

GENITAL WARTS TRENDS IN AUSTRALIAN AND OVERSEAS-BORN PEOPLE IN AUSTRALIA: MEASURING PROGRESS TOWARDS CONTROL AND ELIMINATION

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Background: Substantial declines in genital warts (GW) have been observed in countries with quadrivalent / nonavalent HPV (*q/n* HPV) vaccination programs, with Australia showing the most pronounced and long-term reductions. Yet, no study has assessed progress towards elimination of GW among migrants, and their contribution to population-level control of GW. We assessed Australia's progress towards GW elimination by examining trends in diagnoses in Australian- and overseas-born attendees of sexual health clinics (SHCs) across Australia.

Methods: A cross-sectional trend analysis of new GW diagnoses among first-time attendees of 34 SHCs between 2004 and 2018. Rate ratios (RR) and their 95% confidence intervals (CI) were used for comparing GW trends among Australian- and overseas-born patients by 2018 relative to the pre-vaccination era 2004-2007.

Results: A total of 439,957 new patients (Australian-born: 230,230; overseas-born: 209,727) were seen at SHCs, 6.4% were diagnosed with GW (Australian-born: 7.1%; overseas-born: 5.6%). By 2018, there had been a 64% reduction in the proportion of all SHC patients with a GW diagnosis relative to 2004-2007 (RR: 0.36, 95% CI: 0.35 to 0.38, $P < 0.01$). The decline was more pronounced at 72% (RR: 0.28, 95% CI: 0.27 to 0.30, $P < 0.01$) among Australian-born patients, with the greatest reduction in women and men aged < 21 years, at 98% (RR: 0.02, 95% CI: 0.01 to 0.02, $P < 0.01$) and 92% (RR: 0.08, 95% CI: 0.06 to 0.11, $P < 0.01$), respectively. There was a 49% reduction in the proportion of overseas-born patients diagnosed with GW (RR: 0.51, 95% CI: 0.48 to 0.54, $P < 0.01$), and a 21% reduction in overseas-born patients from countries with no/bivalent HPV (*b*HPV) vaccination program (RR: 0.79 95% CI: 0.71 to 0.90, $P < 0.01$).

Conclusion: Although reductions in genital warts diagnoses have reached near elimination levels in young Australian-born people, population-wide elimination of genital warts is dependent on other countries initiating and expanding their HPV vaccination programs.

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