In this issue:

- Māori ethnicity misclassified in cervical screening data
- Binge drinking among Māori secondary school students
- High prevalence of prediabetes in NZ
- e-Learning teaches about sudden infant death
- Inequalities in road traffic injury rates
- Neighbourhood effects on Māori health and racial discrimination
- Exploring Māori experiences of asthma management
- Finding a living kidney donor
- Reducing smoking among indigenous populations
- Diabetes self-management education in primary care

The effect of Māori ethnicity misclassification on cervical screening coverage

**Authors:** Sandiford P et al

**Summary:** These researchers examined data from Waitemata District Health Board's two Primary Health Organisations (PHOs) to identify the population of Waitemata domiciled women aged 25–69 years eligible for cervical screening. Their cervical screening status was obtained from the National Cervical Screening Programme register (NCSP-R). Auckland and Waitemata DHB data were used to determine the women's ethnicity in the National Health Index (NHI). Ethnicity codes from the three sources (PHO registers, NCSP-R and NHI) were compared to identify women classified as non-Māori in the NCSP-R but Māori in either of the other two data sources. Of a total of 6718 women identified as Māori on the NCSP, 5242 had been screened within the last 3 years and 1476 had not. An additional 2075 women who identified as Māori in either the PHO or NHI databases but not in the NCSP-R had been screened within the preceding 3 years, and a further 2094 had not been screened. Moreover, 797 women identified as Māori in the NHI or PHO datasets who were not on the NCSP-R (and therefore were not screened). After adjusting ethnicity data to include all screened women classified as Māori from any source, the Waitemata DHB Māori screening coverage rate increased from 49.3% to 68.8% (or to 61.0% and 63.2%, respectively, after adjusting for just PHO or NHI Māori).

**Comment:** The findings are of particular importance for those PHOs and practices with large numbers of Māori women. Hopefully, the NCSP team overseeing the register will be able to address the problem.

**Reference:** N Z Med J 2013;126(1372):55-65

Abbreviations used in this issue

- DHB = District Health Board
- NHI = National Health Index
- PHO = Primary Health Organisation


The latest report regarding the performance of general practices in Whānau Ora collectives is now available on the www.health.govt.nz website.

General practices within Whānau Ora collectives continue to outperform practices within the national sample on several key areas and the report highlights further increases in several key indicators – including providing smoking cessation advice and recording CVD risk assessments.

Learn more online: The full report and a range of supporting FAQs can be found here

www.maorihealthreview.co.nz
Binge drinking among Māori secondary school students in New Zealand: associations with source, exposure and perceptions of alcohol use

Authors: Clark TC et al

Summary: These researchers investigated factors and outcomes associated with patterns of alcohol use among a sample of 1702 Māori secondary school students from the 2007 national youth health survey. Among current drinkers, 31.5% reported binge drinking (5–9 drinks) and 30.4% reported heavy binge drinking (≥10 drinks) in a 4-hour session in the past 4 weeks. Compared with non-binge drinkers, binge drinkers more frequently reported ‘drinking alcohol was okay for people their age’ (OR\_{\text{ binge}} = 1.9; \text{OR}_{\text{heavy binge}} = 2.4, p<0.0001), had friends that drank alcohol (OR\_{\text{ binge}} = 4.0, p<0.0001), had sourced alcohol from friends (OR\_{\text{ binge}} = 1.7; \text{OR}_{\text{heavy binge}} = 1.2, p=0.002) or from ‘other adults’ (OR\_{\text{ binge}} = 1.6; \text{OR}_{\text{heavy binge}} = 1.7, p=0.0004) and buying their own alcohol (OR\_{\text{ binge}} = 2.8; p<0.0001). Binge drinking was associated with poorer school performance, unsafe sex, unwanted sex, an injury, injuring someone else, motor vehicle crashes and ‘doing things that could cause trouble’. Binge and heavy binge drinkers reported greater difficulty accessing drug and alcohol services (OR\_{\text{ binge}} = 2.30; \text{OR}_{\text{heavy binge}} = 4.97; p<0.0001).

Comment: Binge drinking is associated with major risks, especially in adolescents, of cognitive impairments and possible irreversible brain damage – urgent action has been recommended. There is some evidence that interventions by schools and employers, such as health and lifestyle checks, psychosocial skills training and peer referral, can reduce the level of binge drinking. Conducting interviews in emergency departments of young people suspected of harmful drinking patterns and trying to persuade them to accept individual counselling in youth addiction counselling services are also effective strategies for reducing the harm of binge drinking.


Prevalence of diagnosed and undiagnosed diabetes and prediabetes in New Zealand: findings from the 2008/09 Adult Nutrition Survey

Authors: Coppell KJ et al

Summary: Data were obtained from the 2008/09 New Zealand Adult Nutrition Survey, a nationally representative, cross-sectional survey of 4721 subjects aged ≥15 years. Self-reported diabetes and the 2010 American Diabetes Association cut-offs for HbA\(_1c\) were used to define diagnosed diabetes, undiagnosed diabetes and prediabetes. Prevalence rates were calculated and age-specific diagnosed diabetes rates were compared with those from the Virtual Diabetes Register, which counts known diabetes cases as follows: individuals with diabetes are identified using the NHMRC from 6 databases with information about hospital admissions, attendance at diabetes outpatients or retinal screening, diabetes-specific medication prescriptions, laboratory HbA\(_1c\) testing and mortality. Overall prevalence rates of diabetes and prediabetes were 7.0% and 18.6%, respectively. Diabetes was more prevalent in men (8.3%) than in women (5.8%) and among the obese (14.2%) compared with the normal-weight group (2.4%). Pacific people had the highest prevalence of diagnosed diabetes (6.4%), followed by Māori (2.2%) and New Zealand European and Others (1.5%).

Comment: Robust and kaupapa Māori research is required to build evidence and then develop and implement approaches to prediabetes.


Usage and impact of an online education tool for preventing sudden unexpected death in infancy

Authors: Cowan S et al

Summary: This group of researchers from Christchurch describes the usage, impact and reach of their online education tool designed to prevent sudden infant death. They formatted a 24-slide presentation for online access, which was designed for mainstream audiences and intended to align current knowledge, attitudes and actions for a blitz approach to preventing sudden infant death in NZ. Between 18 November 2009 and 31 December 2011, 3286 online sessions were completed, 2683 (81.7%) of which had complete data. Average usage was 24.4 completed sessions/week over the 2-year study period, at a cost of NZD11.11 per completed session. Usage reached across regions, ethnic groups and roles. On completion of the course, most respondents (68.8%) rated highly (7–9/9) their ‘increased confidence’ to discuss infant sleep safety with others. A high increased confidence rating was significantly influenced by spending more time per slide and being Māori, Pacific, Asian or ‘Other’ compared with New Zealand European.

Comment: Useful information for services/agencies who may be thinking of developing e-learning tools. Although more NZ European people accessed the tool compared with Māori, it appears that Māori learners felt more confident in sharing the health messages learnt.

Strategies to improve access for Māori e-learners should be considered.

Reference: J Paediatr Child Health 2013;49(3):228-32

The Health of Māori Adults and Children

This brief paper presents key findings about the health and wellbeing of Māori adults and children in 2011/12, which come from the New Zealand Health Survey.


Hard copies are available by emailing moh@wickliffe.co.nz or calling 04 496 2277 quoting HP number 5617.

For full results from the 2011/12 New Zealand Health Survey, see the publications The Health of New Zealand Adults 2011/12 and The Health of New Zealand Children 2011/12.

For more information, please go to [http://www.maorihealth.govt.nz](http://www.maorihealth.govt.nz)
An indigenous approach to explore health-related experiences among Māori parents: the Pukapuka Hauora asthma study

Authors: Jones B et al

Summary: This paper details the development of a culturally responsive, Kaupapa Māori Research approach that successfully recruited and retained a cohort of Māori families with experiences of childhood asthma. The investigation recruited 32 Māori families, who each participated in a series of four in-depth interviews that were carried out at seasonal intervals over the course of one year. Families also took part in an interviewer-administered questionnaire and participated in a Photovoice exercise. Qualitative analyses were conducted of the material generated by the interviewees and questionnaires. The methodology produced a 100% retention rate of the participating families over the course of the follow-up. This was attributed to the research collaboration, the respectful research relationships established with families, and the families’ judgement that the methods used enabled them to tell their stories. The study authors consider that “the methodology and methods of this study set a benchmark for conducting collaborative, Māori health research that can be used to inform intervention strategies that facilitate Māori health and wellness”.

Comment: A fantastic description of ways to successfully engage Māori whānau in research. I look forward to reading the results from the research.

http://www.biomedcentral.com/1471-2458/13/228

Ethnic density and area deprivation: Neighbourhood effects on Māori health and racial discrimination in Aotearoa/New Zealand

Authors: Bécares L et al

Summary: This study analysed the Māori sample from the 2006/07 New Zealand Health Survey to examine the association between increased Māori ethnic density, area deprivation, health, and experiences of racial discrimination. The results of the study showed that whereas ethnic density is protective of the health and exposure to racial discrimination of Māori, this effect is concealed by the detrimental effect of area deprivation, signalling that the benefits of ethnic density must be interpreted within the current socio-political context.

Comment: As identified by the authors, whilst Māori ethnic density is associated with improved Māori health and reduced racial discrimination, these benefits are buried by the detrimental effect of area deprivation. Factors that drive and maintain deprivation in areas where Māori live must be eliminated in order for us to fully realise the advantages of living in self-determined communities.


Ethnic, socioeconomic and geographical inequalities in road traffic injury rates in the Auckland region

Authors: Hosking J et al

Summary: These researchers describe substantial ethnic, socioeconomic and geographical inequalities in road traffic injury (RTI) risk in the Auckland region. They analysed rates of RTI deaths and non-fatal hospital admissions using the New Zealand Mortality Collection and the National Minimum Data Set 2000–2008. Poisson regression examined the association of age, gender, prioritised ethnicity and small area deprivation (New Zealand Index of Deprivation) with RTI rates, and RTI rates were mapped for 21 local board areas within the Auckland region. RTI rates increased with levels of deprivation in all age groups, with the steepest gradient among children (9% increase/decile) and adults aged 25–64 years (11% increase/decile). In all age groups, RTI risk was highest among Māori (all ages). Pacific children had an elevated risk of RTI compared with the NZ European/Other group, but Pacific youth (15–24 years) and adults (25–64 years) had a lower risk. While RTI rates were generally higher for those living in rural local board areas, all but one local board in the southern Auckland urban area had among the highest rates.

Comment: Interventions or strategies that are effective at reducing ethnic or socioeconomic inequalities in RTI rates are required, particularly in South Auckland and for rural areas. The authors raise an interesting point in their discussion that Auckland’s walking school buses (an intervention expected to reduce child pedestrian injuries) found substantially lower coverage in the southern Auckland urban area, despite the fact that children living in this area are at high risk.


Māori Participation and Attainment in Science Subjects (Year 11–13) 2007 to 2011

The Ministry of Health has just published data measuring Māori students’ participation and attainment in science subjects (Year 11–13). Māori students’ participation and attainment in science subjects is necessary to enable them to study at higher levels to become Māori health professionals which is vital to providing appropriate care to Māori individuals, their whānau and all New Zealanders.

Data can be viewed in an easy to use excel workbook at:

For more information, please go to http://www.maorihealth.govt.nz
Finding a living kidney donor: experiences of New Zealand renal patients

Author: Martin P

Summary: This paper discusses the barriers to living donor kidney transplantation (LDKT) in New Zealand. While LDKT is the preferred treatment for many people with end-stage renal failure (ESRF), a significant and growing gap exists between the number of people who might benefit from a transplant and those who receive one in New Zealand. One hundred and ninety-three patients on the New Zealand waiting list for a kidney transplant responded to a postal survey about live transplantation. Their responses provide evidence about patterns of donor recruitment activity amongst New Zealand patients. While many patients are willing to discuss LDKT with family and friends, most are reluctant to go on to ask others directly to consider live donation. Patients who have not discussed LDKT with others are significantly less likely to have received even one offer from a potential donor. Pākehā and Māori are more likely to have received an offer to donate and to have had someone go on to be considered a potential donor. Māori and Pacifica peoples compared with NZ Europeans; the lower rates of kidney transplants for Māori and Pacifica peoples; the lower rates of kidney transplants for Māori and Pacifica peoples compared with NZ Europeans; the lower rates of kidney transplants for Māori and Pacifica peoples compared with NZ Europeans; the lower rates of kidney transplants for Māori and Pacifica peoples compared with NZ Europeans; the lower rates of kidney transplants for Māori and Pacifica peoples compared with NZ Europeans; the lower rates of kidney transplants for Māori and Pacifica peoples compared with NZ Europeans; the lower rates of kidney transplants for Māori and Pacifica peoples compared with NZ Europeans; the lower rates of kidney transplants for Māori and Pacifica peoples compared with NZ Europeans; the lower rates of kidney transplants for Māori and Pacifica peoples compared with NZ Europeans;

Comment: An interesting paper, given the higher rates of ESRF in Māori and Pacifica peoples; the lower rates of kidney transplants for Māori and Pacifica peoples compared with NZ Europeans; and the fact that views from the Māori and Pacifica participants in this study varied significantly, when we are often grouped together.


A structured, group-based diabetes self-management education (DSME) programme for people, families and whanau with type 2 diabetes (T2DM) in New Zealand

Authors: Krebs JD et al

Summary: Outcomes are discussed from a group-based diabetes self-management education (DSME) programme specifically tailored for New Zealand’s social and ethnic environment. A total of 107 patients aged 18–80 years (mean age 56.7 years) with type 2 diabetes from diverse cultural backgrounds were recruited from primary care. The mean duration of diabetes was 7.5 years and ethnic backgrounds consisted of NZ European (44%), Māori (24%), Pacific (16%) and Indian (16%). Seventeen groups of six weekly education sessions were conducted. Responses to a self-administered questionnaire on diabetes knowledge and self-management behaviours revealed that the programme improved confidence in self-managing diabetes, regular examination of feet, physical activity levels and smoking rates. HbA1c was improved from 6.4 mmol/mol (8.07%) at baseline to 5.9 mmol/mol (7.62%) at 6 months (p<0.05), but was no different to baseline at 9 months. Systolic BP reduced from 131.9 to 127.4 mmHg (p<0.05) at 6 months, but increased to baseline levels by 9 months. Diastolic BP, triglycerides and urine microalbumin:creatinine ratio were significantly reduced at 3, 6 and 9 months.

Comment: Interesting follow-up of DSME delivered in primary care. As the authors note, many of the gains made at 6 months were lost at 9 months; a refresher course is recommended. A similar evaluation of the ‘Whānau Ora’ type of DSME would provide even more useful information.

Reference: Prim Care Diabetes 2013 Mar 18. [Epub ahead of print]

Reducing smoking among indigenous populations: new evidence from a review of trials

Authors: Johnston V et al

Summary: This systematic review of the literature identified five trials that recruited nonindigenous and indigenous participants in tobacco control interventions – three interventions tested the effectiveness of enhanced Quitline protocols with cessation products over usual Quitline care, and two trialled a culturally adapted cessation counselling intervention using mobile phones. Three studies did not demonstrate a significant effect of the intervention for both indigenous and nonindigenous participants; two were pharmacotherapy studies using nicotine replacement therapy and the third was a trial of a multimedia phone intervention. The fourth study found a significant effect of a behavioural intervention using text messaging for indigenous and nonindigenous participants. The final study found a significant effect in favour of very low nicotine cigarettes compared with usual care; results were similar across ethnic groups.

Comment: A great review on ‘what works’ to help indigenous peoples quit smoking. I agree with the authors’ recommendations that any study of cessation products or support must over-sample Māori, for as Māori participants have indicated, they are more likely to consider quitting even when they just participate in smoking cessation research. Importantly, a focus on developing a ‘culturally appropriate’ service may miss the point. Evidence shows that NZ Europeans are more likely to be prescribed NRT than other ethnicities. This gap increases after adjusting for smoking prevalence. Research to address inequities in clinical practice may therefore be more important.

http://ntr.oxfordjournals.org/content/early/2013/03/20/ntr.nrt022.short

Foundation Course in Cultural Competency

The Foundation Course in Cultural Competency on-line training tool is still available. This training is free for the New Zealand Health Workforce until 30 June 2013.

For further information and registration details, please visit www mauriora.co.nz

www.maorihealthreview.co.nz

© 2013 RESEARCH REVIEW