

Pacific Health Review

Making Education Easy

Issue 3 – 2008

In this issue:

- > *Ethnic rates for diabetic retinopathy*
- > *Meningococcal B: to vaccinate or not?*
- > *Smoking prevalence data in Pacifica people*
- > *Quality of ethnicity data in primary care*
- > *Survival by ethnicity in childhood cancer*
- > *NZ child use of dental services*
- > *NZ Mental Health Survey 2003–2004*
- > *Stroke epidemiology, Māori and Pacific peoples*
- > *Patient retention in diabetic reviews*
- > *Nutrition practices and BMI in overweight teens*

Kia orana, Fakalofa lahi atu, Talofa lava, Malo e lelei, Bula vinaka, Taloha ni, Kia ora, Greetings.

Welcome to the third edition of Pacific Health Review. I wish you all a Happy New Year.

We are publishing a Review of the recently held National Smokefree Conference and this will be available for downloading next month at www.researchreview.co.nz.

Lastly we welcome submissions from practitioners working with Pacific peoples who would like us to feature their research – published or not.

We look forward to your feedback and hope you enjoy this issue.

Kind regards,

Colin

Dr Colin Tukuitonga

colintukuitonga@researchreview.co.nz

Ethnic differences in diabetic retinopathy

Authors: Simmons D et al

Summary: This study investigated rates of diabetic retinopathy in 458 (67.5% of eligible) randomly selected household survey participants with known diabetes (168 Europeans, 144 Māori, 149 Pacifica people). Type 2 diabetes was associated with significantly higher rates of moderate or more severe retinopathy in Māori and Pacifica people, compared with Europeans (12.9% and 15.8% vs 4.0%, respectively). No such ethnic differences were seen for overall rates of retinopathy and macular disease. Pacifica ethnicity was associated with a significantly higher rate of cataracts (36.6% vs 19.3% for Europeans and 16.4% for Māori). After adjusting for diabetes duration and ethnicity, patients with type 1 diabetes were over 5 times more likely to develop moderate or more severe retinopathy. While Māori and Pacifica people with type 2 diabetes were more hyperglycaemic, with higher systolic and lower diastolic blood pressure, logistic regression analysis revealed that moderate or more severe retinopathy was associated with diabetes duration, insulin therapy, ethnicity and the extent of renal disease, but not glycaemia.

Comment: This New Zealand study of 67.5% of eligible patients (168 Europeans, 144 Māori, 149 Pacific people) with known type 2 diabetes randomly selected from eligible households showed a very high prevalence of moderate or severe retinopathy in Māori and Pacific patients compared with Europeans. Retinopathy was 4 times higher among Pacific patients and 3 times higher among Māori patients, compared with New Zealand Europeans. The reasons for the ethnic differences were not clear but the authors suggest that long-standing glycaemia may be an explanatory factor. Study findings signal serious concerns about the potential increase in visual impairment and blindness among Pacific peoples. The study also confirms the need for better diabetes control among Pacific (and Māori) patients.

<http://dx.doi.org/10.1111/j.1464-5491.2007.02227.x>

Reference: *Diabet Med.* 2007;24:1093-8

Pacific Health Leadership Development Programme 2008



The Ministry of Health's Pacific Health Leadership Development Programme is intended to develop the leadership capability of people working within the health sector.

Applications are invited from Pacific people working in leadership roles or aspiring to leadership roles in the health sector and with a commitment to improved health outcomes for Pacific people.

For information or an application form email pacific_health@moh.govt.nz or visit www.moh.govt.nz/pacific

Applications close on 18 February 2008.



For more information, please go to <http://www.moh.govt.nz/pacific>

Tobacco smoking prevalence in Pacific Island countries and territories: a review

Authors: Rasanathan K and Tukuitonga CF

Summary: Data were reviewed from the period 1986–2006 to establish the prevalence of adult and youth smoking in Pacific Island countries and territories (PICT). Smoking prevalence in PICT ranges from 22%–57% (males) and from 0.6%–51% (females). In all PICT male populations (except Palau), rates exceed those in Australia and New Zealand. High rates of female smoking were found in Nauru, Tokelau, French Polynesia, New Caledonia, and Kiribati. Youth rates of smoking range from 3%–68% (although unavailable for many PICT). Very high levels of youth smoking (both male and female) were evident in Palau, Northern Mariana Islands, Guam, the Cook Islands, and American Samoa. Over the last 30 years, smoking prevalence appears to have decreased in male populations but is inconsistent in female populations.

Comment: A review of the literature on tobacco use in Pacific Island countries showed that the data are incomplete and dated. Nonetheless, available data showed that smoking prevalence was high in all small island states. In general, men smoked more often than women but women smoked more often than men in some islands. Smoking among young people was a concern in almost all island states. The ratification of the WHO Framework Convention on Tobacco Control provides a golden opportunity to take more effective action against smoking in the Pacific islands. Recent World Health Organization STEPS surveys have already provided improved data on smoking in the islands.

<http://www.nzma.org.nz/journal/abstract.php?id=2742>

Reference: *N Z Med J.* 2007;120(1263):U2742

*Independent commentary
by Dr Colin Tukuitonga,
Chief Executive of the
Ministry of Pacific Island
Affairs*

Meningococcal B: tell me everything you know and everything you don't know. New Zealanders' decision-making regarding an immunisation programme

Authors: Watson PB et al

Summary: This qualitative analysis describes parents' decision-making process and the factors influencing decisions regarding children's participation in the MeNZB™ immunisation programme. Semi-structured interviews were conducted with 21 parents, 10 of whom had consented to immunisation, 10 who had not, and 1 who chose to immunise only 1 of their 2 children. Despite different outcomes, the parents were influenced by similar factors and they followed similar decision-making processes consisting of four non-linear phases; a gut reaction, a trigger, reconnaissance, and risk analysis. Most parents expressed a degree of uncertainty about their decision.

Comment: This study compared 10 parents who consented to the MeNZB™ immunisation programme, 10 parents who did not consent and 1 parent who chose to immunise only 1 of their 2 children. All parents were influenced by similar factors and followed similar decision-making processes. All parents expressed a largely unfulfilled desire for reliable, valid and balanced information about the MeNZB™ vaccine. They expressed a generally negative view of the official information provided by health authorities. The study findings confirm generally well known views about the need for better and more balanced information provided by a credible independent third party.

<http://www.nzma.org.nz/journal/120-1263/2751/>

Reference: *N Z Med J.* 2007;120(1263):U2751

The accuracy of ethnicity data in primary care

Authors: Bramley D and Latimer S

Summary: This study investigated the accuracy of Primary Health Organisation (PHO) register ethnicity data held within the Waitemata district of Auckland, New Zealand. Ethnicity data of children aged 5–15 years on the National Immunisation Register (NIR) were compared to ethnicity data for those children on the PHO register. NIR data were collected from parents or guardians via a protocol-based informed consent process in the Meningococcal B Immunisation Campaign. Of children recorded as Māori on the NIR, 62.9% were recorded as Māori on the PHO register, 23.3% as European and 9.6% as Unknown. Of children recorded as Pacific on the NIR, 77.2% were recorded as Pacific on the PHO register, 9.4% as European, and 6.2% as Unknown. Of children recorded as Asian on the NIR, 81.4% were recorded as Asian on the PHO register, 9.9% as Unknown and 6.0% as European. Of children recorded as European on the NIR, 83.2% were recorded as European on the PHO register and 14.4% as Unknown. These study results indicate that a standardised, systematic and appropriate sector-wide approach is needed for ethnicity data collection, conclude the authors.

Comment: Ethnicity data of children registered with the National Immunisation Register (NIR) were compared with ethnicity data in Primary Health Organisation (PHO) registers within the Waitemata District Health Board boundaries. Findings from the study showed significant misclassification in all ethnic groups, especially among Māori children. Māori, Pacific and Asian children were most likely to be classified as 'European'. Ethnicity was unknown in approximately 10% of children in all ethnic groups; highest among European and lowest among Pacific children. These results suggest that these inaccuracies reflect the national scene because the Waitemata DHB population most closely resembles the ethnic mix of the total NZ population. More importantly, results demonstrate the need for more effort to collect accurate ethnicity information, especially where services are funded based on ethnicity.

<http://www.nzma.org.nz/journal/120-1264/2779/>

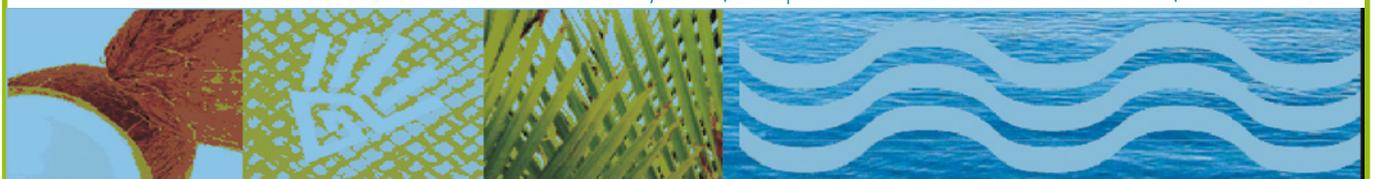
Reference: *N Z Med J.* 2007;120(1264):U2779



The Ministry of Health
invites you to:

AKIRATA – Achieving Excellence in the Pacific Health Sector

28-29 February 2008, Waipuna Hotel and Conference Centre, AUCKLAND



Te Rau Hinengaro: The New Zealand Mental Health Survey: overview of methods and findings

Authors: Wells JE et al

Summary: This report details the findings of a nationwide face-to-face household survey undertaken between 2003 and 2004 with New Zealand residents aged ≥ 16 years, to estimate the prevalence and severity of anxiety, mood, substance and eating disorders, and associated disability and treatment. Oversampling doubled the number of Māori and quadrupled the number of Pacific people, among 12,992 participants (2,595 Māori and 2,236 Pacific people). The response rate was 73.3%. A total of 39.5% had met criteria for a DSM-IV mental disorder at any time in their life before interview, 20.7% had experienced disorder within the past 12 months and 11.6% within the past month. In the last 12 months, 4.7% had experienced serious disorder, 9.4% moderate disorder and 6.6% mild disorder. A visit for mental health problems was made to the health-care sector in the past 12 months by 58.0% of those with serious disorder, 36.5% with moderate disorder, 18.5% with mild disorder and 5.7% of those not diagnosed with a disorder. Higher prevalences of disorder and serious disorder were seen among younger people and people with less education or lower household income, yet these correlates were only weakly related with treatment contact. According to unadjusted sociodemographic correlates, Māori and Pacific people had higher prevalences of disorder and were less likely to seek treatment in relation to need, compared with the composite Others group.

Comment: The New Zealand Mental Health Survey is a comprehensive and representative survey of mental health and mental health services utilisation in New Zealand as part of the global WHO survey. Oversampling led to 2,236 of the total 12,992 sample claiming Pacific descent. The aim of this article was to estimate the prevalence and severity of anxiety, mood, substance and eating disorders in New Zealand, and associated disability and treatment. Results showed that mental disorders are common in New Zealand. Many people with current disorders are not receiving treatment, even among those with serious disorder. Compared with the composite Others group, Māori and Pacific peoples had higher prevalences of disorders, unadjusted for sociodemographic correlates, and were less likely to make treatment contact, in relation to need.

<http://dx.doi.org/10.1111/j.1440-1614.2006.01902.x>

Reference: *Aust N Z J Psychiatry.* 2006;40:835-44

Child use of dental services and receipt of dental care in New Zealand

Authors: Jamieson LM and Koopu PI

Summary: These researchers examined data from the 2002 National Children's Nutrition Survey to determine dental service use and dental care receipt among Māori, Pacific and New Zealand European or Other children in New Zealand. Of the 3,275 participants, 37.4% were Māori, 32.3% were Pacific and 30.3% were New Zealand European or Other. Irregular dental attendance was associated with children who were 11–14 years, Pacific, had not always lived in New Zealand, lived in rented accommodation, frequently watched television, consumed breakfast on the way to school, purchased lunch, consumed sugar-containing products or had food security issues. Tooth restoration was associated with the 11–14-year age group, Māori ethnicity, low household income, households with 4+ children, regular television viewing, consuming breakfast on the way to school, frequent consumption of high-sugar foods, food security issues, children experiencing dental pain at night or who had received dental care under a general anaesthetic. Tooth extraction was associated with Pacific ethnicity, low household income, children who had a disability, purchased their lunch, regularly consumed high-sugar-containing products, had food security issues, had experienced dental pain at night or received dental care under a general anaesthetic.

Comment: Data from the 2002 National Children's Nutrition Survey were used to examine dental service use and dental care receipt by Māori, Pacific and New Zealand European or Other children in New Zealand. Approximately, one-third of 3,275 children included in the survey were Pacific. Results showed that a range of factors were associated with irregular dental attendance, extraction, dental pain at night including purchasing lunch, consuming breakfast on the way to school, frequent television watching and others. Pacific children were most likely to show irregular dental attendance and teeth extraction. Results showed that Pacific children and their families need more information on dental health and need to be encouraged to make use of the dental health services on a regular basis in order to reduce the loss of teeth through extraction. Better diet and nutrition information is also needed.

<http://dx.doi.org/10.1111/j.1440-1754.2007.01168.x>

Reference: *J Paediatr Child Health.* 2007;43:732-9

Survival by ethnicity for children diagnosed with cancer in New Zealand during 1990–1993

Authors: Douglas NM and Dockerty JD

Summary: Survival by ethnicity was assessed for 409 children (0–14 years) diagnosed with cancer in New Zealand during 1990–1993 and the accuracy of the ethnicity data was also investigated. Survival rates were the same for Māori and Pacific Island children as for non-Māori/non-Pacific children for 'all cancers combined' (hazard ratio [HR] 0.98; 95% CI 0.64 to 1.50 and HR 1.01; 95% CI 0.53 to 1.89, respectively) and for acute lymphoblastic leukaemia (HR 1.09; 95% CI 0.45 to 2.62 and HR 0.99; 95% CI 0.24 to 4.16, respectively). There was reasonable close agreement between the National Health Index and the New Zealand Cancer Registry ethnicity data and that provided by the children's mothers at interview (Kappa statistics: 0.82 and 0.81 respectively), whereas the Mortality Collection showed only moderate agreement (Kappa statistic: 0.63).

Comment: This study aimed to assess survival by ethnicity for all New Zealand children (0–14 years) diagnosed with cancer during 1990–1993 and second, to determine the accuracy of the children's routinely collected ethnicity information. The ethnicity data stored within the National Health Index and the New Zealand Cancer Registry showed reasonably close agreement with ethnicity data provided by the children's mothers at interview while the Mortality Collection showed only moderate agreement. The point estimates in this study provide no evidence of ethnic disparities in survival from childhood cancer in New Zealand. Note that the data used in this study are dated. They also refer to a small group of children with a serious disease and it may have been easier to collect ethnicity data from the patient or their parents.

<http://dx.doi.org/10.1111/j.1440-1754.2007.01038.x>

Reference: *J Paediatr Child Health.* 2007;43:173-7



www.moh.govt.nz/healthyeatinghealthyaction

Burden of stroke in Māori and Pacific peoples of New Zealand

Authors: Feigin VL et al

Summary: This report is an overview of published population-based stroke incidence studies and other relevant research in the multi-ethnic New Zealand population, with a particular emphasis on Māori and Pacific populations. The researchers highlight the fact that the stroke epidemiology data are skewed unfavourably towards Māori and Pacific people and they call upon health providers to introduce effective measures and delivery systems with urgency, in order to reverse this trend and improve Māori and Pacific people's health.

Comment: Studying ethnic particularities of stroke epidemiology may not only provide a clue to the causes of the observed racial/ethnic differences in stroke mortality but is also important for appropriate, culturally specific health care planning, prevention in stroke and improved health outcomes. This overview of published population-based stroke incidence studies and other relevant research in the multi-ethnic New Zealand population demonstrates an obvious ethnic disparity in stroke in New Zealand, with the greatest and increasing burden of stroke being imposed on Māori and Pacific people. These data warrant urgent and effective measures to be undertaken by health policy makers and health care providers to reverse the unfavourable trends in stroke and improve Māori and Pacific people's health.

<http://dx.doi.org/10.1111/j.1747-4949.2007.00140.x>

Reference: *Int J Stroke*. 2007;2:208-10

Privacy Policy: Research Review will record your email details on a secure database and will not release it to anyone without your prior approval. Research Review and you have the right to inspect, update or delete your details at any time.

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.

**Upcoming
Conference Reviews
available to
download free**

**World Allergy
Conference Review –
reviewed by
Dr Jan Sinclair**

**Smokefree Oceania
Conference Review –
reviewed by
Dr Colin Tukuitonga**

Retention of patients in the “Get Checked” free annual diabetes review program in Waikato, New Zealand

Authors: Joshy G et al

Summary: Data were retrospectively reviewed from 10,919 Waikato Primary Health registered patients (87% had type 2 diabetes and 8% had type 1 diabetes) who had ≥1 review in the “Get Checked” free annual diabetes review programme between 1st July 2000 and 30th June 2006. During 2005/06, 57% of the estimated 10,604 diabetes patients utilised the free check. Within 1.5 years after initial review, 35% had not returned for a second review. Retained patients attended subsequent reviews more regularly. Those who attended a second review returned much earlier for the third review, 75% within 1.5 years after second review. The time to return for a second review was significantly prolonged in Māori and Asians compared with Europeans (median 1.4 years vs 1.1 years). Patients aged <40 years returned for a second review later (1.8 years) than ≥65-year-olds (1.1 years). Patients less likely to return for a second review were those aged <40 years (vs ≥65 years), those of Māori or Asian ethnicity (vs Europeans) and those with type 1 diabetes (vs type 2).

Comment: A retrospective review of Waikato Primary Health registered patients who had at least one “Get Checked” review between 1st July 2000 and 30th June 2006 was completed in order to characterise the retention of patients in the “Get Checked” free annual diabetes review programme. 10,919 patients were reviewed at least once during this five-year period; only 57% of the estimated 10,604 diabetes patients utilised the free check in 2005/06. In spite of this programme being of benefit and free to patients, a significant proportion of patients did not return for a second review within 1.5 years after initial review. Excess dropouts among ethnic minorities confirm findings from other studies that free services do not always improve attendance. Better ‘cultural fit’ between patient and caregiver, call/recall and more effective follow-up services may improve attendance by ethnic minorities.

<http://www.nzma.org.nz/journal/120-1266/2847/content.pdf>

Reference: *N Z Med J*. 2007;120(1266):U2847

What effect do attempts to lose weight have on the observed relationship between nutrition behaviors and body mass index among adolescents?

Authors: Utter J et al

Summary: These researchers sought to determine how attempts to lose weight confound the relationships between nutrition behaviours and body mass index (BMI) among adolescents, using data from the Pacific OPIC (Obesity Prevention In Communities) measurements on approximately 3,500 high school students in New Zealand, the majority of whom identified as a Pacific Island ethnicity (57%). A total of 57% were overweight/obese; Pacific Island students had the highest prevalence (71%). Approximately 50% of students were currently trying to lose weight, and this was more common among females, Pacific Island students and overweight/obese students. Adjustments for age, sex, and ethnicity in the total population revealed significant inverse relationships between BMI and consumption of high-fat/high-sugar foods and positive relationships between BMI and eating ≥5 fruits and vegetables a day. The researchers comment that in most cases, among students not trying to change their weight, expected relationships were observed; among students trying to lose weight, unexpected or no relationships were observed.

Comment: Data for this study were drawn from the baseline measurements of the Pacific OPIC. Participants included approximately 3,500 high school students in New Zealand. Students in the sample primarily identified as a Pacific Island ethnicity (57%) and the mean age for participants was 14.8 years. This is an important study focussing on findings effective interventions for preventing obesity. In the sample, 57% of students were overweight/obese, with the highest prevalence among Pacific Island students (71%). Findings suggest that among this population of predominately overweight students, solely relying on cross-sectional findings between nutrition behaviours and BMI would misinform intervention strategies. It appears that many students are already taking appropriate steps to reduce their weight. Intervention efforts should move beyond education-based strategies to environmental changes that support students in adopting healthier nutrition practices.

<http://dx.doi.org/10.1186/1479-5868-4-40>

Reference: *Int J Behav Nutr Phys Act*. 2007;4:40

> View the latest job listings at Healthcare Jobs -

<http://www.researchreview.co.nz/jobs.cfm>