



GGD

Amsterdam

HPV Vaccination for sex workers: finding a balance between pros and cons

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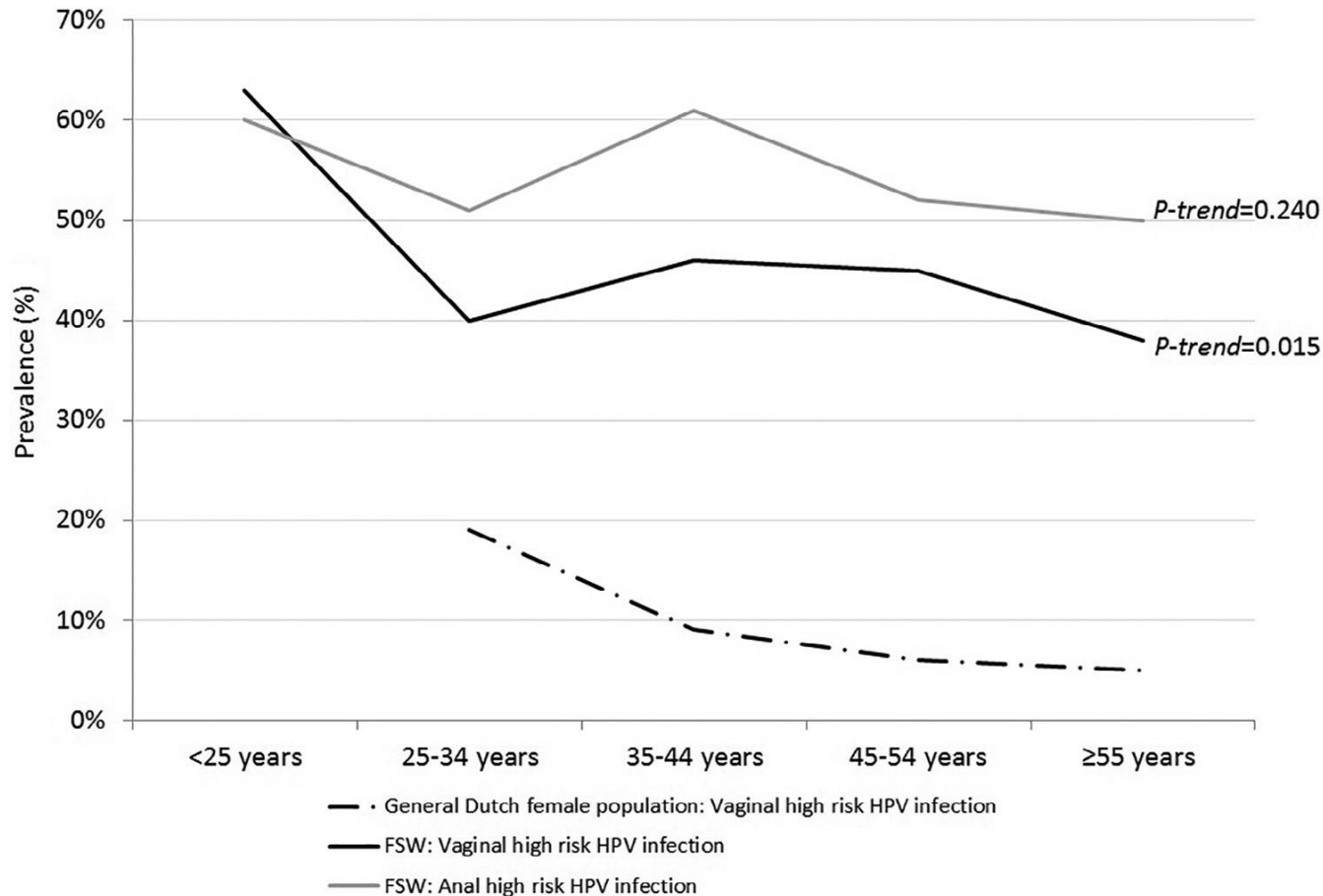


Conflicts of Interest

- My institution received research funding from Sanofi Pasteur MSD, Merck, Janssen Infectious Diseases and Vaccines
- My institution received in-kind contribution for an HPV study from Stichting Pathologie Onderzoek en Ontwikkeling (SPOO)
- I was a co-investigator in a Merck-funded investigator-initiated study
- I was an investigator on a Sanofi Pasteur MSD sponsored trial
- I served on a vaccine advisory board of GSK
- I was a member of the HPV Committee of the Dutch Health Council

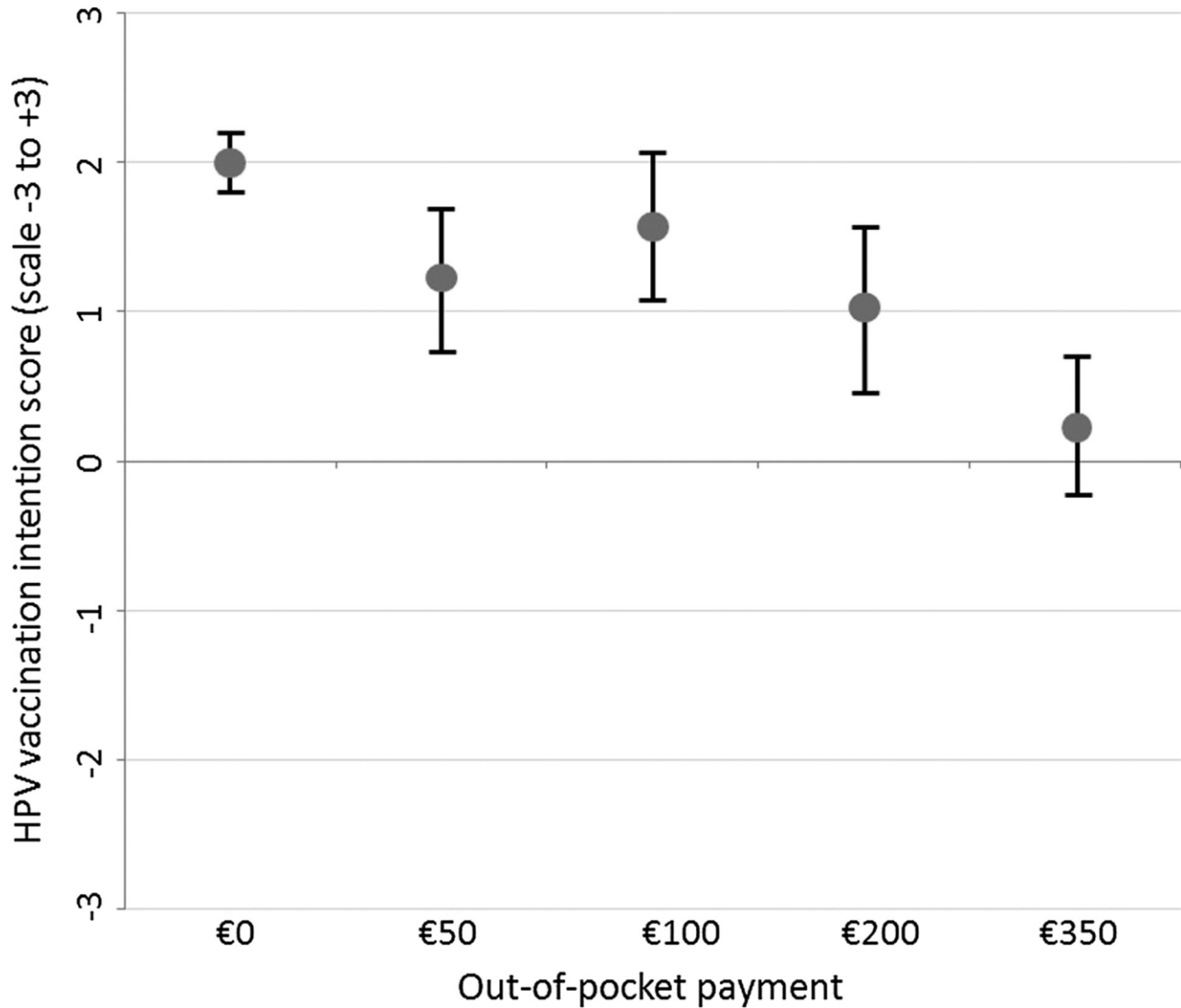


HPV Prevalence among FSW in A'dam





HPV Vaccination intention of FSW





HUMAN VACCINES & IMMUNOTHERAPEUTICS

<https://doi.org/10.1080/21645515.2019.1602432>

REVIEW

Should female sex workers be offered HPV vaccination?

Maarten F. Schim van der Loeff^{a,b,c}, Alex Vorsters^d, Elske Marra^a, Pierre Van Damme^d, and Arjan Hogewoningⁱ



Reasons to Offer HPV Vaccination to SW

1. SWs are at high risk for HPV
2. SWs unlikely to have been offered vaccination in the past
3. Immunogenicity of vaccines is excellent in all women (even if previously exposed)
4. Women with HPV disease may still benefit from vacc.



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2. SWs unlikely to have been offered vaccination in the past
3. Immunogenicity of vaccines is excellent in all women (even if previously exposed)
4. Women with HPV disease may still benefit from vacc.
5. RCTs showed efficacy of vaccinating mid-adult women
6. SWs may not have been exposed to all HPV types
7. Vaccinating SW may reduce HPV transmission



Reasons Not to Offer HPV Vaccination to SW

1. Current vaccines are prophylactic, not therapeutic
2. Women who have cleared an HPV infection do not need a vaccine
3. How to establish a woman's HPV status? [more women may have been / are infected than DNA/Ab shows]
4. Cleared HPV or HPV gone into latency?



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3. How to establish a woman's HPV status? [more women may have been / are infected than DNA/Ab shows]
4. Cleared HPV or HPV gone into latency?
5. Vaccinating after sexual debut may be too late to offer protection against CIN₂+ or AIN₂+



Lancet Child Adolesc Health 2018

Effectiveness of catch-up human papillomavirus vaccination on incident cervical neoplasia in a US health-care setting: a population-based case-control study

Michael J Silverberg, Wendy A Leyden, Jennifer O Lam, Steven E Gregorich, Megan J Huchko, Shalini Kulasingam, Miriam Kuppermann, Karen K Smith-McCune, George F Sawaya



Two sobering studies regarding individual benefit of HPV vaccination in pre-exposed people

Clinical Infectious Diseases

MAJOR ARTICLE



A Randomized, Placebo-Controlled Trial of the Quadrivalent Human Papillomavirus Vaccine in Human Immunodeficiency Virus-Infected Adults Aged 27 Years or Older: AIDS Clinical Trials Group Protocol A5298

Timothy J. Wilkin,¹ Huichao Chen,² Michelle S. Cespedes,³ Jorge T. Leon-Cruz,² Catherine Godfrey,⁴ Elizabeth Y. Chiao,⁵ Barbara Bastow,⁶ Jennifer Webster-Cyriaque,⁷ Qinghua Feng,⁸ Joan Dragavon,⁹ Robert W. Coombs,^{9,10} Rachel M. Presti,¹¹ Alfred Saah,¹² and Ross D. Cranston¹³



Two sobering studies regarding individual benefit of HPV vaccination in pre-exposed people

VACCAIN-P study in Amsterdam

- HIV-positive men with successful treatment of anal HSIL were randomised to placebo or qHPV vaccine
- Primary outcome was cumulative recurrent HGAIN at 12 mo post last vaccination
- ITT analysis:
 - qHPV recurrence in **66%**
 - placebo recurrence in **58%**
 - difference -8%; $P=0.38$



Who may consider the question?

- Public Health Service aiming to protect the health of SWs
- Public Health Service aiming to protect the health of community
- A physician offering health care to an individual SW



Other Issues

- Male sex workers?
- Cx Cancer screening!



Conclusions

- HPV vaccination should be offered to all girls prior to sexual debut
- Studies are needed to directly or indirectly establish effectiveness of vaccinating SW
- RCTs provide the best answer, but are not realistic
- Because the vaccines are safe, a harm-benefit balance is not needed, but only a cost-benefit balance



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