Vaccinating against human papillomavirus is not associated with risky sexual behaviours among men who have sex with men in Australia

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BACKGROUND

- There have been concerns whether vaccinating teenage girls against human papillomavirus (HPV) would lead to risky behaviours.
- A recent meta-analysis has concluded that vaccinating against HPV does not lead to risky behaviours among females¹.
- However, there has been no studies examining this association among men who have sex with men (MSM).

AIM

- To examine the association between sexual behaviours and HPV vaccination status among men who have sex with men.

METHODS

- A cross-sectional study was conducted at the Melbourne Sexual Health Centre (MSHC), Victoria, Australia, in 2016.
- Men who reported having any sexual contact with another man (MSM) and aged 16-40 years attending MSHC for their first consultation were asked whether they have been vaccinating against HPV.
- Sexual behaviours data such as number of male partners and condom use in the last 3 and 12 months were collected as part of the routine clinical care.
- Chi-squared and t-test were used to examine the differences in sexual behaviours between vaccinated and unvaccinated MSM.

RESULTS

- A total of 1,332 MSM aged 16-40 years completed the questionnaire and were included in the analysis.
- The median age of the participant was 27 (IQR 23-31).
- Six percent (n=81) of MSM had been vaccinated against HPV.
- The median number of male partners in the last 3 and 12 months was 2 (IQR 1-5) and 5 (2-10), respectively.
- The proportion of men used condoms always in the last 3 and 12 months was 39.2% (n=797) and 36.5% (n=774), respectively.
- There were no significant differences in number of partners and always condom use in both last 3 and 12 months between vaccinated and unvaccinated MSM (p>0.05) (Table 1)

Table 1. Demographic characteristics and sexual behaviours among men who have sex with men, stratified by HPV vaccination status

Characteristics	Vaccinated (N=81)	Unvaccinated (N=1251)	P value
Age, mean±SD	26.8±0.7	27.7±0.1	0.151 [^]
Country of birth, n(%)			0.562 ^φ
Australia	36 (44.4%)	515 (41.2%)	
Overseas	45 (55.6%)	736 (58.8%)	
Number of male partners in the last 3 months, mean±SD	4.0±0.6	4.0±0.2	0.967 [^]
Condom use with male partners in the last 3 months, n(%)			0.566 ^φ
Always	28 (36.8%)	462 (40.2%)	
Not always	48 (63.2%)	688 (59.8%)	
Number of male partners in the last 12 months, mean±SD	9.8±2.3	8.8±0.4	0.553 [^]
Condom use with male partners in the last 12 months, n(%)			0.200 ^φ
Always	24 (31.2%)	461 (38.5%)	
Not always	53 (68.8%)	737 (61.5%)	

[^] t-test; ^φ Chi-squared test

CONCLUSIONS

- Vaccinating against HPV is not associated with increased sexual activity and condomless anal sex practice among MSM, particularly among sexually-active men attending a sexual health service

REFERENCE

1. Kasting ML et al. Tempest in a teapot: A systematic review of HPV vaccination and risk compensation research. Human Vaccines & Immunotherapeutics. 2016; 12: 1435-1450.