Sex ratios and 'missing women' among Asian minority and migrant populations in Aotearoa/New Zealand: a retrospective cohort analysis

ABSTRACT

Objectives Recent research from the UK, USA, Australia and Canada point to male-favouring sex ratios at birth (SRB) among their Asian minority populations, attributed to son preference and sex-selective abortion within these cultural groups. The present study conducts a similar investigation of SRBs among New Zealand's Asian minority and migrant populations, who comprise 15% of the population.

Setting and participants The study focused on Asian populations of New Zealand and comparisons were made with NZ European, Māori, Pacific Island and Middle-Eastern, Latin American and African groups. Secondary data were obtained from the New Zealand historical census series between 1976 and 2013 and a retrospective birth cohort in New Zealand was created using the Stats NZ Integrated Data Infrastructure from 2003 to 2018.

Primary and secondary outcome measures The primary outcome measure was SRBs and sex ratios between the ages 0 and 5 by ethnicity. A logistic regression was conducted and adjusted for selected variables of interest including visa group, parity, maternal age and deprivation. Finally, associations between family size, ethnicity and family sex composition were examined in a subset of this cohort (families with two or three children).

Results There was no evidence of 'missing women' or gender bias as indicated by a deviation from the biological norm in New Zealand's Asian population. However, Indian and Chinese families were significantly more likely to have a third child if their first two children were female compared with two male children.

Conclusion The analyses did not reveal male-favouring sex ratios and any conclusive evidence of sex-selective abortion among Indian and Chinese populations. Based on these data, we conclude that in comparison to other western countries, New Zealand's Asian migrant populations present as an anomaly. The larger family sizes for Indian and Chinese populations where the first two children were girls suggested potentially 'soft' practices of son preference.