Title: Inequity of timing of access to first antenatal ultrasound amongst Immigrant vs Non-Immigrant Pacific Island Women in Dunedin, NZ: an exploratory descriptive study

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Objective: This study aimed to identify inequities in access to first antenatal ultrasound amongst immigrant and non-immigrant Pacific Island women at Queen Mary Hospital from January 2018 to December 2019.

Design: Descriptive Retrospective Cohort Study

Methods: After obtaining appropriate investigational approval and using self-identified Pacific Islander ethnicity a total of 139 patient data folders were extracted from the Southern District Health Board's comprehensive Maternity Plus database. Three of these folders were found to ineligible and excluded. The remaining cohort was divided as to location of the pregnant patient's own birth, defining New Zealand birth as non-immigrant and non-New Zealand birth as immigrant. All data was analysed using R (version 3.6.2).

Results: Of the 136 women, 65% were non-immigrants and 35% were immigrants. No statistical difference in maternal age, marital status, or tobacco use status was identified. Neither were identified significant differences in gestational weeks at birth or infant birth weight. There were identified statistically significant differences in average maternal BMI (non-immigrant 30.98 kg/m², immigrant 34.53 kg/m²), and increased immigrant reported rates of interpersonal violence. Importantly, significantly increased complication rates were noted for immigrants. Identified also was a significant delay in average timing of first antenatal ultrasound (non-immigrant 11.37 weeks, immigrant 14.78 weeks, p-value=0.015).

Conclusion: This study identifies a statistically significant delay in first antenatal ultrasound scan for Immigrants. The second part of the study will be aimed at exploring barriers to timely access to care for this cohort of women.

Biography of presenting author:

- Dr Temalesi Rasoki Windust
- O&G Registrar based at Gold Coast University Hospital
- Currently a 5th year FRANZCOG trainee
- Passionate about Maori-Pasifika Woman's health
- Started her O&G training in Fiji in 2008 and moved to NZ in 2011, now living and working in Gold Coast, Australia
- Published a paper on 'Safe Motherhood program-a demonstration project' which is now a National Program in Fiji and the Pacific
- Married and proud mum of three boys-Tua (4weeks), Noah (4) & Hansel (18)

References:

- 1. Immigrant: Pacific Island women born overseas. Non-immigrant: Pacific Island women born in NZ
- 2. First ANC care: First visit to LMC, first visit to GP, First USS at booking, Discharge summary on Early pregnancy clinic, maternity plus data base or referral notes from other DHB-whichever is the earliest
- 3. Pacific Island descent: Pacific island women or Pasifika women are registered in our birth data record under the following Pacific island countries: Samoa, Tonga, Cook Islands, Fiji, Papua New Guinea, New Caledonia, Solomon Islands, Vanuatu, American Samoa, French Polynesia, Niue, Pitcairn Islands, Tokelau, Tuvalu, and Wallis and Futuna, Federated States of Micronesia, Guam, Kiribati, Marshall Islands, Nauru, Northern Mariana Islands and Palau. Ethnicity 1-being paternal link and ethnicity 2-maternal link.
- 4. Antenatal and intrapartum complications definitions: Antenatal: Gestational Diabetes, Pregnancy induced hypertension, Pre-eclampsia, Eclampsia, Pregnancy complicated by medical disorders in pregnancy, antepartum haemorrhage; Intra-partum: Emergency Caesarean section, Assisted vaginal birth (ventouse/forceps delivery), 3rd/4th degree tear, PPH; Post-partum: Blood transfusion, wound infection, sepsis, post-natal depression