Does Canada need a HPV vaccine?

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Health Canada's approval last July of a vaccine that protects women from a common form of cervical cancer may have been premature, say experts.

Canada's record for treatment of cervical cancer is adequate, they say, and fast-tracking Gardasil, a vaccine for Human Papilloma Virus (HPV), isn't the way to go. $300 million has been allotted to the vaccine program from the recent federal budget.

But health professionals are questioning the necessity of a HPV vaccine in countries like Canada, which have successful comprehensive cervical screening programs.

Abby Lippman, epidemiologist at McGill University, says Canada does not have a crisis in cervical cancer, but "the announcement by the federal budget created a situation similar to a crisis." She also blames an aggressive marketing campaign by drug giant Merck Frosst for creating an "epidemic of fear" in Canada.

"It's much too soon to be going out with a universal policy that encourages the vaccinations of girls and women for $300 million that's not going to get us very far anyway. Use the $300 million to improve the Pap smear process," says Lippman.

The idea is that the vaccine would be given to girls and women between nine and 26, either before they become sexually active or after a Pap smear showing no HPV infection. Gardasil is a prophylactic vaccine that targets the viruses that lead to cancer rather than the cancer itself.

Lippman credits an efficient Pap smear and cervical screening program for Canada’s "fantastic" record on cervical cancer relative to other countries. Globally, an estimated 250,000 women will die of cervical cancer, with most of those deaths occurring in developing countries where access to screening and Pap smear programs are unavailable or inefficient. Since the vaccine was approved, health ministries in all the provinces are trying to work out the details of their provincial vaccination program. They must also decide who will pay for the vaccines, which are estimated at $300-$500 per person for three shots over a six month period. Merck Frosst's painkiller Vioxx was recalled in 2004 because of serious side effects.
The Canadian Cancer Society ranks cervical cancer as the eleventh-most diagnosed disease in women. Public Health Agency of Canada spokesperson, Alain Desroches, says the projected figures for this year are that 1,350 women will be diagnosed with cervical cancer and about 390 will die of the disease. Still, Canadian Cancer Society figures point to a significant decline in cervical cancer from 15.4 per 100,000 in 1977, to an estimated 7.5 per 100,000 in 2006.

"If every woman got a Pap smear we could virtually eliminate cervical cancer," says Hans Krueger, whose company undertook a HPV immunization study in 2006 commissioned by the B.C. Cancer Agency. The study stated that for over a hundred years it has been suspected that viral infections cause cancer, "beginning with the observed association between cervical cancer and having multiple sexual partners."

Merck Frosst says Gardasil is 100 per cent effective in preventing two HPV strains which together cause 70 per cent of cervical cancer cases, and about 99 per cent effective in preventing the HPV strains that result in genital warts in women. The company recommends Pap smears as part of its preventative regimen.

But a vaccine prevention program for girls as young as nine has triggered a hot debate south of the border, where mandatory school vaccinations against HPV have been proposed in Virginia and Texas. In Canada, the National Advisory Committee on Immunization (NACI) has suggested that the vaccine be given through a school-based vaccination program.

Margaret Somerville, Faculty of Medicine professor at McGill University, says a HPV vaccine is not ethically wrong, because "when you reduce a pool of infection you reduce infection on the whole." However, she is against a mandatory policy.

Somerville says a public policy on the HPV vaccine "touches on very deep sexual, social, ethical values," and complains that Gardasil is not gender neutral: "Why aren't we vaccinating the young men-aren't they the ones spreading the virus?"

Critics say a significant concern are the unknowns in the Gardasil clinical studies-its long-term effects, insufficient trials on girls as young as nine, and the issue of if and when booster shots may be needed. They're also worried that women will be lulled into a false sense of security and neglect the all-important Pap smear.

"The women who died of cervical cancer were not well served by the primary health care system. Most of them had not had a Pap smear in the previous five years-a well established and safe way to pick up any changes suggesting cancer," says Lippman.

Lippman argues that there are well over a hundred HPV viruses but only around thirty strains are spread through sexual contact. The immune system, she says, clears most of the HPV viruses without any intervention. A Pap smear helps identify pre-cancerous cells for safe removal, early enough to prevent death.

"Let's wait for an evidence-based decision before racing off because a pharmaceutical company's trying to sell a product," says Lippman.
Executive Director of the Ottawa-based Institute of Marriage and Family David Quist, and Diane Watts of REAL Women, say the most complex issue in public policy is the assumption that girls as young as nine will engage in, or are preparing to engage in sexual activity.

They mention that the vaccination is also sending mixed messages to young women about abdication of social, moral and parental responsibility, and leads them to believe there are quick fixes for complex problems. Quist says that while any vaccine that eliminates disease is supportable, many parents "have moved away from parental duties in sex education of their children."

"Behavior is crucial in the transmission of this virus which causes cervical cancer and that's not addressed at all," says Watts. "We're just throwing pharmaceutical products at young women-Merck's going to profit enormously from this; the lobbying is quite aggressive."