

Cardiovascular disease and diabetes in Māori

Cardiovascular disease and type II diabetes are major health issues for Māori because:

- They are major causes of mortality and hospitalisations, affecting individuals, whānau and community.
- Inequalities in rates and outcomes between Māori and non-Māori persist and in some cases appear to be increasing.

Risks can be reduced and these conditions respond well to being managed with appropriate care.

What can health professionals do?

Set realistic practice goals

Start screening programmes ten years earlier in Māori
Māori develop diabetes and cardiovascular disease earlier than non-Māori. Screening programmes should be started earlier to identify and diagnose disease and reduce the development of more serious disease. Ideally, cardiovascular risk assessment should be started ten years earlier in Māori (35 years for Māori men and 45 years for Māori women). A recent study in patients receiving cardiovascular risk assessment showed that Māori were receiving a risk assessment three years earlier than non-Māori but the average age of first assessment was 53 years.¹

Ko te pipi te tuatahi, ko te kaunuku te tuarua.

*A small wedge is used first followed by a larger one**

Although a full cardiovascular risk assessment is ideal, a partial cardiovascular risk assessment may be better than none at all. For a patient who does not attend general practice regularly, an achievable goal might be to record blood pressure and take a random blood glucose. Note details about smoking status, family history, blood pressure, height, weight and abdominal circumference. There is evidence that the recording of these details in primary care is incomplete.²

Decision support and practice management programmes may be helpful in reducing barriers to care by providing alerts to identify patients eligible for screening and tools to assess risk.¹ See page 38 for details on how to set up patient alerts for screening.

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The following organisations have Māori resources available on their websites:

- National Heart Foundation
www.nhf.org.nz
- Te Hotu Manawa Māori
www.tehotumanawa.org.nz
- Diabetes NZ Ltd
www.diabetes.org.nz
- PHARMAC
www.pharmac.govt.nz
- The Quit Group www.quit.org.nz
- Aukati Kai Papa www.auahikore.org.nz
- Ministry of Health www.moh.govt.nz
- SPARC Ihi Aotearoa www.sparc.org.nz
- New Zealand Guidelines Group www.nzgg.org.nz

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** Whakataukī (Proverb)–In reference to tree felling: an initial small effort may lead to a significant return.*

Build a trusting therapeutic relationship

Effective communication, establishing links and building a rapport with the patient and whānau is critical. Provide information that aligns with Māori beliefs, values and understandings. Many organisations in New Zealand provide specific Māori resources.

Engage patients in their health issues

Have a high index of suspicion for early symptoms of disease

Take every opportunity to enquire about symptoms such as exertional chest pain or breathlessness. If necessary, refer patients for exercise testing to help with early diagnosis of cardiovascular disease. Early symptoms of diabetes might include polyuria, thirst or fatigue.

Ask if any whānau have heart disease, diabetes or have had a stroke and how it has affected their lives. Discuss how there are many things that can be done to prevent and treat these conditions.

Opportunistic testing can help engage Māori in healthy lifestyle programmes:

- **Take any opportunity to measure glucose.** Although a fasting glucose is the best option, a random blood glucose over 11 mmol/L suggests diabetes and below 5.5mmol/L is likely to be normal. Discussion of results between these levels can lead the way to further investigation.
- **Give patients a form for a fasting lipid test,** discuss when and where they can get it done and make a follow up appointment for them to discuss the results or arrange for them to be phoned with the results. Create an expectation that the test will be done.
- **Consider cardiovascular risk in all people who present with gout** as there is increasing recognition that asymptomatic hyperuricaemia is an independent risk factor for development of cardiovascular disease (see BPJ 8).

Agree on realistic patient-centred health goals

Promote prevention and early management of diabetes and cardiovascular disease by setting achievable and measurable goals.

Smoking, high blood pressure and obesity are important targets for modification of cardiovascular risk, prevention of type II diabetes and reduction in complications.

High blood pressure

In one New Zealand study, the age standardised prevalence of self reported high blood pressure was 23.7% in Māori males compared to 17.6% in European males and 23.9% in Māori females compared to 19.2% in European females. Another study found that Māori also have higher rates of undiagnosed high blood pressure than European New Zealanders.³

Smoking cessation

Smoking is the leading modifiable risk factor causing disease. In New Zealand 40% of Māori males compared to 21% of European males are smokers. One half (50%) of Māori females are smokers, compared with around one fifth (20%) of European females.⁴

Smoking is a significant contributor to ethnic and socio-economic health inequalities. All Māori who smoke should be encouraged and supported to stop. Māori are equally as motivated and just as likely as non-Māori to have made a quit attempt in the past year. Māori can be encouraged to quit smoking using nicotine replacement therapy (NRT) and programmes such as Aukati Kai Paipa, a smoking cessation support programme delivered by Māori for Māori, that takes a whānau based approach to smoking cessation. The programme reports that quit rates are significantly better for Aukati Kai Paipa than conventional programmes.⁵

A first step to engaging Māori in reducing or stopping smoking may be to encourage a smoke-free house and car.

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Don't miss "golden opportunities"

One Heart Many Lives is a social marketing programme aimed at those at high risk of cardiovascular disease, such as Māori and Pacific men over 35 years. The key messages are:

- Get your heart checked
- Get more active
- Eat better
- Stop smoking

The programme has been rolled out in Hawke's Bay and Northland and recently launched in the Lakes DHB region.

As a result more Māori and Pacific peoples should be presenting for cardiac risk assessment, including a number who may not have otherwise come in to see a doctor or nurse. Ensure that you maximise this opportunity as it is a positive experience for all involved.

www.oneheartmany lives.co.nz

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Healthy diet

The age standardised prevalence of obesity (BMI ≥ 30 kg/m² in non-Māori and ≥ 32 kg/m² in Māori) is higher in Māori than European New Zealanders. In 2002, 26.5% of Māori males were obese compared to 16.9% of European males. 26.1% of Māori females were obese compared to 19.1% of European females.³

“Ngāti and Healthy Prevent Diabetes Project”

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“Ngāti and Healthy” is a community-based diabetes prevention programme set up in 2004 in the rural Māori community of Te Tairāwhiti where approximately half of the adults in the Ngāti Porou community have a glucose metabolism disorder. The programme’s main aim is to reduce the prevalence of insulin resistance in the short term and therefore reduce type II diabetes and associated complications in the long term.

The population based intervention has three key messages:

1. Increase consumption of fruit and vegetables
2. Increase consumption of wholegrain foods
3. Increase exercise levels

Education to encourage behavioural change is directed at all community levels such as health promotion (e.g. radio advertisements, posters featuring local personalities); structural changes (e.g. working with schools and employers to encourage healthy food choices, retailer promotion of healthy options); community based education programmes (e.g. exercise classes, weigh-ins and menu swaps).

A diet rich in fruit and vegetables and low in fat is beneficial for preventing and managing cardiovascular disease and diabetes. Diabetes services, including the provision of dietary advice, specifically developed for Māori are ideal to encourage Māori to implement and benefit from them.⁶

An initial goal may be to agree on a number of days that healthy food is consumed.

Physical activity or “Green Prescriptions”

General advice to increase physical activity is often given by primary care providers. One study showed that Māori and Pacific peoples received more physical activity advice and Green Prescriptions than other New Zealanders although numbers were very small—the same study showed that only 13% of all people reported receiving advice about physical activity and 3% reported receiving a Green Prescription.⁷

An initial goal may be a small but agreed and measurable increase in exercise, for example to walk to school, work or shops at least three times per week.

Form partnerships

Enrol Māori patients in management programmes and refer to Māori providers where suitable and/or available

Where possible, enrol Māori patients in disease-specific and/or Māori-based disease management programmes. A sound knowledge of Māori services available within your region and referral processes is essential to ensure patients and whānau are fully informed.

The **Get Checked** programme provides a free annual check-up for people with diabetes focusing on physical health, lifestyle, and disease management.

Māori enrolment in the Get Checked programme in 2006 was lower than non-Māori.³ However, there is encouraging evidence that once Māori are involved in these programmes, they receive similar access to recommended care. For example, Māori in the Get Checked programme were prescribed statins at equivalent levels to others in

the programme. Māori also received similar access to the recommended tests including blood tests, retinal screening, and blood pressure measurement.³ Strategies to increase access to these services, by ensuring Māori patients are enrolled and actively followed up, will help to reduce inequalities.

Improve coordination with secondary care

There are a number of reasons why Māori do not make it to secondary care appointments, ranging from simple administration issues such as recall or appointment letters sent to a wrong address to more complex issues such as cultural barriers.

Primary care services may need to co-ordinate secondary care appointments on behalf of their patients and work with hospitals to ensure timing for their patient is suitable, transport is organised, and whānau or other support are available.

There is some evidence that having specialist clinics in a practice – a diabetes specialist or cardiologist visiting once a month for patient follow up – can be used to reduce

non-attendance to specialist appointments and improve patient outcomes.⁸

Although in recent years coronary revascularisation rates for Māori have increased, there are still disparities with less Māori referred for these procedures even though they have a higher burden of cardiovascular disease.³

Increasing access to exercise testing and diagnostic tests may also be needed.⁹

It is not too hard!

There are many opportunities in primary care to improve the health of Māori and reduce disparities at an individual and whānau level. The first step is to get involved and get your patients involved. Use every opportunity to engage Māori in health care, promote prevention, screen earlier and recognise early symptoms of chronic disease. Enrolling Māori in management programmes and referring them where appropriate to Māori providers and secondary care will help to reduce disparities.

References:

1. Riddell T, Jackson R, Wells S, et al. Assessing Māori/non-Māori differences in cardiovascular disease risk and risk management in routine primary care practice using web-based clinical decision support: (PREDICT CVD-2). *N Z Med J* 2007; 120(1250). Available from: <http://www.nzma.org.nz/journal/120-1250/2445/>
2. Rafter N, Wells S, Stewart A et al. Gaps in primary care documentation of cardiovascular risk factors. *N Z Med J* 2008; 121(1269):24-33
3. Robson B, Harris R. (eds). *Hauora: Māori Standards of Health IV. A study of the years 2000-2005*. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare 2007.
4. Bramley D, Riddell T, Crengle S, et al. A call to action on Māori cardiovascular health. *N Z Med J* 2004; 117(1197). Available from: <http://www.nzma.org.nz/journal/117-1197/957/>
5. Aukati Kai Paipa history. Available from: http://www.tehotumanawa.org.nz/documents/File/AKP_history.pdf (accessed April 2008)
6. New Zealand Guidelines Group (NZGG). *Management of type 2 diabetes*. Wellington: New Zealand Guidelines Group. 2003.
7. Croteau K, Schofield G, Mclean G. Physical activity advice in the primary care setting: results from a population study in New Zealand. *Aust N Z J Public Health* 2006; 30(3): 262-267.
8. Gruen RL, Weeramanthri TS, Knight SE, Bailie RS. Specialist outreach clinics in primary care and rural hospital settings. *Cochrane Database Syst Rev* 2003; 4.
9. Penney L, McCreanor T, Moewaka Barnes H. 2006. *New perspectives of heart disease in Te Tai Tokerau: Māori and health practitioners talk*. Final report. Te Rōpū Whariki, Massey University, Auckland.