to stay STI-free. It also highlights their particular needs with regard to STI testing and treatment: credible information about STI, associated risks, testing and treatment; and pragmatic information about when and where to go to find services, how much it will cost, how to

get there, and what happens once you get there. For these priority rangatahi, the stigma associated with STI is a major barrier to accessing STI testing and treatment, as is discrimination related to sexual orientation and gender identity. Stigma and discrimination must be eliminated from STI service provision, and health professionals should improve their health literacy so as to be comfortable with talking to rangatahi about their sexuality. The cost of STI services and lack of transport are major barriers to access for rangatahi NEET and takataapui. Populations with high needs and low income should have free, or at least low cost services, including prescriptions, and access to nearby outreach services, particularly in small towns and rural areas.

Conducting this study within a Kaupapa Māori methodological framework carries an implicit responsibility to ensure that the research results effect positive transformation, i.e. actual, tangible improvements to the issue of timely access to STI testing and treatment for young Māori in the Waikato. While He Pūkenga Kōrero Evidence Base proposes many specific, targeted actions that can be taken to improve the current situation, stakeholders have indicated that the tightly constrained budget environment within which the sexual and reproductive health sector operates is more tolerant of universal, 'one-size-fits-all' interventions. It may be useful, in that case, to consider some of the proposed actions as longer term objectives; however, some of the actions toward transformative change, particularly those in TIER 2 - STI Service Providers, were formulated to be achievable in the short term, and within existing budgets.

On May 29 2017, He Pūkenga Kōrero Evidence Base was launched at a community hui of Waikato-based organisations in the sexual health and primary care sectors that fund and deliver STI services. Those in attendance had a very positive response to the Evidence Base. Following the presentation, the stakeholders were asked to consider what steps could be taken towards realising some of the actions proposed. By the close of the hui, there was a consensus that an alliance of STI service providers should be formed to work collaboratively towards improving organisational health literacy, and a series of Knowledge Mobilisation hui should be established to support that process.

Clearly, achieving a significant improvement in STI rates for rangatahi NEET and takataapui in the Waikato will require commitment and comprehensive strategies at every level of the Health system; however, addressing structural barriers to access for this priority population will require a commitment to cross sectoral collaboration from government agencies, schools and the health system so that sooner, better access to STI testing and treatment for rangatahi NEET and takataapui in the Waikato is achieved.

REFERENCES

Cram, F. (2014). *Improving Māori access to health care: Research report*. Auckland: Katoa Ltd.

Clark, T. C. , Robinson, E., Crengle, S., Herd, R., Grant, S., & Denny, S. (2008). *Te Ara Whakapiki Taitamariki. Youth'07: The health and wellbeing survey of secondary school students in New Zealand. Results for Māori young people*. Auckland: The University of Auckland.

Crengle, S., Smylie, J., Kelaher, M., Lambert, M., Reid, S., Luke, J., Anderson, I., Harré Hindmarsh, J., & Harwood, M. (2014). Cardiovascular disease medication health literacy among Indigenous peoples: design and protocol of an intervention trial in Indigenous primary care services. *BMC Public Health*, 14(714).

Ekeroma, A., Pandit, L., Bartley, C., Ikenasio-Thorpe, B., Thompson, J. (2012). Screening for sexually transmitted infections in pregnancy at Middlemore Hospital, 2009. *New Zealand Medical Journal*, 125(1359), 23-30. ^[17]_[SEP]

ESR. (2011). *Sexually transmitted infections in New Zealand 2011: Surveillance report*. Porirua, NZ: The Institute of Environmental Science and Research.

ESR. (2013). *Sexually transmitted infections in New Zealand 2013: Surveillance report*. Porirua, NZ: The Institute of Environmental Science and Research.

Fenwicke, R. & Purdie, G. (2000). The sexual activity of 654 fourth form Hawke's Bay students. *New Zealand Medical Journal*, 113, 460-464.

Gender Minorities Aotearoa. (2016). *A third opinion: Transgender, takataapui, & intersex health care tips for clinicians*. Wellington: Gender Minorities Aotearoa.

Green, J. A., & Waiti, J. (2014). *Planning a national STI website that appeals to young Māori*. Available at: <http://tpt.org.nz>

Health Select Committee. (2013). *Inquiry into improving child health outcomes and preventing child abuse, with a focus on preconception to 3 years of age*. Report of the Health Committee. Fiftieth Parliament, ^[17]_[SEP] (Dr Paul Hutchison, Chairperson), November 2013. Wellington, NZ: New Zealand House of Representatives.

Human Rights Commission. (2008). *To be who I am: Kia noho au ki tōku anō ao*. Available at <https://www.hrc.co.nz/your-rights/social-equality/our-work/inquiry-discrimination-experienced-transgender-people/>

Hunter, J. & Franken, M. (2012). Health literacy as a complex practice. *Literacy and Numeracy Studies* 20(1), 25-44.

Jones B., Ingham T. R., Reid S., Davies C., Levack W. and Robson B. (2015). He māramatanga huangō: Asthma health literacy for Māori children in New Zealand. Dunedin, NZ: University of Otago. Available from <https://www.asthmafoundation.org.nz/research/>

Kerekere, E. (2017). *Growing up takatāpui: Whānau journeys*. Auckland: Tīwhanawhana Trust and Rainbow YOUTH.

KPMG. (2013). *International Annual Review 2013*. Available from <https://home.kpmg.com/content/dam/kpmg/pdf/2013/12/international-annual-review-2013.pdf>

KPMG. (2013). *Value for money: Review of sexual and reproductive health services. Final Report*. Wellington, Ministry of Health.

Lambert, M., Luke, J., Downey, B., Crengle, S., Kelaher, M., Reid S., & Smylie, J. (2014). Health literacy: Health professionals' understandings and their perceptions of barriers that Indigenous patients encounter. *BMC Public Health*, 14(614). Retrieved from <http://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-014-0614-1>

Lawton, B., Makowharemahihi, C., Cram, F., Robson, B., & Ngata, T. (2016). E Hine: access to contraception for indigenous Māori teenage mothers. *Journal of Primary Health Care*, 8(1), 52-59. Available from <http://www.publish.csiro.au/>

Lee-Penehira, M. (2015). *Mouri whakapapa: Repositioning Māori resistance and wellbeing in sexual and reproductive health policy and service provision*. A report prepared for the Health Research Council of New Zealand on completion of the Hohua Tutengaehe Postdoctoral Fellowship.

Ludlam, A., Saxton, P., Dickson, N., & Hughes, A. (2015). General Practitioner awareness of sexual orientation among a community and internet sample of gay and bisexual men in New Zealand. *Journal of Primary Health Care*, 7(3): 204-212.

Marie, D., & Fergusson, D. (2011). Cultural identity and pregnancy/parenthood by age 20: Evidence from a New Zealand birth cohort. *Social Policy Journal*, 37, 19-36.

Mead, H. M. (2003). *Tikanga Māori: Living by Māori values*. Wellington, NZ: Huia Publishers.

Ministry of Health. (2003). *Sexual and reproductive health: A resource book for New Zealand health care organisations*. Wellington: Ministry of Health.

Ministry of Health. (2005). *Safer sex evaluation summary. Prepared for the Ministry of Health*. Wellington: Ministry of Health.

Ministry of Health. (2010). *Kōrero Mārama: Health literacy and Māori: Results from the*

2006 Adult Literacy and Life Skills Survey. Wellington, NZ: Ministry of Health. Available at <http://www.health.govt.nz>

Ministry of Health. (2014). *Equity of Health Care for Māori: A framework*. Wellington, NZ: Ministry of Health. Available at <http://www.health.govt.nz>

Ministry of Health. (2015a). *Health Literacy Review: A Guide*. Wellington, NZ: Author. Available at <http://www.health.govt.nz>

Ministry of Health. (2015b). *A framework for health literacy*. Wellington, NZ: Author. Available at <http://www.health.govt.nz>

Ministry of Health. (2016). *New Zealand health strategy: Roadmap of actions 2016*. Wellington: Ministry of Health.

Moewaka Barnes, H. (2000). *Kaupapa Māori: Explaining the ordinary*. Auckland, NZ: Whariki Research Group, The University of Auckland.

Morgan, J. (2013). *Epidemiology, screening and treatment of chlamydia trachomatis infection in New Zealand* (Doctoral thesis, University of Auckland, New Zealand).

NZSHS. (2011). *Request for action on the development of a National Sexual Health Strategy and Action Plan (New Zealand Sexual Health Society report to the Ministry of Health on sexually transmitted infections in New Zealand)*. Wellington: NZSHS. Retrieved from <http://nzshs.org/news/policy-submissions/188-development-of-a-sexual-health-strategy-and-action-plan/file>

NZSHS. (2014). *New Zealand guidelines for the management of gonorrhoea, 2014, and response to threat of microbial resistance*. Retrieved from <http://www.nzshs.org/guidelines>

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks: Sage Publications.

Pihama, L. (1993). *Tūngia te ururua, kia tupu whakaritorito te tupu o te harakeke: A critical analysis of parents as first teachers* (Master's thesis, University of Auckland, New Zealand).

Pihama, L. (2001). *Tihei mauri ora: Honouring our voices: Mana wahine as a kaupapa Māori theoretical framework* (Doctoral thesis, University of Auckland, Auckland).

Pihama, L. (2010). Kaupapa Māori theory: Transforming theory in Aotearoa. *He Pukenga Korero: A Journal of Māori Studies, Raumati (Summer)*, 9(2), 5-14.

Pihama, L. (2016). Te Kotahi Research Institute, Aotearoa/New Zealand. In R. Tandon, B. Hall, W. Lepore, & W. Singh (Eds.), *Knowledge and engagement: Building capacity for the next generation of community based researchers* (pp. 229-238). New Delhi, India:

UNESCO. Available from [http://unescochair-cbrsr.org/pdf/resource/Knowledge%20&%20Engagement 26-09-16 pdf%20ver-mail.pdf](http://unescochair-cbrsr.org/pdf/resource/Knowledge%20&%20Engagement%2026-09-16%20pdf%20ver-mail.pdf)

Pitama, S., Cave, T., Huria, T., Lacey, C., Cuddy, J., & Frizelle, F. (2012). Exploring Maori health worker perspectives on colorectal screening. *New Zealand Medical Journal*, 125(1356), 75-84. Available from <http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2012/vol-125-no-1356/article-pitama>

Pohatu, T. (2004). *Ata: Growing respectful relationships*. Unpublished Paper.

Ratima, M. M. (2003). A Maori inquiry paradigm - A health research perspective. *He Pukenga Kōrero*, 7(2), 9-15.

Reid, P. & Robson, B. (2006). *Understanding health inequities*. Available from <http://www.otago.ac.nz/wellington/otago067740.pdf>

Robson, B., Purdie, G., Simmonds, S., Waa, A., Brownlee, G., Rameka, R. (2015). *Waikato District Health Board Māori health profile 2015*. Wellington: Te Rōpū Hauora a Eru Pomare.

Rose, S., Bromhead, C., Lawton, B., Zhang, J., Stanley, J., & Baker, M. (2012). Access to chlamydia testing needed for high risk groups: Patterns of testing and detection in an urban area of New Zealand. *Australian and New Zealand Journal of Public Health*, 36(4), 343-350.

Signal L, Martin J, Cram F and Robson B. (2008). *The Health Equity Assessment Tool: A user's guide*. Wellington: Ministry of Health.

Smith, G. H. (1997). *The dialectic relation of theory and practice in the development of Kaupapa Māori praxis* (Unpublished doctoral thesis, University of Auckland, Auckland, New Zealand).

Smith, G. H. (1990). Taha Maori: Pakeha capture. In J. Codd, R. Harker & R. Nash (Eds.), *Political issues in New Zealand education* (pp. 183-197). Palmerston North: Dunmore Press Ltd.

Smith, L. T. (2006). *A community-up approach to explaining Kaupapa Maori theory*. Unpublished paper.

Smith, L. T. (1999). *Decolonising methodologies: Research and Indigenous peoples*. London, UK and New York, NY: Zed Books.

Statistics New Zealand. (2016). *Māori population estimates: Mean Year ended 31 December 2015 - tables*. Retrieved October 2016 from <http://www.stats.govt.nz/>

Statistics New Zealand. (2015). How is our Māori population changing? Retrieved February 2017 from <http://www.stats.govt.nz/>

Statistics New Zealand. (2013). *2013 Census QuickStats about Māori: Age and sex*. Retrieved October 2016 from <http://www.stats.govt.nz/>

Terry, G., Braun, V., & Farvid, P. (2012). Structural impediments to sexual health in New Zealand: Key informant perspectives. *Sexuality Research and Social Policy*, 9, 317-326. doi: 10.1007/s13178-012-0089-y. Retrieved September 2016 from https://www.researchgate.net/publication/230705402_Structural_Impediments_to_Sexual_Health_in_New_Zealand_Key_Informant_Perspectives

Te Whāriki Takapou. (2017). *Mātauranga Māori position statement* (Pending). Available at: <http://tpt.org.nz>

Tiakiwai, S-J. (2001). Understanding and doing research – A Māori position. In L. Pihama & K. Southey (Eds.), *Kaupapa rangahau: A reader. A collection of readings from the Kaupapa Māori Research workshop series led by Associate Professor Leonie Pihama and Dr Sarah-Jane Tiakiwai*. Hamilton, NZ: Te Kotahi Research Institute, University of Waikato.

Waetford, C. (2008). The knowledge, attitudes and behaviour of young Māori women in relation to sexual health: A descriptive qualitative study (Master's thesis, Auckland University of Technology, New Zealand). Available from <http://aut.researchgateway.ac.nz/bitstream/handle/10292/412/WaetfordC.pdf?sequence=4>

Witt, M., & Barnett, P. (2012). Assessing the capacity of New Zealand health promoters to develop programs that meet the health literacy needs of both consumers and government. *Health Promotion Journal of Australia*, 23, 117-121. Available from <http://www.healthpromotion.org.au/journal/journal-downloads/article/1-hpja/475-assessing-the-capacity-of-new-zealand-health-promoters-to-develop-programs-that-meet-the-health-literacy-needs-of-both-consumers-and-government>

Walsh, C., Shuker, C., & Merry, A. F. (2015). Health literacy: From the patient to the professional to the system. *New Zealand Medical Journal*, 128(1423), 10-16.

Workbase. (2013). Literature review of health literacy education, training tools and resources for health providers. Available from <http://www.hqsc.govt.nz/publications-and-resources/publication/835/>