

Pacific Health Review

Making Education Easy

Issue 1 – 2007

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

Welcome to Pacific Health Review, a new research based publication focused on major health issues affecting Pacific people. The Review is an independent summary of some of the most significant recently published research with a local commentary on why it is important. We are delighted to have support from the Ministry of Health to produce a quarterly edition and welcome submissions from practitioners working with Pacific peoples who would like us to feature their research – published or not.

This month we are also offering some assistance for a Pacific medical student to attend the PMA Conference in Samoa in September. A \$600 grant for conference registration and towards flights is available so please pass it onto others you think would be interested. Go to www.pacifichealthreview.co.nz for more details.

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

Kind regards,

Colin

Dr Colin Tukuitonga

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Pacific Islands Families Study: maternal factors associated with cigarette smoking amongst a cohort of Pacific mothers with infants

Authors: Erick-Peleti S et al

Summary: This study investigated the association between cigarette smoking and maternal factors amongst mothers of a cohort of 1398 Pacific infants born in Middlemore Hospital, Auckland, New Zealand during 2000. A total of 1219 mothers were interviewed about their cigarette use when their infants were 6 weeks old and again at 12 months. At the first and second interviews, 24.5% and 29.8% of women reported smoking, respectively; more mothers started smoking (9.6%) between the interviews than stopped (4.4%). The following variables were associated with smoking at 12 months after birth: age (<20 years), non-Tongan ethnicity, non-partnered or de facto marital status, New Zealand-born, low income, full-time parenting, English fluency, non-separationalism, living with other smokers, size of house is too small, and overcrowding. The confounding variables of English fluency and cultural alignment to mainstream New Zealand culture were significant, whereas formal education qualifications, parity, and type of home dwelling were not significantly associated with smoking. The authors propose evaluating acculturation issues surrounding smoking behaviour and smoking cessation for Pacific women in New Zealand, and they suggest that a qualitative research design may uncover a more effective response to cigarette smoking amongst Pacific mothers.

Comment: A study of smoking among mothers of 1398 infants enrolled in the Pacific Islands Families cohort study based in Middlemore Hospital in 2000. This study provides comprehensive information on tobacco use among Pacific women and factors associated with its use. The study suggests that smoking during pregnancy is a major problem among Pacific women and more effective interventions are needed that take account of their unique social, cultural and economic circumstances.

<http://www.nzma.org.nz/journal/abstract.php?id=2588>

Reference: *N Z Med J. 2007;120:1256*

Key dates for the 2007 DHB Elections

Friday 24 August	Candidate nominations close (12 midday)
From 21 September	Voting documents issued – start of voting period, special votes are issued and early processing of votes will begin.
Saturday 13 October	Election Day – voting period ends at (12 midday)
Saturday 13 October	Special votes counted and official results declared
Monday 10 December	Elected board members take office.

For more information about the DHB elections, including a candidate information handbook and frequently asked questions, visit www.moh.govt.nz/dhbelections or email vote2007@moh.govt.nz



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

Comparison of tobacco, alcohol and illegal drug usage among school students in three Pacific Island societies

Authors: Smith BJ et al

Summary: This study reports data about drug and alcohol usage among school students aged 11–17 years surveyed in three Pacific Island societies: Pohnpei State in the Federated States of Micronesia (n=1495), Tonga (n=2808) and Vanuatu (n=4474). Among 15-year-olds, the highest prevalence of weekly smoking was reported by boys in Tonga (29%), followed by boys in Pohnpei (17%). Kava use at a potentially harmful level (i.e. daily) was low in all countries. Drunkenness on ≥ 2 occasions was more commonly reported by 15-year-old boys in Pohnpei (51%) than in the other two countries. Marijuana use was most often reported by boys (20%) and girls (20%) in Pohnpei, while solvents had been used most often by boys in Pohnpei (15%), and methylated spirits by boys in Tonga (20%). In all countries, bullying of other students was independently related to regular smoking; bullying behaviour and strong relationships with peers and others outside of the family were related to past drunkenness and use of illegal drugs in Tonga and Vanuatu. These findings can serve as a starting point for goal setting and action plans to address health-related problems associated with substance use in these Pacific Island societies, conclude the authors.

Comment: This is an important investigation into tobacco, alcohol and illegal drug use among young people in three Pacific Island societies. The study shows major variations in tobacco, alcohol and substance use between 15-year-old boys and girls and between different societies in the Pacific. Findings suggest that contrary to popular wisdom, Pacific young people in the region are at risk and interventions are needed there.

<http://www.sciencedirect.com/science?>

Reference: *Drug Alcohol Depend.* 2007;88:9-18

Influence of smoking by family and best friend on adolescent tobacco smoking: results from the 2002 New Zealand national survey of Year 10 students

Authors: Scragg R and Laugesen M

Summary: This paper reports outcomes from a national New Zealand cross-sectional survey administered in November 2002 to 14,936 female and 14,349 male Year 10 students (aged 14 and 15 years), who answered an anonymous self-administered questionnaire about adolescent smoking. The survey aimed to compare the relative importance on adolescent smoking of the influence from parental smoking and peer smoking. The risk of smoking was highest among adolescents with both parents smoking compared with those with one or neither parent smoking. Age- and sex-adjusted relative risks of adolescent daily smoking associated with both parents smoking, compared with neither, were affected by ethnicity (2.34 in Māori, 2.87 in Pacific Island, 11.37 in Asian, and 4.92 in European/Other students), as were the adjusted relative risks of daily adolescent smoking associated with having a best friend who smoked (4.18 in Māori, 5.19 in Pacific Island, 14.35 in Asian and 10.18 in European/Other students). Combined exposure to ≥ 1 of the following factors – parental smoking, pocket money $> \$5$ per week and smoking in the house – explained 64% of daily adolescent smoking; 67% was attributable to best friend smoking. In conclusion, parental behaviour positively influences daily adolescent smoking, to almost the same extent as does peer smoking.

Comment: This study examined some of the important influences on adolescent smoking, including parental smoking, in a representative sample of 14- and 15-year-old young people in NZ. The study showed that parental and peer smoking habits are key influences on tobacco smoking among young people. Study findings confirm other literature and suggest better efforts are needed to limit smoking within the family environment as well as evidence-based interventions targeting young people.

<http://www.blackwell-synergy.com/doi/abs/10.1111/j.1467-842X.2007.00051.x>

Reference: *Aust N Z J Public Health.* 2007;31:217-23

Changes in characteristics of New Zealand Quitline callers between 2001 and 2005

Authors: Li J and Grigg M

Summary: This study analysed changes in the demographic and smoking characteristics of new callers to the New Zealand Quitline, a national free-phone smoking cessation service, between 2001 and 2005. Notable changes in all characteristics (except for gender) occurred over the 5-year period, with increases in the proportions of callers aged < 25 years (67% increase), those who started smoking at age ≥ 15 years (10% increase), and/or who have smoked for < 10 years (86% increase), as well as those smoking roll-your-own cigarettes (13% increase). There was an increase of 54% in the proportion of Pacific people using the Quitline, and slightly more than 20% of all new callers were Māori. While the proportion of pregnant callers also increased (by 127%), the overall percent remains small. In conclusion, these data will inform future Quitline marketing strategies and enable the service to most appropriately meet the needs of callers.

Comment: This is an audit of the NZ Quitline service between 2001 and 2005. Results showed increased use of the service across a range of population groups, including a 54% increase among Pacific Peoples. The increase in calls by Pacific Peoples does not reflect actual need nor outcomes achieved for Pacific Peoples. Service audits are useful tools, particularly if the results are compared with pre-determined goals and targets.

<http://www.nzma.org.nz/journal/abstract.php?id=2584>

Reference: *N Z Med J.* 2007;120:1256



www.moh.govt.nz/healthyeatinghealthyaction

Neighborhood deprivation and access to fast-food retailing: a national study

Authors: Pearce J et al

Summary: The objective of this study was to determine whether geographic access to fast food outlets in New Zealand varied by neighbourhood deprivation and school socioeconomic ranking, and whether any such associations differed to those for access to healthier food outlets. Analyses revealed statistically significant negative associations between neighbourhood deprivation and geographic access to both multinational fast food outlets and locally operated outlets. In the least socially deprived neighbourhoods, median travel distances to both types of fast food outlet were at least twice as far as those in the most deprived neighbourhoods. Analyses repeated for outlets selling healthy food such as supermarkets and smaller food outlets revealed similar patterns. Relationships were broadly linear: the more deprived the neighbourhood, the shorter the travel distances. The authors conclude that their findings "highlight the importance of considering all aspects of the food environment (healthy and unhealthy) when developing environmental strategies to address the obesity epidemic".

Comment: Obesity is a major public health problem in New Zealand and Pacific Peoples and Māori are particularly at risk. Studies suggest that 'obesogenic environments' are responsible for the obesity epidemic. It is well established that obesity is more prevalent among poor populations, which is partly determined by access to energy-dense nutrient-poor foods. This study showed that fast food outlets (and other outlets selling healthy food items e.g. supermarkets) were distributed in similar ways across neighbourhoods.

<http://www.sciencedirect.com/science>

Reference: *Am J Prev Med.* 2007;32:375-82

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

Authors: Douglas NM and Dockerty JD

Summary: This study investigated survival by ethnicity for all New Zealand children (0–14 years) diagnosed with cancer during 1990–1993 and also the accuracy of the children's routinely collected ethnicity information. Cox survival analyses for a total of 409 children revealed that survival in Māori and Pacific Island children did not differ from non-Māori/non-Pacific children for 'all cancers combined' (hazard ratios [HR] 0.98 and 1.01, respectively) and acute lymphoblastic leukaemia (HR 1.09 and 0.99, respectively). The National Health Index and the New Zealand Cancer Registry ethnicity data agreed reasonably closely with ethnicity data provided by the children's mothers at interview (Kappa statistics 0.82 and 0.81, respectively) while the Mortality Collection showed only moderate agreement (Kappa statistic 0.63). In conclusion, these data do not provide any evidence for ethnicity disparities in survival from childhood cancer in New Zealand. However, the small numbers of Māori and Pacific children resulted in wide confidence intervals and thus the data should be interpreted carefully, say the authors.

Comment: This study aimed to assess survival by ethnicity for all New Zealand children (0–14 years) diagnosed with cancer during 1990–1993. Study results are interesting, because results show that Māori and Pacific Island children had the same survival as non-Māori/non-Pacific children for 'all cancers combined'. The findings are significant, because of the prevailing inequalities that exist in most other areas of health care in NZ; Māori and Pacific Peoples generally have poor outcomes compared with other New Zealanders. The authors issued caution on the findings, given the small numbers involved in the study.

<http://www.blackwell-synergy.com/doi/abs/10.1111/j.1440-1754.2007.01038.x>

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

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

Exposure to primary medical care in New Zealand: number and duration of general practitioner visits

Authors: Crampton P et al

Summary: This group of researchers analysed data from a representative survey of visits to general practitioners in New Zealand, to make comparisons among different demographic groups of patients and different practice types, regarding primary medical care exposure. Population groups with the highest annual exposure to primary medical care were the elderly (65+ years), followed by adults (18–64 years). Analyses adjusted for age, gender, NZDep2001, rural/urban, and organisation type revealed a higher average annual exposure to primary medical care in the European ethnic group than in the Māori, Pacific, and Asian ethnic groups. There were no significant differences in exposure to primary medical care across NZDep2001 quintiles after adjusting for other co-variables. The authors conclude that their findings can be used to monitor equity of service provision across different population groups: groups with high identified health care needs (Māori and Pacific users of primary medical care and those living in deprived areas) should have relatively high exposure to primary medical care. The authors also comment that the low overall exposure to primary medical care among Asians is of concern and warrants further exploration.

Comment: This is a useful study, because it looks at the interaction between patients and General Practitioners and provides a measure of access to and use of primary care services. Several studies have shown that Pacific Peoples have low access to primary health care despite high health care needs. This study of a representative sample of visits to GPs confirms findings from other studies that show Māori, Pacific Peoples and Asians have low access to primary care. A case could be made that continuing high avoidable hospitalization rates for these groups reflect problems with access to and quality of primary care available.

<http://www.nzma.org.nz/journal/abstract.php?id=2582>

Reference: *N Z Med J.* 2007;120:1256

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.



How much does health care contribute to health inequality in New Zealand?

Authors: Tobias M and Yeh L-C

Summary: These researchers used the concept of 'amenable' mortality (deaths at ages 0–74 years from causes responsive to health care) to quantify the contribution of health care to ethnic and socio-economic inequalities in health in New Zealand in 2000–2002. The New Zealand Health Information Service provided mortality data for 2000–2002 and Statistics New Zealand provided 2001 Census population data. Amenable causes of death accounted for an estimated 27%, 34%, 33% and 44% of the total mortality disparity (0–74 years) for Māori males, Māori females, Pacific males and Pacific females, respectively, relative to their European/Other counterparts (age-adjusted). Corresponding values for the 'deprived' population relative to the 'non-deprived' population were 26% (males) and 30% (females), adjusting for age and ethnicity. In conclusion, amenable causes of death accounted for considerable differences in mortality between ethnic and socio-economic groups in New Zealand in 2000–2002.

Comment: This study was carried out in order to quantify the contribution of health care to ethnic and socio-economic inequalities in health in New Zealand in 2000–2002, using the concept of 'amenable' mortality based on mortality data for 2000–2002 and 2001 Census population. Results showed that amenable causes of death contributed substantial differences in mortality between Pacific Peoples and other New Zealanders. Results confirm the need to act more decisively on ethnic inequalities in health.

<http://www.blackwell-synergy.com/doi/abs/10.1111/j.1753-6405.2007.00049.x>

Aust N Z J Public Health. 2007;31:207-10

Agreement between ethnicity recorded in two New Zealand health databases: effects of discordance on cardiovascular outcome measures (PREDICT CVD3)

Authors: Marshall RJ et al

Summary: The purpose of this study was to assess agreement between ethnicity as it is used in two independent databases in New Zealand, PREDICT and the National Health Index (NHI), and to assess sensitivity of ethnic-specific measures of health outcomes to either ethnicity record. The PREDICT database recorded ethnicity for 18,239 patients; their associated NHI ethnicity codes were identified by merge-match linking on an encrypted NHI number. The ethnicity classifications between databases agreed reasonably closely (Kappa statistic 0.82). Agreement was better for women than men and agreement improved with age and with time since the PREDICT system has been operational. However, discordances between PREDICT and NHI affected measurement of the admission of ethnic-specific cardiovascular (CVD) hospital admission rates; rate ratios for ethnic groups, relative to European, based on PREDICT were attenuated towards the null relative to the NHI classification. The authors conclude that ethnicity must be recorded in a rational, systematic and consistent way, so that categorisations of ethnicity data do not lead to different ethnic-specific estimates of epidemiological effects between databases.

Comment: Classification and recording of ethnicity is a continuing problem in New Zealand and affects the accuracy of epidemiological data used for planning, management and resource allocation. There is no general agreement on the use of ethnicity in databases in the country, hence the importance of this study. The results showed that there is generally good agreement on ethnicity as it was used in these two databases.

<http://www.blackwell-synergy.com/doi/abs/10.1111/j.1753-6405.2007.00050.x>

Reference: Aust N Z J Public Health. 2007;31:211-6

Comparative study on the efficacy of pioglitazone in Caucasian and S·uxø-Polynesian patients with poorly controlled type 2 diabetes

Authors: Shand B et al

Summary: This pilot, prospective study examined the hypothesis that the efficacy of thiazolidinediones (TZDs) may vary depending on ethnicity, by comparing the effects of pioglitazone (45 mg/day for 6 months in addition to regular diabetes therapy) on glucose control and metabolic and cardiovascular risk factors in 97 patients (40 Caucasian and 57 Māori–Polynesian) with poorly controlled type 2 diabetes. Data obtained from the 81 study completers showed similar absolute changes from baseline in mean haemoglobin A1c (Caucasian –1.4% vs Māori–Polynesian –1.3%) and fasting glucose levels (Caucasian –2.1 mmol/l vs Māori–Polynesian –2.8 mmol/l). Pioglitazone improved the lipid profile in both ethnic groups, by reducing atherogenic fraction mean values (triglyceride, very low-density lipoprotein [VLDL]-cholesterol, VLDL-triglyceride, and apolipoprotein B). These changes were associated with an increase in LDL-cholesterol particle size and a decrease in atherogenic index of plasma. There were no statistically significant between-group differences in lipid response. The authors conclude that pioglitazone has similar beneficial effects on glucose control and plasma lipid profile in Caucasian and Māori–Polynesian patients with poorly controlled type 2 diabetes.

Comment: Type 2 diabetes is a major public health problem among Pacific Peoples in New Zealand and the Pacific region. Diabetes is under-diagnosed and under-treated in Pacific populations and their health outcomes are poorer. Availability of a wider range of therapeutic regimes that are effective is highly desirable. This study showed that there are similar benefits to Caucasian and Māori–Polynesian patients with poorly controlled diabetes from use of pioglitazone. These study findings have major implications for the management of Polynesian patients with diabetes.

<http://www.blackwell-synergy.com/doi/abs/10.1111/j.1463-1326.2006.00635.x>

Reference: Diabetes Obes Metab. 2007;9:540-7

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