

## LETTERS

### Supporting the call for a gender-neutral human papillomavirus vaccination in Canada

We commend Shapiro and colleagues<sup>1</sup> on their recent policy analysis of human papillomavirus (HPV) vaccination for males in Canada and their call for gender-neutral programs in all provinces and territories.

Australia has the highest uptake of HPV vaccine in males at a country-level worldwide; we write to add evidence that may inform Canada's approach. Quadrivalent HPV vaccine was included for males under the Australian National Immunisation Program from February 2013, following introduction for females in 2007. Australia's nationally centralized systems for economic assessment and vaccine procurement facilitate program decisions: inclusion was deemed cost-effective, albeit at an undisclosed price.<sup>2</sup>

The gender-neutral HPV vaccination program received support even before the female vaccination program commenced.<sup>3</sup> Uptake in males was high in the first year of the additional program and has increased: 77.0%, 74.0% and 66.4% of boys turning 15 years of age had received one, two and three doses, respectively, by 2015.<sup>4</sup> HPV vaccination coverage for females has also increased by about 6% since male immunization was funded (from 71.0% to 77.4% for three-dose coverage between 2013 and 2015).<sup>4</sup> Targeting all young people allows more consistent framing of HPV vaccination as a cancer prevention strategy and has likely somewhat negated the vaccine resistance observed in Australia and in other countries. A strong communications strategy, together with strengthening vaccine safety surveillance,<sup>5</sup> has also facilitated vaccine uptake.

Increasing recognition and incidence of HPV-related diseases like anal and oropharyngeal cancers<sup>6</sup> and growing evidence of vaccine immunogenicity, safety

and efficacy in males from clinical trials<sup>7</sup> underpins establishment of equitable HPV vaccination programs. Reliance on herd immunity from a female HPV vaccination program to protect males against HPV-associated disease is arguably unethical, particularly in the context of demonstrated cost-effectiveness in high-income countries. We fully support our colleagues in their efforts to advocate for equitable HPV vaccination throughout Canada.

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