# **Pacific Health Review**

#### **Making Education Easy**

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Abbreviations used in this issue ARF = acute rheumatic fever COVID-19 = coronavirus disease 2019 DHB = District Health Board GP = general practitioner



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

### Welcome to the latest issue of Pacific Health Review.

This issue covers a range of topics of interest to Pacific people living in Aotearoa New Zealand, including the needs of Pacific families affected by age-related cognitive decline, the inequity of open-access vildagliptin use in patients with type 2 diabetes, the impact of food insecurity on child body composition, the issue of sugar-sweetened beverage consumption, and trends in prostate cancer incidence.

We hope you find these and the other selected studies interesting, and welcome your feedback.

Kind regards,

Associate Professor Collin Tukuitonga collin.tukuitonga@pacifichealthreview.co.nz

Dr Roannie Ng Shiu roannie.ngshiu@pacifichealthreview.co.nz

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### The needs of Pacific families affected by age-related cognitive impairment in New Zealand

Authors: Symon V et al.

**Summary:** This study explored the needs of Pacific families affected by age-related cognitive decline. Six health-care service providers from organisations focused on Pacific patients were interviewed to determine services available to aged Pacific people experiencing cognitive decline, access to the services, and whether they met Pacific families' needs. Three areas of concern were access to services, getting a diagnosis, and communication/language barriers. Diagnosis of cognitive impairment was often difficult due to inconsistent access to GPs in lower socioeconomic areas, and communication was affected by poor access to information in Pacific languages.

**Comment (RNS):** The health of Pacific older people in Aotearoa is a key priority area given Pacific peoples are ageing, but there is little research on this population group. This study therefore provides an important contribution in providing empirical research to better understand the health needs of Pacific older people. This qualitative study based on interviews with providers in Auckland, Christchurch and Dunedin highlights critical issues concerning dementia and dementia services. The findings demonstrate that Pacific older people and their families experience health inequities in accessing high-quality health care and language differences are identified as a key barrier. To address these health inequities, the researchers argue for models of care that place elders and their family in the centre.

Reference: J Prim Health Care 2021;13(4):317-22 Abstract

#### The student narrative of undergoing academic difficulty and remediation in a medical programme: Indigenous Māori and Pacific Admission Scheme (MAPAS) and international student perspectives at the University of Auckland

Authors: Watkins S et al.

**Summary:** This study evaluated the academic difficulty and remediation experiences of medical students (years 2–6) at the University of Auckland who were admitted via the Indigenous Māori and Pacific Admission Scheme (MAPAS) or international student pathways. 10 MAPAS medical students and 4 international medical students who had failed a year (or at least 1 exam or assessment) in the university's medical programme in 2014–2016 were interviewed in 2017. Six major themes were identified. Three themes related to academic difficulty (the set curriculum, the hidden clinical curriculum, and life complexities), and 3 related to the students' perspectives of remediation (the impact of MAPAS support, enhanced resilience, and the stigma of failing).

**Comment (RNS):** A Pacific health workforce reflective of Pacific communities in Aotearoa is critical in ensuring the delivery of high-quality and equitable health care. The MAPAS at the University of Auckland is an effective tertiary health equity programme to increase the number of Māori and Pacific health workers needed in Aotearoa. This qualitative study provides valuable insights into the academic challenges and remedial processes undergraduate MAPAS and international medical students face while studying. To address these challenges, analysis of student narratives emphasises the need for a multifaceted, inclusive and culturally responsive approach. The findings of this study provide important practical mechanisms such as funding, resources and culturally diverse and self-aware staff to support at-risk students to succeed.

Reference: N Z Med J 2022;135(1551):40-53 Abstract

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#### Variation in open access vildagliptin use in Waikato patients with type 2 diabetes

#### Authors: Chepulis L et al.

Summary: This study investigated the variation in use of vildagliptin in Waikato patients with type 2 diabetes after approval of open access funding in Oct 2018. Data were collected from 31 general practices for 3971 patients with type 2 diabetes who had received at least 1 diabetes medication in the 12 months prior to funding approval of vildagliptin. 18.2% of patients started vildagliptin therapy after Oct 2018; mean time to first dispensing after funding approval was 192.1 days. Logistic regression analysis showed that, compared with European patients, Asian patients were more likely to receive vildagliptin and Māori patients were less likely. Younger patients and those with a glycated haemoglobin level >64 mmol/mol were also more likely to start vildagliptin therapy. Vildagliptin use ranged from 0.0-82.4% across general practices.

Comment (RNS): Pacific peoples in Aotearoa experience the highest rates of diabetes of all ethnic groups and are less likely to experience reasonable glycaemic control. Therefore data on diabetes management and quality of care for Pacific people is essential to avoid severe complications from diabetes, including chronic kidney disease, cardiovascular disease and lower limb amputations. Vildagliptin therapy has been shown to be suitable for patients with impaired renal function or established cardiovascular disease. The findings from this study show that there is inequity in the initial uptake and use of open-access vildagliptin in the Waikato region, and therefore provide an important contribution to understanding the gaps in diabetes treatment and management for Pacific people.

Reference: N Z Med J 2022;135(1548):77-88 Abstract

#### Structural disadvantage for priority populations: The spatial inequity of COVID-19 vaccination services in Aotearoa

#### Authors: Whitehead J et al.

Summary: This study examined the equity of distribution of COVID-19 vaccination services across Aotearoa New Zealand. Accessibility to vaccination services appeared to be better in major cities than rural regions. Priority populations (Māori, Pasifika, and older individuals) were found to have significantly poorer access to vaccination services. Access to vaccination services also varied significantly by DHB region, and by the proportion of DHB priority population groups living in areas with poor access to vaccination services.

Comment (RNS): Using the Delta variant of COVID-19 in 2021 as context, the researchers provide valuable insights to achieving equitable immunisation in Aotearoa. The focus of the study was on spatial accessibility to services listed on the Healthpoint website. It therefore excluded most of the new 'pop-up' health services established specifically for COVID-19 vaccinations. Analysis of the spatial data showed spatial inequities exist in accessing vaccination services for Māori, Pasifika, older people and rural residents even with the addition of new health services such as COVID-19 vaccination services. This study provides pertinent and relevant learnings that can inform national strategies and approaches to monitor and improve health service equity for priority populations across Aotearoa.

Reference: N Z Med J 2022;135(1551):54-67 Abstract

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#### Independent commentary by Dr Roannie Ng Shiu

Dr Roannie Ng Shiu is the Pasifika Medical Association (PMA) Senior Research Fellow with the University of Auckland Faulty and Medical and Health Sciences Office of the Associate-Dean Pacific. Her primary role is to deliver robust high-quality Pacific health equity

research and to increase the Pacific health workforce in Aotearoa with the recruitment and retention of Pacific health students. She was previously with the Department of Pacific Affairs at the Australian National University. FOR FULL BIO CLICK HERE

#### Pacific Islands Families Study: Adverse impact of food insecurity on child body composition

#### Authors: Oyama S et al.

Summary: This analysis of the Pacific Islands Families Study (PIFS) investigated whether exposure to malnutrition due to household food insecurity during foetal life and early infancy is associated with body composition in adolescence. In the year 2000, mothers in the PIFS were asked questions about food security at their 6-week postpartum check-up. 931 of their offspring were then assessed for height and weight at age 14 years. Of these offspring, 10 girls and 10 boys from each weight decile were randomly selected to undergo dual x-ray absorptiometry measurements, including appendicular skeletal muscle mass (ASMM) and visceral adipose tissue (VAT). Boys born to families experiencing food insecurity had greater birthweights and greater % fat, less % ASMM and greater % VAT of total weight at age 14 years than boys born to families with food security. In contrast, household food security status had no impact on birthweight or body composition at age 14 years in girls.

Comment (RNS): Food insecurity is a critical issue for Pacific families, considering the economic and health impacts of COVID-19 both in Aotearoa and across the globe. Using questions on food security collected once during the longitudinal PIFS study, the authors seek to examine issues of how food insecurity for pregnant mothers affects child growth and development. Despite the study's limitations in investigating food insecurity in-depth, as outlined by the authors, the analysis of the food security data supports findings from previous studies relating to early metabolic programming. This article provides useful directions for further research into food security and ensuring accessibility to nutritious food for Pacific children and families, given the increased poverty in Aotearoa. Furthermore, the authors share learnings for future longitudinal studies that may wish to include domains on poverty, food security and malnutrition.

Reference: N Z Med J 2021;134(1543):30-8 Abstract

#### Prevalence and factors associated with men's perpetration of intimate partner violence in South Tarawa, Kiribati

#### Authors: Miedema SS et al.

Summary: This cross-sectional study in Kiribati investigated the prevalence of maleperpetrated intimate partner violence. 429 married men aged 15-49 years living in South Tarawa, Kiribati, were interviewed about their perpetration of physical and sexual violence against their female partner. Two-thirds (63%) of the men reported committing physical and/or sexual intimate partner violence in the past year. Modifiable risk factors included child physical abuse (adjusted odds ratio [aOR], 2.31; p=0.01), gender inequitable attitudes (aOR, 1.12; p=0.02), gang involvement (aOR, 3.36; p=0.01) and involvement in fights with weapons (aOR, 3.54; p=0.004).

Comment (CT): Several studies have shown that violence against women and girls is a particular problem in the Pacific region with prevalence among the highest in the world. Similar estimates have been established for Pacific people in NZ. The problem is underreported. This study from Kiribati confirms the extent of the problem where two-thirds of the men interviewed reported committing physical and/or sexual violence against their female partner. This is likely to be an underestimate given the public reaction and stigma associated with violence against women. Despite various interventions, violence against women and girls continues to be a major public health problem in the region. It is a blight on the region where political and health leaders have declared Healthy Islands as the underlying aim for the Pacific. The 'Spotlight' initiative is a global multi-year partnership between the United Nations and the European Union to eliminate violence against women and girls in the Pacific region.

Reference: Asia Pac J Public Health 2022; published online Mar 21 Abstract

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#### Sugar-sweetened beverages consumption among New Zealand children aged 8–12 years

#### Authors: Smirk E et al.

**Summary:** This cross-sectional NZ study determined the extent of sugar-sweetened beverage (SSB) consumption in primary school-aged children. An Auckland-wide survey of 578 children aged 8–12 years collected data on beverage consumption, beverage knowledge/attitudes, and various socio-demographic factors. 96% of children consumed 1 or more servings of SSBs per week, with 62% having at least 5 servings per week. Sugar-sweetened milk-based beverages were most common, followed by fruit juice and fizzy drinks. Among unsweetened beverages, 22% of children had less than 2 servings of plain water a day, and 53% had less than 1 serving of plain milk a day. Higher consumption of SSBs was associated with socioeconomic disadvantage, non-NZ European ethnicities, availability of SSBs in the home, frequent takeaway/convenience store visits, and higher body fat percentage.

**Comment (CT):** Consumption of SSBs has been shown to be an important contributor to the rising incidence of overweight and obesity in children and young people globally. Pacific children and young people in NZ and the Pacific region have a high and rising incidence of obesity. Raising the tax on SSBs has been shown to reduce consumption of SSBs in several countries including Tonga. This is documented in a recent WHO study that analysed 86 studies across 12 countries and 5 US states and showed tax hikes resulted in a 15% drop in consumption of soft drinks. More than 45 countries have implemented SSB taxes, but NZ continues without any. The Pacific Non-Communicable Disease Roadmap includes the recommendation to raise taxes and it has been implemented in at least 14 island nations. NZ has not implemented this recommendation despite the support from many parents and public health organisations. This study from Auckland confirms yet again high consumption of SSBs among Pacific children associated with higher body fat. Pacific communities and health care providers should step up the push to raise taxes on SSBs in NZ.

#### Reference: BMC Public Health 2021;21:2277 Abstract

#### Universal health coverage and the Pacific Islands: An overview of senior leaders' discussions, challenges, priorities and solutions, 2015–2020

#### Authors: Craig AT et al.

**Summary:** This study determined the universal health coverage (UHC)-related priorities of Pacific health authorities. The discussions, resolutions, and recommendations from 5 years (2015–2020) of senior-level Pacific health meetings were thematically analysed. Five main themes emerged: the Healthy Islands vision has a unifying influence on action for UHC; adoption of appropriate service delivery models that support integrated primary health care at the community level are needed; human resources for health sector improvement; and digital health offers many opportunities.

**Comment (CT):** Ministers of Health from the Pacific region adopted the Healthy Islands vision for the islands in 1995. Health Ministers endorsed the vision again in 2011 and re-committed to the implementation of the Healthy Islands Framework. The Healthy Islands remains relevant for the Pacific region but implementation has been patchy. UHC is an important development that is consistent with the principles of Healthy Islands. Most Pacific nations have health systems that are oriented towards primary health care and public health (health promotion and protection). This study confirms Pacific leaders' continued focus on Healthy Islands, UHC and related services but implementation remains problematic. There are many opportunities for scaling up the implementation of Healthy Islands aligned with UHC.

Reference: Int J Environ Res Public Health 2022;19(7):4108 Abstract

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#### Preceding group A streptococcus skin and throat infections are individually associated with acute rheumatic fever

#### Authors: Oliver J et al.

**Summary:** This retrospective NZ study evaluated the risk of acute rheumatic fever (ARF) after group A streptococcus (GAS) skin or throat infections. Data for 1,866,981 throat and skin swabs from the Auckland region were analysed, together with antibiotic dispensing data (2010–2017) and hospitalisation data (2010–2018). Analysis of the data showed that ARF risk increased after GAS detection in a throat or skin swab. Māori and Pacific people had the highest ARF risk in the 8–90 days after a GAS-positive swab. During this period, the risk ratio for Māori and Pacific people was 4.8 (95% CI 3.6–6.4) after a GAS-positive throat swab and 5.1 (95% CI 1.8–15.0) after a GAS-positive skin swab. Antibiotic dispensing was not associated with a reduction in ARF risk after GAS detection in a throat swab or skin swab.

**Comment (CT):** ARF and rheumatic heart disease (RHD) remain an important public health problem in wealthy NZ, especially among Māori and Pacific children and young people. It is well established that ARF follows GAS infection of the throat. GAS infections of the skin are less well known to be an important cause of ARF/RHD. Skin infections are common among Pacific children and young people. This study shows increased risk of ARF after skin infections especially among Māori and Pacific children and young people. Greater awareness is needed among parents and health care providers about the risk of ARF following skin infections. ARF incidence declined by two-thirds in Pacific children between 2019/20 and 2020/21, but the reasons for this encouraging trend remain unclear.

#### Reference: BMJ Global Health 2021;6:e007038 Abstract

## Ethnic and regional differences in the temporal trends of prostate cancer incidence and mortality in New Zealand

#### Authors: Matti B et al.

**Summary:** This study used data from the NZ Cancer Registry to evaluate temporal trends in prostate cancer incidence and mortality in NZ, with a focus on ethnic and regional variations. 58,966 men were diagnosed with prostate cancer in NZ in 2000–18 (105.2 per 100,000) and 14,749 men died from prostate cancer in NZ in 2000–15 (49.3 per 100,000). Māori and Asian men had a significantly lower incidence of prostate cancer than European men, and Māori and Pacific men had higher mortality rates than European men. There were no regional differences in mortality.

**Comment (CT):** Prostate cancer is the most common malignancy in men in NZ (apart from skin cancers). Every year more than 4000 men are diagnosed and over 700 die from the disease – the third highest cause of death after lung and bowel cancers (MOH). Incidence data based on the Cancer Registry is subject to various data gaps but this study confirms higher mortality rates among Māori and Pacific men. In most recent years, the difference in mortality is decreasing for Māori but increasing for Pacific men. The authors conclude that the incidence of prostate cancer in NZ has fluctuated over the last 20 years, while mortality rates have steadily declined. Prostate cancer mortality was shown to disproportionately affect Māori and Pacific men. Greater awareness of prostate cancer is needed among Māori and Pacific men in particular.

Reference: ANZ J Surg 2021;91(12):2806-16 Abstract

#### Independent commentary by Associate Professor Collin Tukuitonga



Associate Professor Collin Tukuitonga is a medical graduate and Public Health Physician with extensive experience in health policy, research, management, and leadership in NZ and internationally. He is the inaugural Associate Dean Pacific and Associate Professor of

research, management, and leadership in NZ and internationally. He is the inaugural Associate Dean Pacific and Associate Professor of Public Health at the University of Auckland. **FOR FULL BIO <u>CLICK HERE</u>** 

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