

Māori Health Review

Making Education Easy

From Issue 19:4 – 2009

Matire's comments for the next 3 papers:

As you may know, Māori have raised a number of issues about the study Te Wai o Rona for Māori. And so I have been hesitant to include papers from the study in Maori Health Review. However, I have been convinced to do so after talking with Māori stakeholders including researchers, clinicians, participants and community, who are unaware that results have been written up and published in both national and international medical journals. I have included 3 papers here that I believe have important implications for diabetes care in Māori communities:

1. undiagnosed diabetes is an issue for Māori, and particularly men, those who are overweight and those who have a CSC. Steps must be taken to improve diagnosis rates and access to quality diabetes care for Māori.
2. point-of-care testing with finger pricks tests (like the ones we see at community events, in mobile vans or even in GP clinics) are not adequate and may in fact falsely reassure a person that they don't have diabetes. We must ensure that Māori receive quality screening tests such as fasting glucose or oral glucose tests.
3. the piloting of a personal trainer (Māori community health worker) approach was effective for weight loss in all participants of the programme. The methods for developing and testing the programme are well described and may be useful to those groups considering a similar approach within their own community.

Subscribing to Māori Health Review

To subscribe or download previous editions of Māori Health Review publications go to:

www.maorihealthreview.co.nz

1. Prevalence of undiagnosed diabetes, impaired glucose tolerance, and impaired fasting glucose among Māori in Te Wai o Rona: Diabetes Prevention Strategy

Authors: Simmons D et al

Summary: Baseline population-based data from Te Wai o Rona: Diabetes Prevention Strategy are presented regarding the proportions of Māori aged ≥ 28 years with undiagnosed diabetes, impaired glucose tolerance (IGT) and impaired fasting glucose (IFG) (dysglycaemia), resident within the Waikato/Lakes areas of New Zealand. Of the 3817 eligible Māori, mean BMI among women was 32.9 kg/m² and 33.1 kg/m² among men. The age standardised prevalence of undiagnosed diabetes was higher among men than women (6.5% vs 4.2%), as was that for IFG (5.4% vs 3.0%), but not IGT (8.5% vs 9.7%) with no rural-urban differences. Prevalence of dysglycaemia increased with increasing BMI with no clear inflection point and was 1.38-fold greater among those with a community services card after adjusting for age and gender and 1.33-fold greater after additionally adjusting for BMI.

Reference: *N Z Med J.* 2009;122(1288):30-8.

<http://www.nzma.org.nz/journal/abstract.php?id=3432>

2. Point-of-care testing as a tool for screening for diabetes and pre-diabetes

Authors: Rush E et al

Summary: The utility of finger-prick point-of-care testing (POCT) of blood glucose was investigated for the detection of dysglycaemia in data from a fasting POCT and an oral glucose tolerance test (OGTT) with laboratory assays conducted with 3225 participants enrolled in the Te Wai o Rona Diabetes Prevention Strategy. Participants had no self-reported diabetes. New diabetes was found in 161 participants (5.0%) and pre-diabetes in 414 [impaired glucose tolerance 299 (9.3%), impaired fasting glucose 115 (3.6%)]. The mean difference in capillary and venous measures was 0.02 mmol/L. Capillary POCT predicted dysglycaemia and impaired glucose tolerance and new diabetes (area under curve 0.76 and 0.71) more poorly than venous laboratory analysis (area under curve 0.87 and 0.81, respectively). Optimal screening criteria were best at a venous glucose of 5.4 mmol/L; 77% sensitivity/specificity.

Reference: *Diabet Med.* 2008;25(9):1070-5

<http://www3.interscience.wiley.com/journal/120118957/abstract>

3. Development and piloting of a community health worker-based intervention for the prevention of diabetes among New Zealand Māori in Te Wai o Rona: Diabetes Prevention Strategy

Authors: Simmons D et al

Summary: Outcomes are reported from the piloting of a personal trainer approach using a Māori Community Health Worker (MCHW) to help facilitate intensive lifestyle change among 5240 non-pregnant Māori family members without diabetes from 106 rural and 106 urban geographical clusters. In a pilot study (Vanguard Study), 160 participants were weighed before and during MCHW intervention (consisting of healthy lifestyle messages, toolkit and delivery) and compared with 52 participants weighed immediately before intervention and with 1143 participants from the same geographical area. The participants and MCHW considered that the intervention was acceptable. Significant weight loss occurred during the Vanguard Study among all participants (-1.3 kg; $p < 0.001$), and after screening and during the study among the 27 participants diagnosed with impaired glucose tolerance/impaired fasting glucose (5.2 kg; $p < 0.01$).

Reference: *Public Health Nutr.* 2008;11:1318-25.

<http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=2639304>

Disclaimer: This publication is not intended as a replacement for regular medical education but to assist in the process. The reviews are a summarised interpretation of the published study and reflect the opinion of the writer rather than those of the research group or scientific journal. It is suggested readers review the full trial data before forming a final conclusion on its merits.

Independent commentary by Dr Matire Harwood

Dr Matire Harwood (Ngapuhi) has worked in Hauora Māori, primary health and rehabilitation settings as clinician and researcher since graduating from Auckland Medical School in 1994. She also holds positions on a number of boards, committees and advisory groups including the Health Research Council. Matire lives in Auckland with her whānau including partner Haunui and two young children Te Rangiuira and Waimarie.

Research Review publications are intended for New Zealand health professionals.