

COVID-19 vaccination of children with refugee backgrounds in Western Australia: a retrospective observational study

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In Australia, the proportion of people born overseas who were vaccinated against coronavirus disease 2019 (COVID-19)¹ was smaller and the age-standardised COVID-19 death rate higher than for people born in Australia.² Around the world, the impact of COVID-19 was particularly great for refugees, asylum seekers, and undocumented migrants.³ Lack of trust in government systems was a major barrier to vaccination, but outreach services and comprehensive information from trusted sources in community languages can improve the acceptance of COVID-19 vaccines.³

In Perth (Western Australia), the Refugee Health Service (RHS) of the Child and Adolescent Health Service provides community nursing and tertiary multidisciplinary assessment (paediatricians, dietitians, social workers, dentists, teachers, psychologists) for children with refugee backgrounds, supported by transport services and professional interpreters. In our retrospective observational study, we examined the COVID-19 vaccination status, as recorded by the Australian Immunisation Register (AIR), of children aged 5–15 years who attended medical appointments at the RHS when eligible for two COVID-19

vaccine doses by 31 December 2022 (12–15-year-old children were eligible from 1 September 2021, 5–11-year-old children from 1 February 2022). After randomising the AIR vaccination records in Microsoft Excel, the first 250 of 293 records were included in our analysis (time constraints precluded complete case analysis). We then compared the proportions of vaccinated children in this group with monthly COVID-19 vaccination reports for all WA children aged 5–15 years.⁴ The study proposal was reviewed and approved by the Child and Adolescent Health Service Governance, Evidence, Knowledge and Outcomes Triage Committee (2023-000433).

Professional interpreters were required because of low English proficiency for the families of 232 children (92.8%). Limited health literacy among the parents and transport difficulties were frequent (data not shown). At the time of their first RHS clinic appointment, 177 children (71%) — 106 aged 5–11 years (82%) and 71 aged 12–15 years (59%) — had not received two COVID-19 vaccine doses (Box 1); of the 148 of these children (59%) eligible and due for a second vaccine dose, 58 (39%) received it within one month of their RHS appointment, including 23 (16%) in our child health drop-in vaccination centre on the day of their RHS appointment.

The proportions of children with RHS vaccination appointments during February–August 2022 who had received at least one (70%) or two vaccine doses (60%) by 31 January 2023 were larger

1 Coronavirus disease 2019 (COVID-19) vaccination status for 250 children (5–15 years) who attended the Refugee Health Service (RHS) for vaccine doses to 31 December 2022, and for all Western Australian children aged 5–15 years

Age group	Children	COVID-19 vaccine doses	
		One	Two or more
All children (5–15 years)			
RHS children (at time of clinic appointment: 1 Feb – 31 Aug 2022)	250	48 (19%)	73 (29%)
RHS children (31 Jan 2023)	250	24 (10%)	150 (60%)
Western Australia (31 Jan 2023) ⁴	—	10%	52%
5–11 years			
RHS children (at time of clinic appointment: 1 Feb – 31 Aug 2022)	129	29 (23%)	23 (18%)
RHS children (31 Jan 2023)	129	17 (13%)	58 (45%)
Western Australia (31 Jan 2023) ⁴	—	12%	40%
12–15 years			
RHS children at time of clinic appointment: 1 Sept 2021 – 30 Sept 2022)	121	19 (16%)	50 (41%)
RHS children (31 Jan 2023)	121	7 (6%)	92 (76%)
Western Australia (31 Jan 2023) ⁴	—	6%	73%

2 Coronavirus disease 2019 (COVID-19) vaccination status (31 January 2023) for 250 children (5–15 years) who attended the Refugee Health Service (RHS) for vaccine doses to 31 December 2022: demographic characteristics

Characteristic	Children	COVID-19 vaccine doses (31 Jan 2023)	
		One	Two or more
Consultation type			
Face-to-face	216	23 (11%)	136 (63%)
Telehealth	34	1 (3%)	14 (41%)
Gender			
Boys	134	12 (9%)	79 (59%)
Girls	116	12 (10%)	71 (61%)
Socio-economic status (IRSAD quintile)			
Lowest (quintile 1)	98	9 (9%)	56 (57%)
Highest (quintile 5)	10	1 (10%)	6 (60%)

IRSAD = Index of Relative Socio-economic Advantage and Disadvantage.⁵ ♦

than the overall state proportions (62% and 52% respectively⁴) (Box 1). COVID-19 restrictions necessitated RHS telehealth consultations for 34 children (14%); as opportunistic same-day vaccination could not be offered in these cases, the proportion who had received two doses by 31 January 2023 (41%) was smaller than for children with face-to-face appointments (63%) (Box 2).

Our finding that the proportion of children with refugee backgrounds who had received COVID-19 vaccines prior to their RHS appointments was smaller than for all WA children confirms previously reported differences in vaccination accessibility.³ Culturally and linguistically appropriate care for refugees in Australia was hampered by the COVID-19 pandemic,⁶ compounded by limited face-to-face access to community refugee nurses and primary care. Community barriers to COVID-19 vaccination caused by pandemic-related restrictions were complicated by lower English proficiency and digital literacy, limiting the ability to independently seek vaccination appointments.

The RHS model of care attempted to overcome these problems. Extended consultation times and flexible care delivery optimised the number of face-to-face consultations. Community refugee

health nurses supported primary care for children who could not attend the clinic in person, including assisting with booking appointments and applying for interpreter support in primary care. Verbal COVID-19 information was provided in individual preferred languages, and printed translated information was provided at face-to-face consultations.

Our findings underscore the value of a specialist refugee health service for providing culturally and linguistically nuanced catch-up vaccination and bridging gaps in hospital and community vaccination delivery.

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Erratum

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Black KI, Dorney E, Hall JA, et al. Using a validated instrument to assess pregnancy planning and preconception care at antenatal booking visits: a retrospective cohort study. *Med J Aust* 2023; 219: 366–370. <https://doi.org/10.5694/mja2.52109>.

In the Results section of the Abstract and the third paragraph of the Results section, “59.1%” should read “54.1%”. ■

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