

Pacific Health Review

Making Education Easy

Issue 37 – 2023

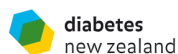
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Abbreviations used in this issue

COVID-19 = coronavirus disease 2019
GLP-1 = glucagon-like peptide-1
SGLT-2 = sodium-glucose cotransporter-2
WHO = World Health Organization

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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 use of direct-to-consumer marketing to increase the uptake of newly funded diabetes medications, initiatives designed to reduce the prevalence of rheumatic fever, initiatives seeking to increase the uptake of allopurinol in patients with gout, and oral self-care in the elderly.

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

Kind regards,

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Empagliflozin and dulaglutide: Community awareness project promotes improved access to newly funded medications for Pacific patients with type 2 diabetes

Authors: Sundborn G et al.

Summary: A public awareness campaign designed to promote improved access to newly funded empagliflozin and dulaglutide in Pacific people with type 2 diabetes ran from Apr 2021 to Jul 2021 in Counties Manukau. Key messages were shared informally through social networks and by word-of-mouth. In addition, a printed pamphlet was distributed in Māori, Samoan, Tongan and English, and 102 primary care practices were notified. The campaign was intended to reach people with type 2 diabetes and/or their families to prompt them to contact their doctor to see if they were eligible for the new medications. Approximately 45,000 people were exposed to the campaign. Analysis of Pharmac data showed that Pacific patients were 40% more likely to apply for and receive a prescription for empagliflozin in Counties Manukau than anywhere else in NZ.

Comment (CT): Pacific and Māori people in Aotearoa New Zealand have high rates of type 2 diabetes mellitus but they are more likely to be undiagnosed and to miss out on treatment. They are more likely to suffer high rates of complications such as preventable blindness and kidney failure. Outcomes for Māori and Pacific patients with type 2 diabetes have not improved in 20 years. Several research studies have shown that many Māori and Pacific peoples with type 2 diabetes are less likely than non-Māori or non-Pacific to be prescribed the appropriate medications. Empagliflozin, an oral SGLT-2 inhibitor and dulaglutide, an injectable GLP-1 receptor agonist, are newly funded options for eligible people with type 2 diabetes. Empagliflozin and dulaglutide reduce the risk of cardiovascular and renal complications in people with type 2 diabetes; empagliflozin in particular reduces hospital admission with heart failure. Both classes of medicine also promote weight loss, especially dulaglutide. This study shows favourable results, with Pacific patients more like to receive empagliflozin in South Auckland.

Reference: *N Z Med J* 2023;136(1572):66-74

[Abstract](#)

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Independent commentary by Sir Collin Tukuitonga KNZM

Sir 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 Public Health at the University of Auckland. Prior to this role, he was the Director-General of the Pacific Community based in New Caledonia.



Tobacco control legislation in small island nations: Adoption of WHO FCTC Article 13 in the Federated States of Micronesia

Authors: Tselengidis A et al.

Summary: The WHO Framework Convention on Tobacco Control (FCTC), ratified by the Federated States of Micronesia (FSM) in 2005, recommended the reduction of tobacco use through the implementation of evidence-based policies, such as the ban of tobacco advertising, promotion, and sponsorship (TAPS; Article 13). This qualitative health policy analysis collected FSM data for the period Nov–Dec 2022 to investigate the implementation and enforcement of Article 13. All TAPS-related provisions were found to have been adopted and implemented. Five years after the WHO FCTC ratification (2010–2012), misleading descriptors on tobacco packaging were banned nationally, Chuuk State banned tobacco industry sponsorship, and Pohnpei State prohibited tobacco advertising and promotion. In 2012, the WHO FCTC Secretariat's assessment identified policy gaps and areas requiring further action, which resulted in the FSM Congress creating the Tobacco Control Act of 2016. That same year, Pohnpei State banned tobacco product displays at retail outlets.

Comment (CT): Smoking remains an important preventable cause of poor health in Pacific Islands Countries and Territories (PICTs). WHO celebrated 20 years of the adoption of the FCTC this year – it is the first international public health treaty and a milestone for countries. Unfortunately, smoking continues to be a major threat to health especially in PICTs, where smoking rates remain very high with no signs of decline (except in Samoa and Tonga). The tobacco industry continues to push their harmful product on Pacific people. This report from FSM is encouraging because it remains committed to the aims of the FCTC.

Reference: *Asia Pac J Public Health* 2023;35(1):65-8

[Abstract](#)



Pharmacologic therapy among patients with type 2 diabetes mellitus admitted to the cardiology service

Authors: Lesiawan E et al.

Summary: This retrospective audit of cardiology admissions at Auckland City Hospital between Nov 2020 and Jan 2021 (prior to the availability of empagliflozin) evaluated diabetes control in patients with type 2 diabetes. A total of 449 patients were admitted for >48h during the 3-month study period; 98 of them had type 2 diabetes. Median age of patients with diabetes was 64 years and 66% of them were male; Pacific people were over-represented (30%). The most common reason for hospitalisation was coronary heart disease (41%) followed by heart failure (22%). 50% of patients with type 2 diabetes had glycated haemoglobin (HbA1c) levels >60 mmol/mol and half of these patients had their diabetes medication changed. Of the 98 patients included in the study, 50% would now be eligible for empagliflozin based on current Pharmac special authority criteria.

Comment (CT): This is an audit of hospital admissions to Auckland City Hospital for coronary heart disease and heart failure. Approximately 20% of the patients had type 2 diabetes with half of the group showing poor control (HbA1c >60 mmol/mol). One-third of the group were Pacific patients. This study shows that half of these patients would be eligible for empagliflozin (a newly funded SGLT-2 inhibitor), with cardiovascular and renal protective benefits. The study highlights the potential benefits of increased use of these newer classes of medication for people with type 2 diabetes.

Reference: *N Z Med J* 2023;136(1571):30-40

[Abstract](#)

Prevalence and factors associated with low birth weight in the Solomon Islands

Authors: Kaforau LS et al.

Summary: This study used data from the 2015 Solomon Islands Demographic and Health Survey to determine the prevalence of, and risk factors for, low birth weight (LBW) in the Solomon Islands. The prevalence of LBW was estimated to be 10%. After adjustment for potential confounders, the risk of LBW was higher in women with a history of marijuana use (adjusted relative risk [aRR] 2.64, 95% CI 0.64–10.95) or kava use (aRR 2.50, 95% CI 0.63–9.88) than among unexposed women. The risk of LBW was also higher in women in a polygamous relationship (aRR 1.84, 95% CI 1.15–2.93), and in those with no antenatal care (aRR 1.73, 95% CI 0.96–3.13) compared with unexposed women. Overall, 10% of LBW cases in the Solomon Islands were in households of more than five members and 4% were attributable to a history of tobacco and cigarette use.

Comment (CT): LBW is an important determinant of child survival and development. It has long-term consequences like the onset of non-communicable disease in the life course. LBW babies are also at risk of stunting compared with babies with normal birth weight. LBW remains an important and preventable public health problem in some Pacific Islands Countries and Territories, especially in Melanesian nations. This study is from the Solomon Islands where the prevalence of LBW was 10% and associated with preventable risks such as marijuana, tobacco and kava use. More effort is needed to reduce risk factors for LBW.

Reference: *Asia Pac J Public Health* 2023;35(2-3):136-44

[Abstract](#)



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Addressing rheumatic fever inequities in Aotearoa New Zealand: A scoping review of prevention interventions

Authors: Tu'akoi S et al.

Summary: This scoping review of NZ data explored interventions and initiatives designed to prevent group A streptococcus and rheumatic fever, particularly in Pacific and Māori communities. A search of various databases identified 58 studies of 57 interventions that were suitable for inclusion. Interventions targeted school-based throat swabbing, awareness and education, housing, secondary prophylaxis, and improvement in primary care guidelines for diagnosis of sore throats and skin infections. Many of the initiatives lacked evaluation outcomes. However, some of them reported short-term improvements in awareness, reduction in rheumatic fever risk, and fewer hospitalisations.

Comment (CT): Acute rheumatic fever and rheumatic heart disease (ARF/RHD) remains a serious public health problem in Aotearoa New Zealand, especially for Māori and Pacific children and young people. Despite multiple strategies and plans, ARF/RHD shows no sign of decline except for isolated events which have not been sustained. It is encouraging that there are several projects underway targeting those most at risk and driven by Pacific health workers. This review shows how important it is for evaluation to be built into programmes of this type because we are in a better position to learn what works/doesn't work. It is curious that recent ARF/RHD programmes have included interventions to improve housing but the disease continues to damage young lives. Socioeconomic disadvantage most probably plays a key role in driving the epidemic and if so, more effective interventions to reduce poverty are urgently needed.

Reference: *J Prim Health Care* 2023;15(1):59-66
[Abstract](#)

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Interventions designed to improve uptake of allopurinol for gout treatment in Aotearoa New Zealand

Authors: Ofanoa S et al.

Summary: This scoping review of NZ data examined various interventions designed to improve allopurinol use and disease management in patients with gout. A database search identified 18 studies that met inclusion criteria. The interventions clustered into three domains: multifaceted or multi-practitioner; gout app; and online booklets or fact sheets. Most of the gout interventions used multifaceted or multi-practitioner approaches. These were the only interventions that were associated with improvements in serum urate levels. The gout app improved patients' awareness and understanding of gout and medications, but had no impact on serum urate levels. Increased use of online fact sheets and booklets is needed to improve gout health literacy.

Comment (RNS): This scoping review provides a comprehensive overview of literature and evidence to date on interventions to improve the uptake and first management of allopurinol for gout patients. Allopurinol is a commonly used medication to manage gout. There are two findings from this scoping review that are important for Pacific people given they experience poorer quality of life as a result of higher rates of gout at a much earlier age. The first is that despite the higher need for allopurinol in Pacific and Māori patients, they are less likely to receive continuous allopurinol treatment compared to non-Pacific, non-Māori patients. More research and interventions for doctors is required to understand this disparity in treatment. Second, the review provides a useful starting point for researchers to co-design more effective interventions to improve treatment outcomes for Pacific gout patients by building on the learnings from previous studies.

Reference: *J Prim Health Care* 2023;15(1):48-58

[Abstract](#)

Foetal alcohol spectrum disorder in Aotearoa, New Zealand: Estimates of prevalence and indications of inequity

Authors: Romeo JS et al.

Summary: This study investigated the prevalence of foetal alcohol spectrum disorder (FASD) in NZ, and evaluated any ethnic disparities. Using self-reported data on alcohol use during pregnancy, together with risk estimates for FASD from a meta-analysis of data from seven other countries, the prevalence of FASD in the general NZ population was estimated to be 1.7% in 2012/2013 and 1.3% in 2018/2019. The prevalence of FASD was significantly higher in Māori than in Pasifika and Asian populations at both times.

Comment (RNS): FASD is 100% caused by alcohol. Internationally there is a lack of reliable prevalence data for FASD despite it being the leading cause of preventable intellectual and neurodevelopmental disability worldwide. In Aotearoa New Zealand there are currently no national studies determining the prevalence of FASD. Reliable national prevalence estimates for FASD are difficult to ascertain as diagnosis requires observational, behavioural, dysmorphology and neurodevelopmental testing. Therefore, this study utilises an alternative methodology developed by the WHO Global Burden of Disease Study. Based on this secondary analysis the findings show that Pasifika rates are significantly lower compared to the total population rate. This approach has several limitations including the reliance on self-reporting of drinking during pregnancy. Further research is required to better understand the prevalence of FASD.

Reference: *Drug Alcohol Rev* 2023;42(4):859-67

[Abstract](#)

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 Faculty 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. Roannie is Samoan and was raised in South Auckland and graduated from the University of Auckland with a PhD in Community Health.



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Differences in physical activity participation among young adults in Aotearoa New Zealand

Authors: Wilson OWA et al.

Summary: Data collected in 2017–2019 as a part of Sport New Zealand's Active NZ survey were analysed to examine socio-demographic differences in physical activity among young adults aged 18–24 years. The proportion of young adults meeting aerobic, muscle-strengthening and combined physical activity recommendations (63.2%, 40.1%, and 37.2%, respectively) varied according to physical activity type. Young adults who were not employed or studying had lower odds of meeting recommendations than those who were in full-time employment (odds ratio [OR] 0.43, 95% CI 0.34–0.54). The odds of Pasifika young adults meeting combined physical activity recommendations did not differ from those of Europeans. However, when stratified by gender the odds of meeting combined physical activity recommendations were higher for Pasifika males (OR 1.55, 95% CI 1.11–2.16) and lower for Pasifika females (OR 0.64, 95% CI 0.47–0.89). Similarly, young adults in high deprivation areas had lower odds of meeting combined physical activity recommendations than those in low deprivation areas, but this was mainly due to the difference among females.

Comment (RNS): Physical activity is known to have a multitude of health and wellbeing benefits for children and youth. However, low levels of physical activity amongst Pacific girls and young females have long been identified as a key issue in Aotearoa New Zealand and the Pacific region. This study investigated the levels of physical participation against the combined aerobic and muscle-strengthening recommendations in NZ. The findings from this study show that a blanket or one-size-fits-all approach to increase physical activity for all young people in Aotearoa New Zealand is inadequate. Based on the findings from this study, young Pacific females have significantly lower levels of participation and therefore require more targeted interventions. The need is likely to be much higher post COVID-19.

Reference: *BMC Public Health* 2023;23(1):150
[Abstract](#)



Oral self-care among dependent older New Zealanders

Authors: Xue C et al.

Summary: This NZ study used data from the 2012 Older People's Oral Health Survey to evaluate oral self-care among dependent older individuals. The survey interviewed 2218 dependent older adults living in aged residential care or receiving home-based care. Overall, 59.5% of them brushed their teeth twice a day; the rate was higher among women, Asians, and those without cognitive or physical impairment. Only 25.9% of participants cleaned interdentally at least once a week, and the proportion was significantly lower in those with higher dependency or who were cognitively or physically impaired. 87.8% of participants used fluoride toothpaste, but only 15.0% used mouthwash (this was most prevalent in Pasifika people). More than half of the individuals who wore dentures also wore them at night.

Comment (RNS): There is a paucity of literature and research on Pacific older people in Aotearoa New Zealand. This study highlights some interesting findings on the oral health of Pacific older people. Older people are more vulnerable to oral diseases and conditions because of their greater cumulative oral disease burden and greater exposure to risk factors that are detrimental to oral health. The findings showed that, overall, oral self-care in older New Zealanders is generally poor. Pasifika people had similar oral self-care practices compared to all participants except for mouthwash use. Pasifika older people are twice as likely to use mouthwash. The authors call for more research to investigate ways to improve oral hygiene for older New Zealanders which includes carers, family/whānau, and support providers to safeguard the oral health of a growing and vulnerable group.

Reference: *Gerodontology* 2023; published online Feb 13
[Abstract](#)

Flexible resources and experiences of racism among a multi-ethnic adolescent population in Aotearoa, New Zealand: An intersectional analysis of health and socioeconomic inequities using survey data

Authors: Simon-Kumar R et al.

Summary: This study used survey data to explore the experiences of racism among privileged majority adolescent groups and minority (Indigenous and ethnic) adolescent groups in NZ. Self-reported data from the Youth2000 survey series administered in 2001, 2007, 2012, and 2019 to students (n=20,410) from mainstream state and private schools in the Auckland, Tai Tokerau, and Waikato regions were analysed. Students were mostly aged 13–17 years. Racism and its effects were measured as socioeconomic inequities (household, neighbourhood, and school-level deprivation); interpersonal discrimination (unfair treatment, bullying, and safety); and health inequities (forgone health care, symptoms of depression, and attempted suicide). Māori and racialised migrants from low-income and middle-income countries experienced high levels of socioeconomic inequities that in some cases extended over three generations (especially for Pasifika migrant adolescents). Minorities perceived as White experienced less discrimination and had more advantages than visibly racialised groups.

Comment (RNS): NZ is seen as a thriving bicultural and multi-ethnic society but there remains lingering systemic disadvantage and discrimination particularly for Māori and Pacific youth. The effects and impacts of racism towards Pacific peoples in Aotearoa New Zealand are often discussed and debated. This study focuses on racism, intersectionality and health for young people. Using an intersectional analysis of self-reported data from the Youth2000 survey series the authors find that racism is a fundamental cause of health inequities but the linkages are complex. The findings show persistent socioeconomic inequities for Pacific young people. First-generation Pacific youth had the poorest health outcomes for all first-generation migrants. Overall, Pacific second-generation migrant youth are just as vulnerable as first-generation youth. By using an intersectionality lens to the research the authors demonstrate the need to develop targeted interventions for young people experiencing racism and to address broader system-level bias and discrimination.

Reference: *Lancet* 2022;400(10358):1130-43
[Abstract](#)

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