

HPV Vaccination programs have not been demonstrated to be cost-effective in countries with comprehensive Pap screening and surgery

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Pap screening combined with loop electrosurgical excision procedures (LEEP) is almost 100% effective in preventing cervical cancer mortality yet many countries with these procedures have now implemented broad HPV vaccination programs. HPV vaccines have not been demonstrated to be more effective or safer than Pap screening in the prevention of cervical cancer and these programs will still be required even in vaccinated women. The HPV vaccine costs Au\$450 per person and it does not protect against ~30% of cancer: 13+HPV genotypes associated with carcinogenesis are not covered in the quadrivalent vaccine, Gardasil®. This investigation analyses the cost-effectiveness of using the HPV vaccine in countries where Pap screening and surgical procedures have already reduced cervical cancer mortality to very low rates. Cost-effectiveness of these programs is being determined by mathematical models which are founded on many assumptions. It is necessary to examine the rigor of these assumptions to be certain of the health benefits that are predicted. In 2002 scientists concluded that HPV 16 and 18 were an independent cause of most cervical cancer. The claim that HPV genotypes 16 and 18 are responsible for 70% of cervical cancer was based upon nascent technology for identifying HPV DNA. Theories of causality for infectious diseases require that the incidence of the causal agent varies with the incidence and mortality of the disease. However the incidence of HPV 16 and 18 worldwide does not correlate to the incidence and mortality from cervical cancer worldwide. This indicates that other etiological or 'risk' factors are necessary for persistent HPV infection to progress to cancer and this has significant implications for the use of an HPV vaccine to reduce the burden of this disease.

Biography

Judy Wilyman has been a teacher and lecturer in environmental health issues for 20 years. She has completed a Master of Science degree in the school of Health and Behavioral Sciences at the University of Wollongong, Australia and has lectured in the Environmental Science Department at Murdoch University, Western Australia. She is currently investigating the political aspects of scientific issues in a Ph.D. in the School of Social Sciences, Media and Communication at the University of Wollongong, Australia.

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