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In this issue:

Abbreviations used in this issue
CI = confidence interval
HR = hazard ratio
OA = osteoarthritis
TBI = traumatic brain injury

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Ngā mihi
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Mate wareware: Understanding 'dementia' from a Māori perspective

Authors: Dudley M et al.

Summary: These authors undertook kaupapa Māori research with 223 kaumātua who participated in 17 focus groups across 7 study regions throughout Aotearoa New Zealand and 8 whānau from the Waikato region with an aim to determine Māori understandings of dementia, its causes, and ways to manage a whānau member with this condition. Five main themes emerged: Ngā Pūtake (causes); Ngā Rongoā (protective factors); Aroha and Manaakitanga (acceptance of illness and behaviour change); Kaitiakitanga (caregiving); and Ngā Ratonga (dementia services). It was identified that mate wareware (becoming forgetful and unwell, 'dementia') affects the wairua (spiritual dimension) of Māori. The study revealed Māori understandings of the causes of mate wareware and the role of aroha (love, compassion) and manaakitanga (hospitality, kindness, generosity, support, caring) involved in caregiving for whānau living with mate wareware. The study emphasised that whānau are crucial for the care of a kaumātua with mate wareware and that participants perceived that cultural activities were protective factors that optimised a person's functioning within their whānau and community. There is an urgent need for culturally appropriate and comprehensive support to assist whānau with their knowledge building and empowerment to meet the needs of those with mate wareware. A collaborative healthcare practice with practitioners accessing the necessary mātauranga Māori (Māori knowledge) is paramount.

Comment: An increasing concern for Māori, their whanau and health providers, this article provides valuable information on dementia, in a mana-enhancing way. Hopefully it sparks action so that people living with dementia, and those caring for them, are supported.

Reference: N Z Med J. 2019;132(1503):66-74
Abstract

Poor outcomes in methamphetamine-associated cardiomyopathy – a growing health issue in New Zealand

Authors: Wang TKM et al.

Summary: This study compared clinical characteristics and in-hospital and post-discharge outcomes of 62 consecutive patients (8 females; median age 41 years) with methamphetamine-associated cardiomyopathy (MAC) at Middlemore Hospital from 2006 to 2018 and compared them to an age-range matched cohort with non-ischaemic cardiomyopathy (NCM). The majority of MAC patients were of indigenous Māori ethnicity. MAC patients were younger than the NCM cohort, had higher peak N-terminal pro-B-type natriuretic peptide and lower left ventricular ejection fraction at presentation, and a higher incidence of cardiogenic shock at presentation (10 vs 2, p = 0.030). During follow-up, 15 deaths occurred in the MAC cohort compared with 7 deaths in the NCM cohort. Compared with NCM patients, MAC patients had an increased mortality risk (HR 2.7; 95% CI 1.1-6.2, p = 0.029) and a trend to more heart failure re-admissions (HR 1.6; 95% CI 1.0-2.8, p = 0.075). Independent predictors of mortality during follow-up were baseline left ventricular end diastolic diameter and failure of improvement in right ventricular systolic function, while heart failure readmission in MAC patients was predicted by failure of improvement in left ventricular ejection fraction.

Comment: I've seen first-hand the impacts of meth on heart health in my community. As with other drugs, screening and management of the wider health problems of meth, beyond prevention and treatment of the acute effects and addiction, is required. And we need to put this in place now.

Reference: N Z Med J. 2019;132(1502):55-66
Abstract

Incidence of stroke and traumatic brain injury in New Zealand: contrasting the BIONIC and ARCOS-IV studies

Authors: Barker-Collo S et al.

Summary: This study examined the incidence of stroke and traumatic brain injury (TBI) by age and ethnicity in 2 New Zealand population-based epidemiological studies (Brain Injury Outcomes New Zealand In the Community [BIONIC] and Auckland Regional Outcomes of Stroke Studies [ARCOS-IV]). A similar stroke risk was seen for men and women, but men had a 2-fold higher relative risk of mild TBI and a 3-fold relative risk of moderate/severe TBI compared with females. The incidence of TBI was over 5-fold that of stroke. Māori had the highest incidence of TBI after 5 years of age, while New Zealand European/Pākehā had the highest TBI incidence in those aged <5 years. Higher incidences of stroke were observed for Pacific people and Māori until 75-84 years, after which Europeans had a higher incidence. The observed differences with ethnicity suggest the need for different prevention strategies for the 2 groups.

Comment: TBI has been described as a silent epidemic for Māori as it often goes undiagnosed, but people are living with the long-term consequences including behavioural issues, learning difficulties and chronic fatigue. It is also worth remembering that sustaining a TBI in childhood is associated with increased likelihood for imprisonment as an adult, with high rates of TBI identified in incarcerated Māori.

Reference: N Z Med J. 2019;132(1502):40-54
Abstract

Geographical and ethnic differences of osteoarthritis-associated hip and knee replacement surgeries in New Zealand: a population-based cross-sectional study

Authors: Lao C et al.

Summary: The regional and ethnic differences in rates of publicly funded osteoarthritis (OA)-associated hip and knee replacement surgeries and mortality after surgery were explored in this New Zealand population-based, retrospective, cross-sectional study. A total of 53,439 publicly funded primary hip replacements and 50,072 publicly funded primary knee replacements with a diagnosis of OA were identified between 2005 and 2017 in patients aged 14-99 years. Increases in the number and age-standardised rates of hip and knee replacements were seen over the time period, with Māori having the highest age-standardised rate of hip replacements, followed by European/others and Pacific peoples; Asians had the lowest rate. Pacific peoples had the highest age-standardised rate of knee replacements, followed by Māori and European/others, while Asians again had the lowest rate. The lowest rates of hip and knee surgeries were seen in the Northern Health Network and the Southern Health Network, respectively. Standardised mortality ratios decreased over the time period and were lower than in the general population: 0.92 (95% CI 0.89-0.95) for hip and 0.79 (95% CI 0.76-0.82) for knee surgery recipients. 30-day, 90-day and 1-year mortality patterns were similar to the standardised mortality ratios.

Comment: Although the authors report higher age-standardised rates of hip replacements for Māori, this should be considered in the context of Māori having higher rates of OA; having diagnosis at younger average age; experiencing delays to surgery; and having worse symptoms at presentation. It is pleasing to see that surgery is associated with better life expectancy, and as others have reported, equity in quality of life measures.

Reference: BMJ Open. 2019;9(9):e032993
Abstract

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Independent commentary by Dr Matire Harwood

Dr Matire Harwood (Ngapuhi) has worked in Hauora Māori, primary health and rehabilitation settings as clinician and researcher since graduating from Auckland Medical School in 1994. She also holds positions on a number of boards, committees and advisory groups including the Health Research Council. Matire lives in Auckland with her whānau including partner Haunui and two young children Te Rangiura and Waimarie.

Maternal experiences of ethnic discrimination and subsequent birth outcomes in Aotearoa New Zealand

Authors: Thayer Z et al.

Summary: These New Zealand authors evaluated the relationship between perceived discrimination, as measured in pregnancy, with birth weight and gestation length among 1653 Māori, Pacific, and Asian women. Some type of unfair treatment that they attributed to their ethnicity was reported by 30% of the sample. Among Māori women, unfair treatment at work and in acquiring housing were associated with lower birth weight when compared to Māori women not experiencing these types of discrimination (β -243 and -146 g, respectively), while significantly shorter gestation was found in those experiencing an ethnically motivated physical attack and unfair treatment in the workplace, in the criminal justice system, or in banking (β -1.06, -0.95, -0.55 and -0.73 weeks, respectively).

Comment: see below

Reference: BMC Public Health 2019;19(1):1271
Abstract

Brief Report. A qualitative study of maternal mental health services in New Zealand: Perspectives of Māori and Pacific mothers and midwives

Authors: Holden G et al.

Summary: Current maternal mental health screening practices and supports amongst Māori and Pacific peoples in New Zealand were explored in this qualitative research involving interviews and focus groups with maternity carers and mothers of Māori and Pacific descent. Mothers and carers both reported that maternal mental health screening is ad hoc in this country and discussed multilevel barriers that hamper screening and access to supports. Gaps in maternal mental health services were identified, with a need for service improvements to be targeted at patient, provider, and systems levels.

Comment: Two really important studies that demonstrate how institutionalised and interpersonal racism affect our mama and their pepi, with the potential for life-long, and for some devastating, consequences.

Reference: Asia Pac Psychiatry 2019;Sep 2 [Epub ahead of print]
Abstract

Exploring motivation for bariatric surgery among Indigenous Māori women

Authors: Rahiri JL et al.

Summary: This study explored the motivation of 29 Māori women requesting bariatric surgery for obesity through semi-structured interpersonal interviews informed by kaupapa Māori research methodologies. A majority of respondents reported that obesity-related disease and a better quality of life were the greatest sources of motivation. Whānau were key to achievement of preoperative milestones required for acceptance for bariatric surgery. Experiences of fat-shaming and yo-yo dieting were also factors in choosing to have surgery.

Comment: So proud of this wahine and the work she is doing in this space. I look forward to seeing her step into leadership roles in the future.

Reference: Obes Res Clin Pract. 2019;13(5):486-91
Abstract

Management of childhood obesity: An audit of clinical practice in secondary care

Authors: Dainty GJ et al.

Summary: The prevalence of obesity in children presenting to secondary care in southern New Zealand and their clinical management were investigated in this study. A review of data contained in the electronic anthropometry database in the region for the period 19 July 2010 to 16 July 2015 identified obesity prevalence. Clinical records were examined using a standard data extraction form for 333 obese children. In this region, the prevalence of overweight and obesity was stable over the 5-year period, but it was higher than the average national rates. There was an over-representation in terms of obesity by children of Māori and Pacific Island ethnicity, males, and those most deprived. Among 333 obese children investigated in the study, only 45.0% received a diagnosis of obesity and 24.7% of those children had further investigations related to possible obesity complications (72.7% were given management plans). Māori and Pacific Island children were less likely to receive clinical intervention for their obesity, while older females were more likely to receive such treatment.

Comment: see below

Reference: J Paediatr Child Health 2019;55(10):1224-9
Abstract

Ranked importance of childhood obesity determinants: Parents' views across ethnicities in New Zealand

Authors: Glover M et al.

Summary: This study used 19 focus groups (including Māori, Pacific, Indian, and New Zealand European caregivers) to examine factors contributing to body weight in children. Across all groups, cost of healthy foods was the highest ranked factor. Ease of access to takeaways and lack of food preparation time were similarly ranked. Cultural factors and screen time were identified as inducing sedentary behaviours in children and a lack of time to ensure children exercised was the next ranked factor. Lack of familial, social, and health promotion support, and others' behaviour and attitudes were identified by participants as negatively impacting what children ate. All groups rejected cultural stereotypes for higher obesity rates. Compared to Māori and New Zealand Europeans, Pacific Island and Indian participants noted loss of culture and extended family support, and not having culturally appropriate nutrition education or social support and services as additional factors.

Comment: I always look to the discussion of papers to get a feel for the research team and their stance. The first paper clearly showed that Māori and Pacific children experienced 'unequal treatment' for their health need. Yet the authors say 'This may highlight a need for specific education regarding cultural practices'. Do they mean the cultural practice of health services?! For, as the authors report in the second paper, all caregivers reject stereotyping that blames culture for obesity.

Reference: Nutrients 2019;11(9):pii:E2145
Abstract

The residual dentition among New Zealanders in aged residential care

Authors: Hyland N et al.

Summary: This analysis of data from the Older People's Oral Health Survey examined the residual dentition of 987 people living in residential aged care facilities. The most prevalent (24.7%; 95% CI 20.4, 29.7) dentate configuration was maxillary tooth-bounded saddles against a partially dentate lower. Younger people generally had less tooth loss and a higher prevalence of Kennedy classes II, III and IV. More females than males had a fully dentate arch. Māori were 8-fold more likely to have only mandibular anterior teeth. Upper dentures were worn more frequently than lower dentures. Various degrees of tooth loss were common with upper tooth-bounded saddles against partially dentate lower combination. Edentulous maxilla opposed by some standing teeth occurred in ≥25%, and was most common among those who were older and in Māori. Maxillary prostheses were more common than mandibular prostheses.

Comment: Not something I would have considered studying, but the findings suggest we should keep oranga niho in mind across the life-course.

Reference: Gerodontology 2019;36(3):216-22
Abstract

Keratoconus prevalence among high school students in New Zealand

Authors: Papali'i-Curtin AT et al.

Summary: The population-based, prospective, cross-sectional, Wellington Keratoconus Study aimed to determine the prevalence of keratoconus (progressive thinning of the cornea) in 1916 Wellington high school students (mean age 14.6 years). Overall, keratoconus occurred in 1/191 (0.52%) participants and among Māori in 1/45 (2.25%) participants. Participants with keratoconus had a mean K_{max} of 48.7 diopters (D), at the thinnest point they had mean pachymetry of 494.05 µm and mean posterior elevation of 23.4 µm, and they had a Belin/Ambrosio enhanced ectasia display overall D value of 4.30. In those with keratoconus, 80% had visual impairment of ≥0.2 Logarithm of the Minimum Angle of Resolution (LogMAR) in the better eye; 70% did not use visual aids, 70% had atopy, and 60% were from a low school decile.

Comment: I was shocked at how common this condition is for rangatahi Māori. There are certainly a number of risk factors for Māori here including atopy (especially atopic dermatitis/eczema), lower school decile and reduced access to visual aids. Perhaps we could address these as part of a screening programme.

Reference: Cornea 2019;38(11):1382-9
Abstract

Reported Māori consumer experiences of health systems and programs in qualitative research: a systematic review with meta-synthesis

Authors: Palmer SC et al.

Summary: This systematic review of 54 qualitative studies of Māori consumer experiences of health services and programmes was conducted to assess Māori experiences and characterise how recommendations inform strategies to address inequities. Experiences mapped to social determinants of health inequities mostly related to direct interactions, in particular patient-clinician communication and relationships, and clinician and systemic cultural competency. Key recommendations mapped to potential strategies at all levels of the political, social and health system ranging from individual interactions, community change, to broader public and system-level strategies. Recommendations focused on actions that reduce risks of exposure to health-damaging factors including health literacy interventions, increased cultural competency resources and increased Māori health service development and workforce capacity.

Comment: An excellent summary of the evidence and therefore a great resource. Importantly the authors make the point here that indigenous-led qualitative research has the potential to inform solutions.

Reference: Int J Equity Health 2019;18(1):163
Abstract