

# Māori Health Review

Making Education Easy

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## In this issue:

- *NZ incidence of bronchiectasis*
- *Racial differences in renal transplantation*
- *Beliefs about racial differences in renal transplantation*
- *Mortality and use of revascularization in patients with acute MI*
- *Smoking cessation at an Aboriginal medical service*
- *Beclomethasone and albuterol for mild asthma*
- *Home insulation and health inequality*
- *Māori and health and medical research: part 1*
- *Māori and health and medical research: part 2*
- *Panui*

### Tena koutou, tena koutou, tena taatou katoa

Nau mai ki tenei Tirohanga hou Hauora Māori. He rangahau tuhi hou e paa ana ki nga hau ora a ki te oratanga o te Māori.

No reira noho ora mai raa i o koutou waahi noho a waahi mahi hoki.

Noho ora mai

### Matire

#### Greetings

Welcome to this issue of the Māori Health Research Review. Each issue attempts to bring you research relevant to the health and wellbeing of Māori. I welcome feedback and suggestions for papers/research to include in future issues and I'm pleased to hear and read about the excellent work being undertaken in Hauora Māori.

Stay well, regards

### Matire

#### Dr Matire Harwood

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## New Zealand national incidence of bronchiectasis "too high" for a developed country

**Authors:** Twiss J et al

**Summary:** This paper sought to examine the incidence, aetiology and severity of bronchiectasis amongst New Zealand children. New cases of bronchiectasis were collected via monthly survey of paediatricians, and confirmed cases were followed up by questionnaire after 12 months. Over 94% of paediatricians provided data, and of 99 notifications received, 65 cases were confirmed. Median age at diagnosis was 5.2 years. Bilateral disease was present in 83% of cases. Mean FEV1 was 77% of predicted, and the modified Bhalla HRCT score was 18. The overall incidence of bronchiectasis in children < 15 years was estimated at 3.7 per 100,000, but varied by ethnicity and region. Rates per 100,000 by ethnicity were 17.8 for Pacific children, 4.8 for Māori and 1.5 for New Zealand Europeans. The authors find that the incidence of bronchiectasis is high in NZ children. It is 7x the rate in Finland, the only other country which has reported a childhood national rate.

**Comment:** An alarming paper from Dr Byrnes (Raukawa) and others alerting us to the fact that bronchiectasis is a significant health issue for tamariki and whanau. The most common and important cause of bronchiectasis is repeated severe infection of the lungs due to pneumonia, TB or whooping cough. Prevention therefore includes appropriate immunisation and prompt diagnosis and antibiotic treatment of chest infections, particularly in infancy and early childhood. These steps in the care pathway may be important factors contributing to ethnic differences in rates on bronchiectasis.

**Reference:** *Arc Dis Child* 2005; 90:737-740

<http://adc.bmj.com/cgi/content/abstract/90/7/737>



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## Patient preference and racial differences in access to renal transplantation

**Authors:** Ayanian JZ et al

**Summary:** A stratified sample of patients aged 18 to 54 (n = 1,392) with end stage renal disease were interviewed with regard to their views on transplantation and experiences with medical care 10 months after beginning maintenance treatment with dialysis. Follow-up continued for up to 4 years. Fewer black than white patients wanted to receive a transplant; for women, 76.3 vs 79.3% respectively; for men 80.7 vs 85.5 respectively. Black patients were also less certain about their preference. Rates of referral to a transplantation centre were significantly lower for black patients (50.4 vs. 70.5% for women, 53.9 vs 76.2% percent for men; both p < 0.001), as were rates of placement on a transplant waiting list (31.3 vs. 56.5% for women, and 35.3 vs. 60.6% for men; both p < 0.001). There was no effect of factors including preferences and expectations about transplantation, socio-demographic characteristics, the type of dialysis facility, perceptions of care, health status, the cause of renal failure, and the presence or absence of coexisting illnesses on the significance of these results.

**Comment:** The authors of this paper have examined possible reasons for the lower rates of renal transplantation in African American compared with White patients in the US. Fortunately the research looked at both patient preference AND provider factors and found that more of the ethnic disparity was explained at the 'Provider level'. We hear the same claims from clinicians here in NZ that Māori prefer not to receive donated organs on the basis of our 'culture'. Yet there is little evidence to confirm such claims. In fact, anecdotal stories from Māori suggest that clinicians play an important role in deciding whether or not a person goes onto transplant waiting lists. As the authors state, doctors should ensure that people who desire transplantation are fully informed and referred for evaluation.

**Reference:** *N Engl J Med* 1999. 25; 341(22):1661-9  
<https://content.nejm.org/cgi/content/abstract/341/22/1661>

## Physicians' beliefs about racial differences in referral for renal transplantation

**Authors:** Ayanian JV et al

**Summary:** The authors surveyed nephrologists with regard to quality of life and survival for black and white patients undergoing renal transplantation. The number of physicians who believed quality of life would be improved with transplantation was similar with regard to both black (84%) and white (86%) patients. However beliefs about improved survival were significantly different for black (69%) and white patients (81%, p = 0.001). Reasons for lower transplantation rates for black patients suggested by physicians included patient preference (66%), availability of living donors (66%), failure to complete evaluations (53%), comorbid illness (52%), perceived patient-physician communication and trust (38%) and physician bias (12%). The patients of physicians who did not view patient-physician communication and trust as an important reason for racial differences were less likely to receive information about transplantation if they were black.

**Comment:** A follow on from the previous study, the authors have provided more in depth information about the 'Provider' factors that may contribute to ethnic disparities in renal transplant rates. The next step from here is to plan and implement interventions that improve the quality of care to patients so that equitable outcomes are achieved.

**Reference:** *Am J Kidney Dis.* 2004. 43(2):350-7

[http://www.ncbi.nlm.nih.gov/sites/entrez?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=14750101](http://www.ncbi.nlm.nih.gov/sites/entrez?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=14750101)

## Mortality and use of revascularisation in black and white patients with acute MI

**Authors:** Popescu I et al

**Summary:** This retrospective cohort study compared outcomes by race for 1,215,924 patients admitted to hospital with acute myocardial infarction (MI). Patients admitted to hospitals without revascularisation services were less likely to be transferred if they were black than white (25.2 vs 31.0% respectively, p < 0.001). Regardless whether the admitting hospital had revascularisation services, black patients were significantly less likely to undergo revascularisation and had significantly greater mortality at 1-year. These results remained after adjustment for sociodemographic factors, comorbidity, and illness severity. The authors concluded that "the higher long-term mortality of black patients may reflect the lower use of revascularization or other aspects of acute MI care."

**Comment:** Ethnic differences in the use of coronary revascularisation after acute myocardial infarction have been documented in the US and here in Aotearoa. This study attempts to investigate the contribution of system factors to inequalities in health care (receipt of cardiovascular procedures), and asks whether ethnic disparities in the US are a consequence of ethnic differences in admission to hospitals lacking revascularization services. The authors found that compared with white patients, African American patients admitted to hospitals without revascularisation services were less likely to be transferred to hospitals with the service, were less likely to undergo revascularisation even in hospitals with revascularisation, and had higher 1-year mortality rates. Although differences in the quality of health care can occur at four major levels – system level, with the physician and their decision making, during the physician-patient interaction or patient related factors – the focus has often been on patient factors. The results from studies such as this force a shift in 'gaze' so that planning for appropriate interventions is undertaken.

**Reference:** *JAMA* 2007. 297; (22):2489-2495

<http://jama.ama-assn.org/cgi/content/short/297/22/2489>

*Independent commentary by Dr Matire Harwood,  
 Medical Research Institute of New Zealand*



[www.moh.govt.nz/healthyeatinghealthyaction](http://www.moh.govt.nz/healthyeatinghealthyaction)

## Key considerations in quitting smoking at an Aboriginal medical service

**Authors:** DiGiacomo M et al

**Summary:** The authors report the results from 10 months of a high intensity smoking cessation programme at a suburban Aboriginal medical service in Western Sydney. Clients were able to receive weekly counselling sessions and free nicotine replacement therapy. Attempts to stop smoking were made by 32 clients, but these were successful in only 9% of cases (3 clients). Participants found the primary barriers to quitting were chronic and intercurrent life stressors. The authors comment that the complexity of smoking cessation is increased amongst Aboriginal Australians due to their experience of multiple life stressors and that these issues should be considered in the design of future interventions.

**Comment:** Although brief, this article does highlight the complexities of undertaking a smoking cessation programme with Indigenous Australians. The multiple life stressors experienced by Aboriginal and Torres Strait Island people are significant and are extremely difficult to 'take control of' when attempting to quit smoking. Interventions such as increased tax on tobacco, while benefiting some, may create further burden for others. The recommendations made in this paper are worth reading.

**Reference:** *ANZ J Pub Health* 2007. 31; (2):174-176

<http://www.blackwell-synergy.com/doi/abs/10.1111/j.1753-6405.2007.00037.x>

## Rescue use of beclomethasone and albuterol in a single inhaler for mild asthma

**Authors:** Papi A et al

**Summary:** The aim of this 6-month randomised controlled trial was to determine the comparative efficacy of different treatments in patients with mild asthma. Patients (n = 455) were randomly assigned to 1 of 4 treatment groups as follows: As-needed combination group, 250 µg of beclomethasone and 100 µg of albuterol in a single inhaler plus twice daily placebo; As-needed albuterol group, 100 µg of albuterol plus twice daily placebo; regular beclomethasone group, 250 µg of beclomethasone twice daily and 100 µg of albuterol as needed; regular combination therapy group, 250 µg of beclomethasone and 100 µg of albuterol in a single inhaler twice daily plus 100 µg of albuterol as needed. Patients who received as-needed combination therapy had significantly improved morning peak expiratory flow and a lower rate of exacerbations than those in the as-needed albuterol group. There was no significant difference between patients who as-needed combination therapy and those who received regular beclomethasone, with or without albuterol.

**Comment:** The prevalence rates for asthma are similar for Māori and non Māori. However, the severity of asthma appears to be greater for Māori than non Māori – hospitalisation rates and the numbers of days off school as a result of asthma are higher for Māori than non Māori. One possible reason is inadequate asthma management. Māori are less likely to be prescribed preventive medication, receive an action plan or education about asthma. The results of this study may revolutionise the way asthma is managed in primary care – as required beclomethasone rather than regular, twice daily dosing. Such a regimen may also address compliance issues.

**Reference:** *N Eng J Med* 2007. 356; (20):2040-2052

<http://content.nejm.org/cgi/content/abstract/356/20/2040>

*The views expressed in this Publication are personal to the authors, and do not necessarily represent the views or policy of the Ministry of Health on the issues dealt with in the publication*

## The effect of insulating existing houses on health inequality

**Authors:** Howden-Chapman P et al

**Summary:** This community based study utilised a randomised cluster design to determine whether insulating existing houses increased indoor temperatures and improved occupants' health and well-being. The 1,350 households comprising 4,407 participants were based in seven low income communities in New Zealand. Whilst the energy consumption of insulated houses was 81% that of uninsulated homes, the relative humidity was lower (-2.3%) in those with insulation. Bedroom temperatures were warmer in insulated houses (0.5°C), with 1.7 fewer hours of temperatures below 10°C each day. There were also reduced odds of the following self reported measures in insulated homes: fair or poor health (OR 0.50; 95% CI 0.38-0.68); wheezing in the past three months (OR 0.57; 0.47-0.70); children absent from school (OR 0.49; 0.31-0.80); adults absent from work (OR 0.62; 0.46-0.83). The occupants of insulated houses also reported less frequent GP visits (OR 0.73; 0.62-0.87) and fewer hospital admissions for respiratory conditions (OR 0.53; 0.22 to 1.29), although the latter was not statistically significant (p = 0.16).

**Comment:** There are three major points to highlight in this paper. Firstly, it was a comprehensive study and many Māori whanau/communities benefited as participants in the research. Ruth Nepia (Rakaipaaka) was instrumental in setting the study up prior to her passing in 2001 and I wish to acknowledge her hard work. Secondly the study found that avoidable deaths and hospitalisations for temperature related illnesses are a major and yet largely unrecognised problem in NZ. Finally, not having electricity or adequate heating has particularly serious consequences for our young, old and those people who are ill. The recent passing of Mrs Muliaga highlighted this. Hopefully appropriate changes in policy and practice result.

**Reference:** *BMJ*. 2007; 334:460

<http://www.bmj.com/cgi/content/abstract/334/7591/460>

## Healthy Eating Healthy Action

Healthy Eating Healthy Action (HEHA) is the Ministry of Health's strategic approach to improving nutrition, increasing physical activity and achieving healthy weight for all New Zealanders.



## Panui – upcoming events of interest

### Hauora IV: Māori Health Standards 1996 to 2005 - update

The launch for Hauora IV has been postponed. New data will be included and as a result further analysis is required. I will publicise the revised launch date in Māori Health Review once it has been announced.

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## Māori and health and medical research: key issues for researchers (part 1)

**Authors:** Sporle A & Koea J

**Summary:** The authors aim to clarify issues around consultation with Māori in the development of biomedical and clinical research. 9 key areas are highlighted.

1. Utility. Research should have benefits for Māori wherever possible and these should be clearly communicated.
2. Defining and identifying Māori. Ethnicity of research participants should be identified using standardised definitions. This ensures that ethnicity-specific analyses can be used to identify differences between ethnic groups, for example with regard to service utility, morbidity or mortality, and can be used to inform changes to healthcare policy and practice.
3. Confidentiality. Researchers should minimise the amount of material which could be used to identify research participants. This is particularly important where small communities are involved.
4. Handling and disposal of tissue. Biological specimens taken from Māori should be treated with great sensitivity. All tissues and body fluids are regarded as both taonga and tapu and researchers must be cognisant of the issues surrounding this.
5. Genetic information. Māori are often reluctant to be involved in genetic research and the use of genetic materials from Māori is controversial. There are also issues surrounding the use of genetic material from indigenous flora and fauna.
6. Intellectual property. The contribution of Māori organisations or individuals should be given appropriate recognition in the research process. Researchers should also consider intellectual property issues when developing patentable knowledge or new services.
7. Koha. Recognition of the contribution of research participants may involve the appropriate provision of koha.
8. Involvement of regional Māori health services. Researchers should ensure they consult with regional Māori health providers with regard to research protocols. These organisations may also be very helpful with other issues including recruitment.
9. Informed consent. Depending on the nature of the research it may be appropriate to obtain informed consent from an individual participant. However in many circumstances a more collective consent, involving the whanau, hapu or iwi, may be appropriate.

**Comment:** See below.

**Reference:** J NZMA-2004; 117(1199)

<http://www.nzma.org.nz/journal/117-1199/997/>

## Māori and health and medical research: clarifying the roles of the researcher and the institution (part 2)

**Authors:** Sporle A & Koea J

**Summary:** Direct consultation with Māori in order to clarify the importance of a health issue for Māori in the light of a proposed research project can result in an additional and un-remunerated workload for Māori researchers and organisations. Instead it is suggested that researchers use a 4 step procedure as follows.

STEP 1. Literature search and review. Hauora and Our Health, Our Future are suggested as good starting points. Clinical colleagues, NZHIS and local DHB's may be helpful in the absence of published work.

STEP 2. Potential effective strategies for research can be determined by using a combination of published literature and consultation with peers or pre-existing networks with Māori organisations.

STEP 3. Identification of and relationship building with relevant end-user organisations. These organisations may be able to help with the development of research ideas, recruitment of participants, and dissemination of results, and working with them will help to ensure that the research is relevant and addresses their needs.

STEP 4. Researchers must refer to any institutional codes of practice on the Treaty of Waitangi or Māori responsiveness issues in research. If none exist, consideration should be given to developing them.

**Comment:** Although published almost three years ago, the two papers from Sporle and Koea (No Taranaki) contain useful and practical information for researchers. I often refer researchers to these articles along with the 'HRC guidelines for Research with Māori' when asked about health research with Māori. Many organisations, and in particular DHB's, have set up Māori Research Review Committees to review research projects that are being undertaken within the organisation. Such an approach has both advantages and disadvantages. Māori who had been inundated with research proposals have appreciated the reduced workload and researchers have applauded the committees for providing clear direction. It is certainly useful to read about how a major DHB has tackled this issue and I look forward to hearing from readers about what is working for them in their region.

**Reference:** JNZMA 2004; Vol 117:(1199)

<http://www.nzma.org.nz/journal/117-1199/998/>