

# ACCURACY OF SELF-REPORTED HUMAN PAPILLOMAVIRUS VACCINE IMMUNISATION STATUS AMONG GAY AND BISEXUAL ADOLESCENT MALES

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**Background:** Men who have sex with men are a risk group for anal human papillomavirus (HPV) and anal cancer. Australia introduced the universal school-based HPV vaccination program in 2013. Self-reported HPV vaccination status has been widely used in both clinical and research setting but its accuracy is understudied. This study aimed to determine the accuracy of self-reported HPV vaccination status from the school-based program against the national registry data among gay and bisexual adolescent males.

**Methods:** 200 gay and bisexual males aged 16-20 years were recruited in 2017-2018 as part of the HYPER2 study. All males were asked to self-report their HPV vaccination status. Separated written informed consent was obtained to verify their HPV vaccination status using records at the National HPV Vaccination Program Register and the Australian Immunisation Register. We calculated the sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of self-reported HPV vaccination status.

**Results:** The mean age of the 200 males was 18.8 (SD=1.0) years. There were 142 males (71%) who had HPV vaccination records documented on either registry. Self-reported HPV vaccination had a sensitivity of 49.3% (95%CI: 40.8-57.8%; 70/142), a specificity of 87.9% (95%CI: 76.7-95.0%; 51/58), a PPV of 90.9% (95%CI: 83.0-95.3%; 70/77) and a NPV of 41.5% (95%CI: 37.0-46.1%; 51/123).

**Conclusion:** The accuracy of self-reported HPV vaccination among gay and bisexual adolescent males was low. Underreporting HPV vaccination suggests that self-reported vaccination status may be inaccurate for clinical practice and research.

## Disclosure of Interest Statement:

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