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Making Education Easy

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Tēnā koutou 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. Ngā mihi o te wā me te Tau Hou ki a koutou katoa. Noho ora mai.

Greetings

Welcome to this issue of the Māori Health 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.

Nga mihi **Matire** Dr Matire Harwood matire@maorihealthreview.co.nz

Improving Māori health through clinical assessment: Waikare o te Waka o Meihana

Authors: Pitama S et al.

Summary: It is widely acknowledged that biomedical, social, political and cultural factors contribute to health inequalities of indigenous communities. Health professionals have an important role to play in addressing these inequalities. This paper describes how the Indigenous Health Framework developed at the University of Otago, Christchurch, has been designed to translate the principles of cultural competency and safety into an approach that health practitioners can use in everyday practice and thereby improve health service delivery for Māori patients/whānau. The Indigenous Health Framework comprises the Hui Process and the Meihana model, which together have formed the indigenous health framework in the University of Otago, Christchurch undergraduate medical education programme for $4^{th}-6^{th}$ year medical students over the past 5 years. The components of the framework are defined in this paper, which goes on to describe how they are applied to clinical assessment. Favourable evaluations of the Indigenous Health Framework by medical students, health practitioners, Māori patients and whānau position it as a clinically relevant framework that supports health practitioners to work effectively with Māori patients and whānau.

Comment: The Hui Process is now taught at both medical schools. In my experience, students enjoy the opportunity to work in small groups with Māori patients. For some, this is their first clinical experience and sets them up well for their clinical years.

Reference: N Z Med J 2014;127(1393):107-19 Abstract

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The Guide to He Korowai Oranga



Initiation of maternity care for young Māori women under 20 years of age

Authors: Makowharemahihi C et al.

Summary: This qualitative study used a Kaupapa Māori research paradigm to expand understandings, beyond negative stereotypes, of the lived realities of young Māori women becoming pregnant, having their babies, and becoming mothers. Forty-four pregnant or recently pregnant Māori women <20 years of age were recruited from two case study sites: Wellington and the Hawkes Bay. The aim of the study was to describe what happens along the maternity care pathway from when the participants confirmed their pregnancy, and how well (or not) their needs were met. They completed a series of interviews during different stages of pregnancy and motherhood. Participants engaged early with health care services (GP services, school- and community-based youth health services) both to confirm their pregnancy and to initiate maternity care. Primary care providers often missed opportunities to adequately explain the process of what to do next or to help the young women to enrol with health services had an appropriate maternity care pathway toward obtaining early and seamless maternity care.

Comment: This study has recently received a huge response from national media. This is partly due to the themes that emerged from the interviews (first point of contact key to seamless maternity care for hapū teens) but also the fact that the focus shifted from teens to barriers in the health system as the place for intervention.

Reference: N Z Med J 2014;127(1393):52-61 Abstract

CONGRATULATIONS

Hannah Soper, a pharmacist at Christchurch Hospital. She won a Navman hands-free GPS unit for completing our Maori Health review subscriber survey.

Māori Health Review



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 Rangiura and Waimarie.

Twenty-eight day and one-year case fatality after hospitalisation with an acute coronary syndrome: a nationwide data linkage study

Authors: Grey C et al.

Summary: This study sought to determine 28-day and 1-year case fatality among all New Zealand residents hospitalised with acute coronary syndromes (ACS) between 2007 and 2009 (n=42,920), who were followed for 1 year using individual patient linkage of national hospitalisation and mortality datasets. Case fatality increased steeply with age. In Cox-proportional hazards analysis, Māori and Pacific people had 1.5 times the risk of 28-day, and twice the risk of 1-year, mortality as Europeans/ Others. Compared with having a high socioeconomic status (SES), having a low SES was associated with significantly higher mortality at 28 days (but not 1 year). Patients with unstable angina had half the risk of short-term mortality as non-ST-elevation myocardial infarction (NSTEMI) patients, whereas STEMI patients had double the NSTEMI risk.

Comment: The findings have confirmed previous research that case fatality (likelihood of dying from a coronary event) was not only higher for Māori and Pacific people in the short term, but then increased over time. Some suggest that inequities in post-ACS management (i.e., timeliness of surgical intervention) between Māori and non-Māori may explain disparities in ACS outcomes.

Reference: Aust N Z J Public Health 2014;38(3):216-20 Abstract

Twelve-month post-injury outcomes for Māori and non-Māori: findings from a New Zealand cohort study

Authors: Maclennan B et al.

Summary: The Prospective Outcomes of Injury Study recruited 2856 New Zealand residents from 5 regions of New Zealand. At 12 months post-injury, high levels of adverse outcomes were evident in both Māori (n=405) and non-Māori (n=1875), although higher proportions of Māori than non-Māori were experiencing disability, problems with mobility and psychological distress. In analyses that controlled for pre-injury and injury-related characteristics, Māori were at greater risk of disability, of having problems with mobility, having trouble performing usual activities, being in psychological distress and were more likely to report 'barely/not enough' household income at 12 months compared to non-Māori.

Comment: Although the findings may confirm what we expect or experience, it is good to have the evidence published and in such a good journal. Research is currently underway to better understand and improve outcomes for Māori living with injury.

Reference: Aust N Z J Public Health 2014;38(3):227-33 Abstract

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Māori Health Review

Survival on home dialysis in New Zealand

Authors: Marshall MR et al.

Summary: Data were retrospectively analysed from a cohort of New Zealanders in the Australian and New Zealand Dialysis and Transplant Registry (ANZDATA) Registry. Survival was compared over a 15-year period between those treated with home haemodialysis (HD; defined as dialysis in an independent fashion in an unstaffed setting using either HD or peritoneal dialysis [PD]) and those treated with facility HD (defined as dialysis in a dependent fashion at a staffed hospital or satellite dialysis HD unit), adjusting for measured patient risk factors such as age and co-morbidity. A total of 6419 adult patients with 3254 deaths were identified over 20,042 patient-years of follow-up with sufficient data for modelling. Patients treated with PD and facility HD had comparable demographics and co-morbidity. However, compared to those treated with PD or facility HD, patients on home HD were younger, more likely to have end-stage kidney disease (ESKD) secondary to single-organ (e.g. glomerulonephritis) rather than systemic disease, and less likely to have diabetes mellitus or medical co-morbidity. Compared to facility HD, home dialysis (as a unified category) was associated with an overall 13% lower mortality risk. In a second set of analyses that compared facility HD with PD and home HD separately, there was no difference in mortality risk between PD and facility HD, although PD was associated with a 20% lower mortality risk in the early period (<3 years) that was offset by a 33% greater mortality risk in the late period (>3 years), with no overall net effect. Overall, there was a 52% lower mortality risk associated with home HD, with no significant variation of the presence and extent of this effect over time. Effect modification and less observable benefit was associated with PD in those with diabetes mellitus, co-morbidity, and in New Zealand Maori and Pacific people. There was no effect modification by age or by era.

Comment: Interesting results that should help inform both clinicians and patients about best options for dialysis.

Reference: PLoS ONE 2014;9(5):e96847 Abstract

The WERO group stop smoking competition: main outcomes of a pre- and post- study

Authors: Glover M et al.

Summary: This study investigated if a Quit and Win competition, WERO (WERO in Māori language means challenge), would be effective in prompting quitting and increasing abstinence from smoking amongst Maori and New Zealand resident Pacific Island smokers. WERO has been designed to use both within team support, external support from a team coach and cessation experts, and technology. Fourteen teams with 10 contestants and one team with 8 contestants were recruited from urban Māori, rural Māori and urban Pacific communities. The teams competed against each other over a 3-month period (31 May to 30 August 2012) to win a NZ\$5000 prize for a charity or community group of their choice. Eligible contestants were aged ≥18 years, identifying as smokers. At the end of the competition the biochemically-verified guit rate was 36%. The 6 months self-reported quit rate was 26%. The Pacific and rural Māori teams had high end-of-competition and 6 months' follow-up quit rates (46% and 44%, and 36% and 29%, respectively). The study authors emphasise that if New Zealand is to reach its smokefree nation goal by 2025, innovative tobacco control strategies are needed that can rapidly reduce smoking prevalence within existing health budgets. They suggest that groups-based quit competitions such as WERO offer one such solution.

Comment: A great evaluation of a Māori- and Pacific-led intervention.

Reference: BMC Public Health 2014;14:599 Abstract

Treatment delay for Māori women with breast cancer in New Zealand

Authors: Seneviratne S et al.

Summary: Data were retrospectively analysed from 1449 women with breast cancer diagnosed in the Waikato region between 1 January 2005 and 31 December 2010. Of 1264 women undergoing primary surgery, 59.6% and 98.2% underwent surgery within 31 and 90 days of diagnosis, respectively. In comparison with New Zealand European women (mean 30.4 days), time to surgical treatment was significantly prolonged among Māori (mean 37.1 days, p=0.005) and Pacific women (mean 42.8 days, p=0.005). Māori women were more likely to experience delays longer than 31 (p=0.048) and 90 days (p=0.286) compared with New Zealand European women. In multivariate analysis, public sector treatment, ductal carcinoma in situ, mastectomy, higher co-morbidity score and earlier year of diagnosis were identified as factors predicting delays longer than 31 and 90 days. Inequities in delay between Mãori and New Zealand European women were greatest for women aged <50 years and those aged >70 years.

Comment: Again, there has been a lot of media interest over the past month about inequities in cancer care pathways for Māori with breast and prostate cancers. Monitoring the quality of care in this way has resulted in better services and better outcomes for Māori – as seen in other cancer care pathways such as cervical cancer.

Reference: Ethn Health 2014 Mar 18 [Epub ahead of print] Abstract

Why equal treatment is not always equitable: the impact of existing ethnic health inequalities in cost-effectiveness modeling

Authors: McLeod M et al.

Summary: This work was undertaken within a cancer research programme. It used as a case example a hypothetical cancer intervention in New Zealand to examine the impact of using ethnic-specific (Māori and non-Māori) data in cost-utility analyses for three cancers (lung, female breast, and colon cancer). For each cancer, the researchers modelled a hypothetical treatment that reduces the excess mortality due to the cancer by 20% for both Māori and non-Māori. For each of the three cancers, including existing inequalities in background parameters (population mortality and co-morbidities) for Māori attributed less value to a year of life saved compared with non-Māori, lowered the relative health gains for Māori, and therefore increased the resulting cost-effectiveness ratio (making the intervention appear less cost-effective). In contrast, ethnic inequalities in cancer parameters had less predictable effects. Despite excess mortality rates for Māori being higher for all three case study cancers, modelled health gains for Māori were lower from the lung cancer intervention than for non-Māori but higher for the breast and colon interventions.

Comment: As the authors say, health economics should play an important role in the prioritisation of health interventions (for example, where can we make the biggest bang for our dollar). However, this is something that I have concerns about when it comes to things like equity and Māori health gain. It is therefore reassuring to read that such concerns may be justified, and that cost-effectiveness analyses require an 'equity' component to them.

Reference: Popul Health Metr 2014;12:15 Abstract

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Māori Health Review

Combination budesonide/formoterol inhaler as maintenance and reliever therapy in Māori with asthma

Authors: Pilcher J et al.

Summary: In this study, 303 adult asthma patients (44 of whom were Māori) were randomised to the single combination budesonide/formoterol inhaler as maintenance and reliever therapy ('SMART') regimen or 'standard' regimen (combination budesonide/formoterol inhaler for maintenance and salbutamol as reliever) for 24 weeks. In analyses adjusting for ethnicity, the SMART regimen was associated with fewer days of 'high use' of reliever therapy (defined as >8 actuations of budesonide/formoterol in excess of 4 maintenance days for SMART and >16 actuations per day of salbutamol for standard) (relative rate [RR] 0.57; 95% CI, 0.38 to 0.85), fewer days of high use without medical review within 48 h (RR 0.49; 95% CI, 0.32 to 0.75) and fewer severe exacerbations (RR 0.54; 95% CI, 0.36 to 0.81) compared with the standard regimen. The magnitude of the benefit from the SMART regimen was similar in Māori and non-Māori. Days of high use, days of high use without medical review and underuse of maintenance treatment were greater in Māori, regardless of treatment regimen.

Comment: There are significant disparities between Māori and non-Māori with asthma, despite nearly 40 years of Māori-led research showing that barriers to health care and differences in management contribute to these inequities. The results, showing the effectiveness of ground-breaking asthma management for Māori, should inform best practice and help to eliminate these disparities.

Reference: Respirology 2014;19(6):842-51 Abstract

Potentially preventable admissions to New Zealand public hospitals for dental care: a 20-year review

Authors: Whyman RA et al.

Summary: Data were examined from the New Zealand Ministry of Health National Minimum Data Set (NMDS), a collection that covers all publicly funded hospital discharges, over a 20-year period from 1 January 1990 to 31 December 2009, to describe the prevalence of admissions to New Zealand public hospitals for dental care and associated time trends for people of all ages during this 20-year period. A total of 120,046 admissions between 1990 and 2009 were identified as being primarily for the provision of dental care. The rate of admission to hospital for dental care increased from 0.92 per 1000 population in the period 1990–1994 to 2.15 per 1000 population in 2005–2009. Dental admission rates were greatest in the 3- to 4-year-old age group, for Māori and Pacific people and for people in the most deprived quintile of the NZDep 2006 index. Almost one-third of people aged 18–34 years who were admitted to hospital primarily for dental care were acute admissions.

Comment: A really good paper. The discussion is particularly comprehensive about the multiple interacting reasons including disease patterns, inconsistent access to fluoridated water, a potential lack of primary prevention in both the child and adult population, variable access to primary dental care across population groups and changing standards of care.

Reference: Community Dent Oral Epidemiol 2014;42(3):234-44 Abstract

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