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HUMAN PAPILLOMAVIRUS

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It is tempting to characterize the human papillomavirus story as a triumph of science. Over the course of nearly 40 years, a lethal cancer was found to be caused by a particular virus, and vaccines were developed and rolled-out across the world. If only other cancers proved as tractable.

But, as we chronicle in this Outlook, the tale of this virus is still being written. For one thing, these vaccines have not yet met their most stringent endpoint: prevent cervical cancer (page S4). Moreover, HPV vaccines are expensive and, because they require refrigeration and come in three doses, impractical for much of the developing world — which bears the biggest burden of cervical cancer (S2). More durable vaccines in development might prove more useful (S7).

Research is upending the basis of most cancer screening programmes: the Pap test. New methods to detect the virus directly could warn of impending disease earlier (S8).

Most young women become infected with the virus, yet many clear the virus naturally and never go on to develop cervical cancer. Researchers are investigating why this is so (S14). And HPV may not be alone among cancer-causing viruses. Harald zur Hausen — the scientist who received a Nobel prize for his work linking HPV to cancer — points to a couple of other culprits (S16).

Because of its close association with cervical cancer, HPV is generally considered to be a women's health issue. That's a mistake, argues Margaret Stanley: men and women both suffer from HPV-related illnesses so both sexes should be vaccinated (S10). The prevention of HPV infection, and ultimately cervical cancer, is very much a work in progress and it will be some time before we can consign HPV-related cancers to the history books.

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Herb Brody

Supplements Editor

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