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### Abbreviations used in this issue

**GAS** = group A streptococcus

**OR** = odds ratio

**SUDI** = sudden unexpected death in infancy

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### Matire

Dr Matire Harwood matire@maorihealthreview.co.nz

### **Violence and self-harm in severe mental illness: inpatient** study of associations with ethnicity, cannabis and alcohol

Authors: Dharmawardene V, Menkes DB

Summary: This analysis involved 141 adult psychiatric inpatients in Hamilton, New Zealand, 66% of whom had a history of violence, 54% a history of self-harm, and 40% had a history of both; only 20% had neither. Cannabis use was a significant predictor of lifetime violence (p=0.02); no such association was seen between violence and gender, age, ethnicity, alcohol use, or psychiatric diagnosis. Self-harm was predicted by female gender (p<0.001), by cannabis use (p=0.025) and alcohol use (p=0.036); age, ethnicity and diagnosis did not reach significance. Fewer than 10% of patients were receiving treatment for substance use comorbidity.

Comment: I wish to thank readers who sent papers through to me. David Menke's paper showed significant associations of violence and self-harm with histories of substance abuse in the severely mentally ill. Interestingly. Māori ethnicity did not play a significant role, which is important, as it points to upstream/root causes for current inequities between Māori and non-Māori.

Reference: Australas Psychiatry. 2017;25(1):28-31

**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 whanau including partner Haunui and two young children Te Rangiura and Waimarie.



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## Understanding obesity in the context of an Indigenous population: a qualitative study

Authors: Bell R et al.

**Summary:** These researchers used qualitative research theory, inclusive of Indigenous knowledge systems, to explore and contextualise Indigenous understandings of obesity in the interview narratives of 15 Indigenous (Māori) people aged between 18 and 65 years. The thematic analysis revealed four intrinsic determinants for obesity expression that specifically relate to Indigenous peoples: (1) relationships and social connectedness; (2) holistic health including spiritual beliefs and cultural practices (Indigenous worldview); (3) historical trauma and the impacts of colonisation; and (4) the biomedical model of caloric restriction, diet and exercise were culturally insensitive, non-relatable, and were not significant drivers for engagement in healthier lifestyles.

**Comment:** Ricky Bell's paper is the follow-up article to research presented in a previous MHR (Bell R et al. Obes Med. 2016;2:19-24). The four themes identified in their research are all important, but theme three was of most interest to me, and suggests a potential exciting site to develop a decolonising intervention for obesity.

Reference: Obes Res Clin Pract. 2017 May 9. [Epub ahead of print]

<u>Abstract</u>

## The combination of bed sharing and maternal smoking leads to a greatly increased risk of sudden unexpected death in infancy: the New Zealand SUDI Nationwide Case Control Study

Authors: Mitchell EA et al.

**Summary:** Results are reported from a three-year (1 March 2012 to 28 February 2015) nationwide case-control study conducted in New Zealand that sought to identify modifiable risk factors for sudden unexpected death in infancy (SUDI). Over the study period, 137 SUDI cases were recorded, resulting in a SUDI mortality rate of 0.76/1,000 live births. Māori had the highest rate (1.41/1,000) versus Pacific (1.01/1,000) and non-Māori non-Pacific (predominantly European; 0.50/1,000). Interviews were conducted with the parent(s) of 97% of the SUDI cases and with 258 controls. The two major risk factors for SUDI were maternal smoking in pregnancy (adjusted OR 6.01; 95% CI, 2.97 to 12.15) and bed sharing (adjusted OR 4.96; 95% CI, 2.55 to 9.64). There was a significant interaction (p=0.002) between bed sharing and antenatal maternal smoking. Infants exposed to both risk factors were at substantially greater risk of SUDI (adjusted OR 32.8; 95% CI, 11.2 to 95.8) compared with infants not exposed to either risk factor. Infants not sharing the parental bedroom were also at increased risk of SUDI (adjusted OR 2.77; 95% CI, 1.45 to 5.30). Just 21 cases in the entire study were not exposed to smoking in pregnancy, bed sharing or front or side sleeping position.

**Comment:** A timely reminder, and excellent evidence, that we must not be complacent about SUDI, given the HUGE inequities that exist between Māori and non-Māori.

Reference: N Z Med J. 2017;130(1456):52-64

**Abstract** 

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# Clinical management and patient persistence with antibiotic course in suspected group A streptococcal pharyngitis for primary prevention of rheumatic fever: the perspective from a New Zealand emergency department

Authors: Mathan JJ et al.

Summary: This retrospective audit included all suspected group A streptococcal (GAS) pharyngitis admissions to Whangarei Hospital's Emergency Department between 1 May 2016 and 31 August 2016. The investigation primarily aimed to assess how well patients adhere to antibiotic treatment for possible strep throat. It also examined prescriber adherence to the national antibiotic guideline for sore throat management. Electronic medical records were searched for patient demographics, clinical examination findings, investigations and antibiotic prescription. Patients were contacted and 75 who consented to a telephone interview were questioned about their antibiotic treatment. While all patients were discharged on the recommended medication, only 62 (82.7%) were prescribed the correct length (10 days) of oral antibiotics. Of the 61 patients (81%) who had a swab taken, 25 (41%) were confirmed positive for GAS. Patients were either advised to commence medication without waiting for a swab result (n=72; 96%) or delay treatment and commence only if no improvement in symptoms (n=3; 4%). Of those advised to commence medication immediately, 67 (94%) obtained their medication from a community pharmacy. Three patients were advised to stop treatment after confirmation of a negative result. Of the 65 patients assessable for medication persistence, 48 (73.8%) were compliant in completing their full course of antibiotics.

Comment: I was disappointed about the cessation of prescribed targets in rheumatic fever. However, let's focus on those DHBs, including Northland, who trialled innovative programmes such as that described here. Qualitative evidence from Northland and Auckland found that the issue wasn't with the patient presenting with sore throat/taking medication but with GP clinics who did not follow guidelines. A programme run through ED is an excellent idea.

Reference: N Z Med J. 2017;130(1457):58-68 Abstract

## **Dementia:** Supplementary Findings from LiLACS NZ for Section Five, 'Service Use and Common Health Conditions' in the report 'Health, Independence and Caregiving in Advanced Age'

Funded by the Ministry of Health, the University of Auckland released the report *Dementia: Supplementary Findings from LiLACS NZ for Section Five,* 'Service Use and Common Health Conditions' in the report 'Health, Independence and Caregiving in Advanced Age' on the 10th of May 2017. This report establishes how the presence of dementia affects older Māori and non-Māori (aged 80 years and above), and the services they use when the dementia patients also have cardiovascular disease, chronic lung disease and diabetes mellitus.

The study found that dementia was associated with lower functional status, higher frailty, poorer mental and physical health-related quality of life and higher health service use and cost. The combination of dementia with any of the physical health conditions studied in the report (cardiovascular disease, chronic lung disease, and diabetes mellitus) worsened health status and increased health service use and costs.

The project *Te Puāwaitanga O Ngā Tapuwae Kia Ora Tonu/ Life and Living in Advanced Age, a Cohort Study in New Zealand (LiLACS NZ)* is a longitudinal cohort study of New Zealanders in advanced age. LiLACS NZ is the world's first longitudinal study of an indigenous population aged 80 and over.

The report, along with the 13 previously released LiLACS NZ reports, can be found at the University of Auckland website:

https://www.fmhs. auckland.ac.nz/en/ faculty/lilacs/research/ publications.html

## New Zealand tobacco control experts' views towards policies to reduce tobacco availability

Authors: Robertson L et al.

**Summary:** Outcomes are reported from this analysis of smokefree experts' views on policies that would reduce tobacco retail supply. In-depth telephone interviews were conducted with 25 tobacco control experts drawn from academia, non-governmental organisations, Māori and Pacific health, smoking cessation services, district health boards and other public health-related organisations throughout New Zealand. Their views were sought upon the importance of reducing tobacco retail supply, different policy options and barriers to policy adoption. The qualitative analysis of the transcripts revealed that participants believed tobacco retailer licensing was an important short-term step towards the 2025 goal. In the long-term, participants envisaged tobacco only being available at a small number of specialised outlets, either pharmacies or adult-only/R18 stores. To achieve that long-term scenario, participants suggested a sinking-lid policy on licences or a zoning approach could be adopted to gradually reduce outlet density. Policies banning sales at certain types of outlet were not considered feasible.

Comment: An interesting glimpse into the potential smokefree future.

Reference: N Z Med J. 2017;130(1456):27-35

**Abstract** 

### Low sugar nutrition policies and dental caries: A study of primary schools in South Auckland

Authors: Thornley S et al.

Summary: These researchers assessed the impact of a healthy food policy restricting sugary food and drinks upon student oral health of one primary school (Yendarra Primary) situated in a socioeconomically deprived area of South Auckland. Records of caries of the primary and adult teeth were obtained between 2007 and 2014 for children aged 8–11 years attending Yendarra, and compared to those of 8 other public schools with a similar demographic profile in the same region. None of the other schools had introduced any such low sugar nutrition policy. A total of 3813 records were examined. In linear regression analysis that adjusted for confounders, Yendarra school children had a lower mean number of carious primary and adult teeth (0.37), compared to children in other schools. Pacific students had higher numbers of carious teeth (adjusted  $\beta$  coefficient: 0.25; 95% Cl, 0.03 to 0.46) than Māori.

**Comment:** When on the Board of Trustees at my children's school, we agreed to introduce a 'water-only' policy for staff and students. We had no objections, and the impact on the students in particular was significant. For those of you keen to introduce similar policies in your schools, perhaps this article, providing clear evidence on the benefits, will be useful.

Reference: J Paediatr Child Health. 2017;53(5):494-9 Abstract

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## Small numbers, big challenges: adolescent and young adult cancer incidence and survival in New Zealand

Authors: Ballantine KR et al.

**Summary:** These researchers analysed data from 1606 registrations of 15–24-year-olds in New Zealand diagnosed with a new primary malignant tumour between 2000 and 2009. Cancer incidence was 228.6 per million for adolescents aged 15–19 years and 325.7 per million for young adults aged 20–24 years. While overall incidence rates were consistent across all ethnic groups, the analysis identified unique ethnic differences by tumour group. Māori had a higher incidence of bone tumours, carcinoma of the gastrointestinal tract and gonadal germ cell tumours, Pacific peoples had a higher incidence of leukaemia, and non-Māori/non-Pacific peoples had a higher incidence of melanoma. Five-year relative survival for adolescents (75.1%) and the entire cohort overall (80.6%) appeared to be worse compared with other high-income countries. Māori (69.5%) and Pacific (71.3%) adolescents and young adults had lower 5-year survival compared with non-Māori/non-Pacific peoples (84.2%).

**Comment:** Evidence to date has tended to focus on inequities in cancer rates and outcomes for the very young and adult groups. Often neglected in epidemiological studies, Māori adolescents with cancer appear to have very different types of cancer (and those working with Māori communities should pay heed to bone, gastrointestinal and testicular symptoms) and poorer survival (which is of particular concern given the potential for remission in these types of cancer).

Reference: J Adolesc Young Adult Oncol. 2017;6(2):277-85 Abstract



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### Integrative review of older adult loneliness and social isolation in Aotearoa/New Zealand

Authors: Wright-St Clair VA et al.

**Summary:** This systematic review included 9 articles (1 qualitative and 8 quantitative research studies) exploring loneliness amongst older people in Aotearoa/New Zealand. Loneliness was significantly related to social isolation, living alone, depression, suicidal ideation, being female, being Māori and having a visual impairment. Older Korean immigrants reported experiencing loneliness and social isolation, language and cultural differences.

**Comment:** These results may not be surprising — a recent audit of the 'frequent flyers' in our practice (predominantly Māori) showed that the majority were older people either living alone or alone during the days when adult children and mokopuna were away at work/school. It seems they come to the clinic for 'social engagement' rather than medical need (though there is a fine line). The authors provide a number of useful recommendations. We plan to put some of these into action and monitor the impact they have on patients and the service.

Reference: Australas J Ageing. 2017;36(2):114-23

**Abstract** 

## Antibiotic consumption by New Zealand children: exposure is near universal by the age of 5 years

Authors: Hobbs MR et al.

Summary: This analysis used data from the Growing Up in New Zealand longitudinal cohort study (<a href="www.growingup.co.nz">www.growingup.co.nz</a>) with linkage to national administrative antibiotic dispensing data to describe community antibiotic dispensing during the first 5 years of life. It also sought to determine how antibiotic dispensing varies between population subgroups. The cohort comprised 5581 children who were treated with 53,052 antibiotic courses, over half (54%) of which were amoxicillin. By age 5 years, 97% of children had received ≥1 antibiotic courses, and each child had received a median of 8 antibiotic courses. The mean incidence of antibiotic dispensing was 1.9 courses/child/year. In multivariable negative binomial regression analysis, antibiotic courses were dispensed more often to Māori and Pacific children than European children, and to children residing in the most-deprived compared with the least-deprived areas. A distinct seasonal pattern suggested that much antibiotic use may have been for self-limiting respiratory infections.

**Comment:** The issue of antimicrobial resistance is receiving increasing attention (see <a href="https://royalsociety.org.nz/what-we-do/our-expert-advice/all-expert-advice-papers/antimicrobial-resistance/">https://royalsociety.org.nz/what-we-do/our-expert-advice/all-expert-advice-papers/antimicrobial-resistance/</a> for more information). There may be good reason for Māori to be prescribed amoxicillin at higher rates (e.g. higher incidence of Group A Strep) and a 'blanket approach' to reducing antibiotics may have its risks.

Reference: J Antimicrob Chemother. 2017;72(6):1832-40 Abstract

## Evaluation of a smoking cessation service in elective surgery

Authors: Saxony J et al.

Summary: Outcomes are reported from an evaluation of a novel specialist stop smoking service for patients undergoing elective surgery ('ELECT') that was established in 2012 in Auckland, New Zealand. The service involves regular staff training and the development of setting-specific and easy-to-use referral procedures. Cessation treatment emphasises temporary abstinence around the time of surgery, as opposed to long-term smoking abstinence. At the time of the evaluation in 2014, 27 months after its inception, 527 patients had been referred to ELECT, representing one-fifth of all identified smokers. Around 60% of those referred received ≥1 treatment session involving intense behavioural support and nicotine replacement treatment; for Māori, this figure was 75%. In multiple logistic regression analysis, a shorter time to contact of referred patients, older age, being Māori (versus NZ European) and being referred through the surgical hospital services were all associated with a higher likelihood of receiving ≥1 treatment session (p<0.05). Of the 123 patients who set a formal quit date, 68% (n=82) self-reported sustained abstinence at 4 weeks post-quit, and 48% (n=58) remained abstinent at 12 weeks post-quit.

Comment: Fantastic results!

Reference: J Surg Res. 2017;212:33-41

<u>Abstract</u>

# The challenges and opportunities of translating best practice immunisation strategies among low performing general practices to reduce equity gaps in childhood immunisation coverage in New Zealand

Authors: Turner NM et al.

Summary: This intervention study recruited 10 general practices with low immunisation coverage rates and a high percentage of the enrolled population being of Māori ethnicity. The study aim was to translate best practices from high performing general practices into strategies to improve childhood immunisation coverage in these low performing practices. The 6 intervention groups received customised action plans and support for a 12-month period; 4 control groups received 'business as usual' support. Key informants from all participating practices took part in structured interviews that explored current aspects related to childhood immunisation delivery. Surveys were conducted to understand how the intervention worked. Thematic analysis of the interview data revealed two positive aspects of childhood immunisation delivery: high prioritisation at the practice and staff who were pro-immunisation and knowledgeable. Key challenges cited by participants included inaccurate family contact information and discrepancies with referral processes to other providers. Other challenges included building rapport with families and vaccine hesitancy. The action plans included various strategies aimed to improve processes at the practice, contact and engagement with parents, and partnership development with local service providers.

**Comment:** I wish more people took notice of the hard work that goes in to achieving 95% immunisation rates. The clinical champions (i.e. NURSES) that engage and have the critical conversations with whānau in my experience, and as described here, achieve results. The nurses in my quintile 5 practice achieved all targets this last quarter. However, media, and some of my colleagues, won't talk with us but instead seek the views of individual grand-standers. In my opinion, attending anti-vax events and calling for benefits to be cut not only requires less effort but appears to be counterproductive.

Reference: BMC Nurs. 2017;16:31

**Abstract** 



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