

## GEMS OF NEW ZEALAND

### Primary Health Care Research

#### Brain stimulation to treat tinnitus

Many people describe tinnitus as a ringing, buzzing, humming, or whistling sound in the absence of its external source. In the past five years, attention has been drawn towards the use of non-invasive brain stimulation for tinnitus management. This study examined dose-response effects of transcranial direct current stimulation (tDCS) for tinnitus relief by stimulation of the left temporoparietal area of the brain. In total, 56% of participants experienced transient suppression of tinnitus and 44% of participants experienced long-term improvement of symptoms. This suggests that tDCS can be a potential intervention tool for tinnitus, although more research is needed in this area.

Shekhawat GS, Stinear CM, Searchfield GD. Transcranial direct current stimulation intensity and duration effects on tinnitus suppression. *Neurorehabil Neural Repair*. 2013;27(2):164–172. **Corresponding author:** Dr Grant Searchfield; email: g.searchfield@auckland.ac.nz

#### Providing equity in HPV vaccination

Vaccination rates across ethnicities in New Zealand are not equal. Immunisation uptake by Pacific and Maori generally has been lower compared with NZ European in childhood vaccination programmes. A study found this trend reversed in 8665 female students in the Auckland District Health Board area, where Maori and Pacific students

achieved high levels of vaccination in the HPV school-based immunisation programme. Girls in higher socioeconomic groups were more likely to be vaccinated by general practice, indicating that a mix of delivery options (school-based and primary care) is needed to optimise coverage of the New Zealand population.

Poole T, Goodyear-Smith F, Petousis-Harris H, Desmond N, Exeter D, Pointon L, Jayasinha R. Human Papillomavirus vaccination in Auckland: reducing ethnic and socioeconomic inequities. *Vaccine*. 2012. 11 DOI:10.1016/j.vaccine.2012.10.099. **Corresponding author:** Felicity Goodyear-Smith; email: f.goodyear-smith@auckland.ac.nz

#### New Zealand pharmacists' alignment with a future vision

In 2004, the Pharmaceutical Society of New Zealand launched a Ten Year Vision (TYV). Significant buy-in from pharmacists is required in order to implement the TYV. The aim of this study was to determine alignment between New Zealand pharmacists' views and the TYV. A postal survey was undertaken based on attitude statements informed through six focus groups. Pharmacists' responses indicated a high level of alignment with the TYV. Pharmacists appear receptive to practice and funding changes in order to facilitate greater contribution to patient care. Respondents demonstrated a clear desire to be involved in medicines-related

health policy and feel underrepresented at this level.

Harrison J, Scahill SL, Sheridan J. Pharmacy in the future: New Zealand pharmacists' alignment with the 'Ten Year Vision for Pharmacists'. *Res Soc Admin Pharm* 2012, 8(1):17-35. **Corresponding author:** Jeff Harrison; email: j.harrison@auckland.ac.nz

#### Ethnic differences in pre-eclampsia

Pre-eclampsia affects 3–5% of pregnancies and is associated with maternal morbidity and mortality. Our multi-ethnic Auckland population (n=26 254) study identified clinical risk factors independently associated with pre-eclampsia, including overweight and obesity, nulliparity, Type 1 diabetes, chronic hypertension and pre-existing medical conditions. Chinese women had an approximate 50% reduction and Maori a 50% increase in risk after adjustment for confounding factors. Reduced risk in Chinese women has been reported by others and may be related to lifestyle or genetic factors. The finding of an increased risk amongst Maori women is novel and unexpected. The mechanism is currently unexplained but may be related to metabolic factors.

Anderson NH, Sadler LC, Stewart AW, Fyfe EM, McCowan LME. Ethnicity, Body Mass Index and risk of preeclampsia in a multi-ethnic New Zealand Population. *Aust N Z J Obstet Gynaecol*. 2012 DOI:10.1111/j.1479-828x.2012. **Corresponding author:** Ngaire Anderson; email: n.anderson@auckland.ac.nz



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