High rates of vaccination of Aboriginal and Torres Strait Islander Australians: an underappreciated success?

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Reducing vaccine-preventable disease is a major achievement in equitable health service delivery

The health of Aboriginal and Torres Strait Islander (Indigenous) Australians should be of concern to all Australians. Many readers of the Journal will be aware that cervical cancer incidence is twice and mortality four times as high among Indigenous women as among non-Indigenous women.[1] This grossly inequitable situation is largely attributable to the lower participation of Indigenous women in cervical screening programs because of a variety of socio-cultural and health system-related barriers, including shame, cultural safety, and problems of access.[1,2]

While a range of measures have been implemented to overcome such barriers, human papillomavirus (HPV) vaccination offers major promise for eliminating the infection that causes most cervical cancers. It is therefore very pleasing to note the high uptake of HPV vaccination by Indigenous adolescents reported by Brotherton and colleagues in this issue of the Journal.[3] The authors, who analysed data from the National HPV Vaccination Program Register, found that quality of Indigenous status data in the register was adequate in only four states and territories in 2015 (Queensland, the Northern Territory, New South Wales, and the Australian Capital Territory). In these jurisdictions, coverage for the first HPV vaccine dose was high among Indigenous adolescents aged 12 years in 2015, in a few instances higher than for non-Indigenous adolescents.[3] First dose coverage for Indigenous girls ranged from 87% to 96% and for boys from 82% to 94%; however, coverage for dose 3 was consistently lower for Indigenous (girls, 66–83%; boys, 61–73%) than for non-Indigenous adolescents (girls, 78–88%; boys, 74–84%).[3]

In 2018, Australia changed from a 3-dose to a 2-dose HPV vaccination schedule. While the reduced dose number could facilitate course completion, Brotherton and her colleagues note that the wider spacing of doses (6–12 months) than in the 3-dose schedule (6 months) could affect coverage, particularly among Indigenous adolescents, for whom school absenteeism rates are high. We therefore need to understand and reduce any barriers to course completion,[3] although recent evidence suggests that HPV vaccines may be adequately effective when administered as a single dose.[4]

Early successes of the HPV vaccination program have already been documented, including large falls in the prevalence of HPV and genital warts among both Indigenous and non-Indigenous Australians.[3] Sustaining the current high rates of initiation and increasing course completion by Indigenous adolescents should lead to substantial falls in cervical cancer incidence and mortality over the next two decades. For monitoring progress, it is important to note that in 2018 all HPV register data were transferred to the Australian Immunisation Register (AIR); as Brotherton and colleagues note, this should result in better capture of catch-up HPV vaccine doses given in general practice. Further, Indigenous status data completeness in the AIR has been high since 2004.[5,6] However, ensuring the continuing high quality of HPV vaccination data in the AIR will be important. Analyses and reporting of coverage may need to be adjusted to the new context; for instance, AIR data reporting is based on the number of people with AIR records, while reporting of HPV Register data used ABS population estimates for the denominator.

High coverage rates in Indigenous children have also been achieved for routine childhood vaccinations by the National Immunisation Program. Since 2012, "fully immunised" vaccination coverage at 60 months of age has been higher for Indigenous than non-Indigenous children (96.9% *v* 94.4% in December 2017).[5] While timeliness of vaccination in Indigenous children has been a problem at earlier age milestones, "fully immunised" coverage at 12 months of age was 93.2% in December 2017, only 0.7 percentage points below that for non-Indigenous children.[5] Substantial improvements in timely vaccination of young Indigenous children in New South Wales were recently documented in the Journal, and were ascribed to a program for optimising uptake in a culturally appropriate manner.[7] Higher rates of zoster vaccine uptake by older Indigenous adults have also been achieved by the national program, with coverage (possibly underreported) of 43.3% (33.8% in older non-Indigenous Australians).[8]

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Improved Indigenous vaccination rates are therefore considerable, albeit possibly underappreciated, successes that reflect the intensive efforts of dedicated vaccination providers, program staff, and policymakers (including many Indigenous people) to engage with Indigenous Australians and their communities, as well as the support of Indigenous people for these efforts. These successes may give heart to those working in other areas of health where achieving equitable service delivery has been more challenging. However, high vaccination rates are only one piece of the jigsaw in terms of preventing vaccine-preventable disease. We also need to work together across sectors on the social determinants of health (including education, housing, employment, institutionalised racism), significant contributors to the higher rates of many vaccine-preventable diseases among Indigenous people.[5] Collaboration with Indigenous communities will be critical, just as it has been in achieving success with vaccination, and Indigenous Australians should play a leading role in all decision making, governance, and engagement processes.

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