

Parental Vaccine Hesitancy among Former Refugees in Aotearoa New Zealand

Summary

Abstract

Background: Vaccination is one of the most cost-effective and successful public health measures to prevent and control infectious diseases. Vaccine hesitancy is an important factor underpinning suboptimal vaccination uptake worldwide. Low immunisation uptake contributes to the resurgence of vaccine-preventable diseases (VPDs). Hence, the historic achievements of vaccinations in reducing the burden of VPDs have been threatened. There is substantial evidence on the magnitude and determinants of vaccine hesitancy in Western countries' general populations, yet evidence on subpopulations such as refugees is limited. The purpose of this study was to investigate the prevalence of vaccine hesitancy and its determinants among former refugees in Aotearoa New Zealand.

Methods: A cross-sectional survey was conducted in 2020/21 among former refugee parents who had been in New Zealand for more than 6 months and had a child 6 weeks–16 years old. Data collection was conducted using the Parental Attitudes about Childhood Vaccines (PACV) questionnaire, which was made available online and in paper format and in four languages (English, Arabic, Somali and Oromo). The internal consistency and predictive validity of different versions of the PACV was assessed. The prevalence of parental vaccine hesitancy was explored and the association between vaccine hesitancy and sociodemographic factors was examined using logistic regression.

Results: One hundred and seventy-eight participants completed the survey. Most participants were of African descent (70%) and lived in New Zealand for over a decade (61%). The rate of parental vaccine hesitancy was 16.3%, 95% CI (10.7, 21.3). About 20.6% of the parents had delayed vaccines and 11.8% had refused to vaccinate their child for reasons other than medical exemptions. Most caregivers were concerned about vaccine side-effects (47%), safety (43%) and efficacy (40%). The Cronbach's alpha scores for English, Arabic, Somali and Oromo PACV were 0.77, 0.53, 0.89 and 0.64 respectively. After controlling for confounders, the predictive validity of English PACV ($p=0.04$) and Arabic PACV ($p=0.03$) reached significance level. The combined PACV survey in four languages was contextually valid and internally consistent with significant predictive validity ($p=0.01$) and very good internal consistency (Cronbach's $\alpha=0.77$). After adjusting for covariates, primary source of information ($p=0.045$) and education ($p=0.04$) had significant association with vaccine hesitancy. Media as a primary source of vaccine information and low education status were linked with higher vaccine hesitancy. About 80% of the parents said their child(ren) had up-to-date immunisation status.

Conclusions: This is the first quantitative study that has investigated vaccine hesitancy among resettled refugees in New Zealand. The rate of vaccine hesitancy among former refugees was less than that of the host population, yet proportionally more refugee parents delayed and refused vaccines than the host population. Parents' educational status and primary source of vaccine information were important factors influencing vaccine hesitancy. Therefore, vaccine information tailored to former refugee parents' needs in a manner that addresses their concerns are required to reduce vaccine hesitancy and improve vaccine uptake. As the delay or refusal of vaccines is likely attributed to immunisation services barriers, reducing vaccine hesitancy and improving uptake requires a concerted and holistic approach.