

Pacific Health Review

Making Education Easy

Issue 2 – 2007

In this issue:

- > *Breast feeding Pacific infants*
- > *Infant care and cot death*
- > *Health indicators for Samoan women*
- > *CVD risk and treatment eligibility*
- > *Prevalence of COPD*
- > *Cigarette prices and the poor*
- > *Intervention for physical activity*
- > *Activity counselling and prescription*
- > *Enhancing HIV prevention*
- > *Otitis media with effusion*
- > *The 10th PMA conference*

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

Welcome to the second edition of Pacific Health Review. In this issue, commentary for the studies has kindly been supplied by Teuila Percival and Josephine Herman on behalf of the Pasifika Medical Association. They have done a fantastic job and we thank the PMA for its contribution.

This month we also feature studies presented at the recent PMA Conference in Samoa. The Pacific Health Review grant winner Roannie Ng Shiu who attended the meeting has provided us with summaries.

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

Breast-feeding rates of Pacific infants in Auckland

Authors: Schluter PJ et al

Summary: This study investigated current breastfeeding rates for Pacific infants living in New Zealand during the first 2 years of the infants' lives. Exclusive breastfeeding rates were 84% at hospital discharge, 49% at 6 weeks, 37% at 3 months and 9% at 6 months. When infants receiving any breast milk were included, the percentages increased to 96% at hospital discharge, 95% at 6 weeks, 31% at 12 months and 15% at 24 months. Samoan mothers were significantly more likely than Tongan mothers to breastfeed exclusively. Reasons for stopping exclusive breastfeeding were uncertainty of breast milk supply (56%), breast problems (30%) and difficulty breastfeeding at work. Half of all the mothers with breastfeeding problems in the first 6 weeks sought no advice. These breastfeeding rates fall short of WHO recommendations, and the main reasons for stopping breastfeeding exclusively have not changed in the last 10 years.

Comment: This study shows breastfeeding rates are still low in our Pacific community. The common reasons found for discontinuing breastfeeding are similar to other studies and should be amenable to support and education in the perinatal period and first 6 weeks of life. Of concern is that the exclusive rate had dropped to less than 50% by 6 weeks of age and half of the mothers had not sought any advice around breastfeeding. Perhaps this is a reminder to LMC's, Well Child Nurses and GP's to be more proactive around common breastfeeding problems, and not wait for mothers to ask for help - T.Percival <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=586892>

Reference: *Public Health Nutrition 2006; 9:692-699*

Infant care practices associated with cot death

Authors: Schluter PJ et al

Summary: Data from the Pacific Islands Families study were examined to determine the prevalence of modifiable risk factors for cot death among Pacific Island children born in South Auckland in 2000. Mothers were interviewed 6 weeks after the birth to assess infant care practices. 50% of the children were exclusively breastfed, 50% usually slept in their mother's bed, and 12% shared with a mother who smoked. Most of the children usually slept in the same room as their mother. In all, 29% of mothers interviewed were current smokers. Ethnic differences in these practices were observed between the 3 major Pacific Island subgroups. The investigators concluded that mothers need to receive adequate antenatal advice about safe-sleeping practices.

Comment: The positives for Pacific from this study are that most babies sleep in the same room as their mother. Notably, however, 50% shared the same bed as their mother. It might be timely to not only reinforce SIDS prevention messages such as smoking cessation and sleeping position, but perhaps look at education about how to minimize risk for babies who share a bed with an adult as is done in some developing countries - T Percival

<http://dx.doi.org/doi:10.1111/j.1440-1754.2007.01085.x>

Reference: : *J Paed Child Health 2007; 43(5):388-393*

Health and Independence Report 2007 released

The health sector is producing key improvements in New Zealanders' health and life expectancy, according to *The Health and Independence Report 2007* released this month. This year's Health and Independence Report contains Health Minister Pete Hodgson's report on progress on the New Zealand Health Strategy and implementing the Quality Improvement Strategy. It also includes the Director-General's annual report on the state of public health.

The report presents data from 39 'headline indicators' of health system performance such as life expectancy, use of primary health care, immunisation coverage and cancer survival. It assesses whether the health sector is making progress towards important goals such as better health for all New Zealanders. It is available from the Ministry's website: www.moh.govt.nz/publications



BMI and waist circumference as indicators of health among Samoan women

Authors: Novotny R et al

Summary: This study looked at the adequacy of internationally recognised cut-off points for body mass index (BMI) and waist circumference as indicators of risk in young Samoan women living in Hawaii. 55 women aged 18 to 28 years had their blood lipids and blood sugar levels measured, as well as their weight, height and waist circumference. The investigators found that 58% of the women were obese according to Centers for Disease Control and Prevention (CDC)/WHO cut-off points for BMI. WHO/NIH cut off-points for BMI and waist circumference predicted levels of blood lipids and glucose associated with an increased risk of chronic disease. It was concluded that WHO/NIH cut-off points for BMI and waist circumference are effective indicators of chronic disease risk in young Samoan women living in Hawaii.

Comment: BMI & waist circumference cut off points for predicting chronic disease in Pacific needs further research. This small study of 55 young Samoan women adds to this. It showed a positive relationship with both increasing waist circumference and BMI and cholesterol and impaired glucose tolerance. Interestingly whereas 65% of the women had waist circumference greater than 88cm, only 15% had impaired glucose tolerance - T. Percival

<http://www.obesityresearch.org/cgi/content/abstract/15/8/1913>

Reference: *Obesity 2007; 15:1913-1917*

Cardiovascular risk chart adjustments and treatment eligibility in New Zealand

Authors: Wells S et al

Summary: Guidelines for the management of cardiovascular disease (CVD) risk in NZ recommend treating patients with a high 5-year CVD risk. This risk is determined using a CVD risk calculator based on Framingham Heart Study findings. The guidelines also suggest a 5% upward adjustment of the calculated 5-year CVD risk in high-risk populations such as those with a family history of premature ischaemic CVD or in Māori, Pacific or Indian individuals. This study examined the impact of these risk adjustments on eligibility for treatment in 23,709 patients visiting their primary care provider in Auckland between 2002 and 2006. It was found that the 5% risk adjustment increased the number of people eligible for drug treatment, intensive lifestyle management and referral to a dietician by approximately 20% and increased the number of people eligible for individualised lifestyle counselling by 50%. The 5% upward risk adjustment has the potential to significantly increase resource requirements for CVD prevention in primary care.

Comment: As the authors point out, the aim of the upward 5% adjustment in high risk populations is to achieve cost-effective and equitable reduction in adverse health outcomes in New Zealand, However the evidence for the efficacy of this targeting is lacking. The study highlights the resource implications and points to future research needed to evaluate the upward risk adjustment - T.Percival

<http://www.nzma.org.nz/journal/abstract.php?id=2712>

Reference: *J NZMA 2007; 120(1261)*

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International variation in the prevalence of COPD (the BOLD study)

Authors: Buist AS et al

Summary: Chronic obstructive pulmonary disease (COPD) is an increasing cause of morbidity and mortality throughout the world. This multinational study involving almost 10,000 participants investigated the prevalence of COPD and identified risk factors among different populations. Using spirometry testing and questionnaires, it was found that approximately 10% of the study group had stage II or higher COPD (11.8% of the men and 8.5% of the women) based on Global Initiative for Chronic Obstructive Lung Disease staging criteria. The risk of COPD increased with age in all countries irrespective of gender. Smoking increased the risk of COPD but significant variation between sites was found for women. Although smoking cessation is very important in an ageing population, the investigators made the point that identification of other factors likely to contribute to COPD is needed if public-health officials are to develop the most effective prevention policies for their regions.

Comment: Pacific have high rates of COPD, particularly in older males, reflecting as is shown in this study the relationship with years of smoking. Other less important risk factors predisposing to COPD identified in this study are relevant to Pacific, in particular previous pulmonary TB and other environmental particulate exposure such as biomass fuels for cooking and heating - T Percival

[http://dx.doi.org/DOI:10.1016/S0140-6736\(07\)61377-4](http://dx.doi.org/DOI:10.1016/S0140-6736(07)61377-4)

Reference: *Lancet 2007; 370:741-750*

Cigarette prices, smoking and the poor

Authors: Franks P et al

Summary: This study investigated the impact of cigarette prices on smoking rates among various income groups in the US. Data from the Behavioural Risk Factor Surveillance System surveys conducted between 1984 and 2004 were used. As cigarette prices increased over time, there was a marked drop in the number of smokers in the higher-income group (the top 3 income quartiles) but not in the lower-income group (the lowest quartile). Cigarette price elasticity (change in the percentage of people smoking for every 1% change in cigarette pack price) was greater in the lower- than the higher-income group before the Master Settlement Agreement, but not after it. It was concluded that increasing cigarette prices may no longer be an effective deterrent to smoking, and may in fact place a disproportionate burden on low-income smokers.

Comment: In terms of being able to interpret and apply this information to the Pacific setting – one needs to acknowledge the country and population differences in base and disposable income as well as the unit price of cigarette packs being USD 2–3 in the US, yet much higher in New Zealand and the Pacific region - J Herman

<http://dx.doi.org/DOI:10.2105/AJPH.2006.090134>

Reference: *Am J Public Health 2007; 97(10):1873-1877*

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.



www.moh.govt.nz/healthyeatinghealthyaction



The effect of disseminating evidence-based interventions promoting physical activity to health departments

Authors: Brownson RC et al

Summary: This study examined the effect of disseminating physical activity guidelines via workshops, ongoing technical assistance and an instructional CD-ROM on US health department organisational practices. State and local health department staff in 8 states were surveyed before (n = 154) and after (n = 124) guideline dissemination. Knowledge of and skill in 11 intervention-related characteristics improved after the workshops. Local health department staff had greater improvements in awareness-related characteristics than state practitioners. With regard to intervention adoption and implementation, improvements were seen in state participants but results were mixed among local staff. It was concluded that the dissemination methods evaluated in this study should be considered by health departments who want to encourage physical activity in the communities they serve.

Comment: Guidelines are an important tool in health care practice however the development phase should also include planning around the logistics for implementation, necessary resources and key stakeholders such as consumers and those who will implement the tool. This reduces the risk of a well developed evidence based guideline not being fully utilised - T Percival and J Herman

<http://dx.doi.org/DOI:10.2105/AJPH.2006.090399>

A model to enhance HIV prevention for Asian & Pacific Island communities

Authors: Sheth L et al

Summary: HIV prevention services for Asian and Pacific Island communities in the US are not culturally competent despite these populations facing an increasing risk of HIV. This report describes a multifaceted model HIV prevention programme developed specifically for these populations. The programme set up a national network of HIV and health-focused institutions for Asian and Pacific Island communities - the National Capacity-Building Assistance Program. Over a 2-year period the programme led to an increased capacity in community-based groups and health departments for improving culturally competent models of HIV prevention. The programme improved leadership skills for HIV advocacy services, improved media connections and developed better relationships between health departments and community leaders. The investigators concluded that these initiatives were likely to improve HIV-related prevention services for Asian and Pacific Island communities.

Comment: This report highlights some of the challenges around service delivery and the need to develop a workforce skilled and competent to serve their client population safely and appropriately. The impact of HIV on Pacific populations particularly in the Pacific region is significant and with concurrent Tuberculosis infection, urgent action is required to address the spectrum of care including prevention, promotion of safe sex practices, and access to adequate supplies of antiviral therapy and strategies to reduce anti-TB drug resistance - J Herman

<http://www.jpmp.com/pt/re/jpmp/abstract.00124784-200701001-00008.htm;jsessionid=G8PFkH21y2FJP2QpfKmBfqhrdfHYZSJ7ZHVLTNjNrp20ZxyTBNS!1330140564!181195629!8091!-1>

Reference: *J Public Health Management & Practice* 2007; 13:S40-S48

Physical activity counselling and prescription among Canadian primary care physicians

Authors: Petrella RJ et al

Summary: This study used a questionnaire to determine the type of counselling and physical activity prescribed by primary care physicians in Canada to patients with a sedentary lifestyle. Approximately half of the 27,980 primary care physicians contacted gave a usable response. Most of them were male physicians working in private practice, who had graduated more than 22 years previously. 85% said they asked patients about their level of physical activity and 26% assessed patient fitness. 70% used verbal counselling to encourage activity and 16% used a written prescription for an activity promotion programme. The investigators concluded that these results helped identify potential opportunities for improving physical activity counselling and prescription efforts among Canadian primary care physicians.

Comment: Regular physical activity reduces the prevalence of chronic disease, disability and mortality. Using verbal or written activity prescriptions has been shown to improve activity and fitness outcomes. Though the study showed high overall rates of asking about activity, it also showed low rates of fitness assessment, referral or written prescriptions.

Older GPs, consistent with other studies, were more likely to take the time to provide counselling and activity prescriptions.

There is perhaps room for a greater role by physicians in the physical activity and fitness of their patients - T Percival

<http://archinte.ama-assn.org/cgi/content/abstract/167/16/1774>

Reference: *Arch Intern Med* 2007; 167:1774-1781

Risk factors associated with otitis media with effusion among 2-year-olds

Authors: Paterson J et al

Summary: This report used data from the Pacific Islands Families First Two Years of Life study to investigate risk factors associated with middle ear disease in 656 2-year-old Pacific Island children living in New Zealand. The investigators found that children with regular fluid/pus discharge from the ears were twice as likely to develop OME, as were children who had at least 5 coughs/colds in the past year. Children who snored frequently and children who were treated at home for breathing problems had more than twice the risk. Children who were exposed to a lot of other children also had a higher risk of developing OME, such as those who attended a daycare centre for >20 hours per week (5x risk) or regularly attended church (almost 3x risk).

Comment: The relationship between household crowding and morbidity such as respiratory tract infections is well documented. In this study, consistent with previous studies there is increased risk of OME with daycare attendance. The risk, not unexpectedly is also increased with regular Church attenders - T Percival

<http://dx.doi.org/doi:10.1016/j.ijporl.2007.03.013>

Reference: *Int J Paed Otorhinolaryngology* 2007; 71(7): 1047-1054



The Ministry of Health
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Presentations from the 10th Annual Pacific Medical Association Conference, held at the National University of Samoa in September 2007 Reported by Roannie Ng Shiu

The effect of alcohol on Samoa and its people abroad

Authors: Toleafoa ET et al

Summary: This qualitative study was undertaken by the team at the Pacific Islands Drug and Alcohol Services Trust (PIDAS) in Auckland. They explored the role and perceptions of Alcohol in modern Samoan culture using interviews with PIDAS clients and their families who were recent migrants to New Zealand. Perceptions of alcohol developed and shaped in Samoa impact and influence the consumption of alcohol by Samoans when they migrate abroad, and can have detrimental effects on health in countries such as New Zealand where alcohol is more freely available. Health authorities should have a clear understanding of cultural perceptions of alcohol in order to inform treatment practices and policies. Samoan communities could also use this information to help them make better choices concerning alcohol and healthy lifestyles.

Comment: The detrimental effects of alcohol abuse particularly binge drinking is well described in the literature, yet political will to reduce the impact on Pacific families and society has been difficult to implement. In some Pacific countries, weekly alcohol binge consumption is common and associated with sporting and celebratory activities. Lessons could be learnt from tobacco control - J Herman

The extent of undiagnosed diabetes mellitus by ethnicity

Authors: Sundborn G et al

Summary: This study assessed the prevalence of new and known diabetes mellitus by ethnicity in Auckland. Data from the Diabetes Heart and Health Survey, a cross-sectional population-based survey was used to assess the prevalence of known diabetes. In participants without diabetes, a glucose tolerance test was used to determine glucose status and establish the prevalence of new (undiagnosed) diabetes. Although overall rates of diabetes were highest in Pacific peoples (followed by Māori and European New Zealanders), the ratio of diagnosed to undiagnosed diabetes was 5:1 for Pacific peoples compared to 2:1 for Europeans. This suggested that screening initiatives in Pacific communities had been effective.

Comment: This has been an important study in terms of the sampling size of 1000 Pacific participants (Total 4000 - Māori 1000) and thus the ability to explore some of the common and different characteristics between and within the major Pacific ethnic groups namely Samoa, Cook Islands, Tonga, and Niue. While previous studies have estimated that for every Pacific person with diabetes there is another undiagnosed, this study implies that this ratio has improved to 5:1. However – the prevalence of diabetes in the study population was high at 20% with 4% newly diagnosed cases thus requiring for continued attention not only in early diagnosis and management but also stronger preventative action by key stakeholders and the wider community - J Herman

Obesity in Pacific adolescents: a socio-cultural study

Authors: Teevale T & Thomas D

Summary: This study (part of the Obesity Prevention in Communities [OPIC] project currently underway in 6 low-decile secondary schools in South Auckland) aims to explore socio-cultural factors, such as community attitudes, perceptions, beliefs, and values that may promote or prevent obesity in Pacific communities in New Zealand. Preliminary results suggest that parental influence has a stronger influence for Pacific students compared to those from other ethnicities. Results from this study will assist with the implementation of obesity interventions in Pacific communities and families.

Comment: The obesity epidemic is a global phenomena impacting severely on Pacific people. It requires for additional focus on interventions that address key underlying determinants for poor health. While there is a need to explore behavioural influencers among young people, we must also address the social, economic and physical environment that our children and adolescent youth are living in, as there are many opportunities to modify this through healthier food stores and schools as well as safer walkways, parks and roads - J Herman

An exploration of the Pacific non-regulated workforce in New Zealand

Authors: Perese L & Ulugia A

Summary: The authors reported details of this project which aims to develop the knowledge base of the Pacific non-regulated workforce and identify mechanisms to increase the capacity and capabilities of this workforce as a means of addressing and reducing the inequalities of health for Pacific communities. The first phase of the project will involve a census in order to characterise the Pacific non-regulated workforce. The second phase will qualitatively explore current and potential roles, effectiveness, impacts, developmental pathways, barriers and enablers, future options and the requirements needed to ensure and acknowledge high quality services from this workforce. This study was funded by the Ministry of Health and the Health Research Council.

Comment: Pacific models of health care have traditionally incorporated community/extended family/chiefly structures and functioned exceptionally well under the leadership of Pacific woman. Today this non-regulated workforce continues to exist in Pacific health care providers and countries, some to a lesser extent than others, and includes community health workers, maternal and child welfare association workers as well as woman's organisations. The Pacific has much to teach as we understand more the need to equip and empower the larger public/community – (non waged non-regulated workforce) population to assist in improving Pacific health outcomes - J Herman

Tongan Nurses Association: Strengthening the Pacific nursing workforce in New Zealand

Authors: Finau E et al

Summary: This project aims to promote nursing to Pacificans in New Zealand as well as to support the post-graduate development of the current nursing workforce. The project is based in Auckland and tracks Tongan nursing students, both New Zealand and overseas-born. The main barrier for overseas born or trained students and nurses is passing the compulsory English language equivalency test (IELTS). For some multiple attempts are required before passing. It is hoped that the strategies formulated from this study will be applicable to other Pacific ethnic groups.

Comment: In order to better meet the needs of Pacific populations – it is necessary to build Pacific specific ethnic workforce capacity and capability. Diseases such as Tuberculosis, Hepatitis B, diarrhoeal diseases and diabetes for example demonstrate different prevalence rates and risk factors among the various Pacific groups. This reflects the diversity in culture, language and way of life and the need for health services to be responsive to these factors. The Tongan Nurses Association is commended for broadening their reach to Tongan colleagues abroad who have been able to facilitate and support workforce capacity development - J Herman