

Review article

# Improving adolescent health: Focus on HPV vaccine acceptance

Gregory D. Zimet, Ph.D.\*

*Department of Pediatrics, Section of Adolescent Medicine, Indiana University School of Medicine, Indianapolis, Indiana*

Manuscript received July 20, 2005; manuscript accepted September 20, 2005

## Abstract

The success of future human papillomavirus (HPV) vaccination programs will depend on individuals' willingness to accept vaccination, parents' willingness to have their preadolescent and early adolescent children vaccinated, and health care providers' willingness to recommend HPV vaccination. The purpose of this article is to provide a qualitative review of the relevant literature, including research on knowledge and attitudes about HPV infection and its clinical sequelae, the acceptability of HPV vaccination to individuals and parents, and health care providers' attitudes about recommending HPV vaccination. Additionally, strategies are suggested by which providers of adolescent health care can discuss and recommend HPV vaccines with parents and their children. The research published to date suggests that there is a good deal of misunderstanding about HPV infection, cervical cancer screening, and the sequelae of HPV infection. However, the majority of research studies to date indicate that young women, parents, and health care providers are interested in vaccines that prevent HPV and other sexually transmitted infections (STIs). Of particular note are the consistent findings that providers are less comfortable vaccinating younger versus older adolescents and that endorsement of vaccination by a professional organization is of great importance. Furthermore, research suggests that most parents are interested in having their preadolescent and adolescent children vaccinated against HPV. Parents value the information and recommendations provided by their children's health care providers. To the extent that providers are concerned about potential negative reactions of parents to a recommendation of HPV vaccination, these findings should provide reassurance. At the same time, health care providers will need to be prepared to provide patients and parents with information about HPV and HPV immunization and to respond productively to the rare parent who expresses opposition to HPV vaccine or any other vaccine. © 2005 Society for Adolescent Medicine. All rights reserved.

## Keywords:

Vaccination; HPV; Sexually transmitted infection; Parents; Adolescent; Health personnel

Vaccines that protect against infection with the most common disease-causing human papillomavirus (HPV) types are predicted to prevent thousands of cases of cervical cancer worldwide, as well as substantially reduce emotional stress associated with abnormal Papanicolaou (Pap) test results and diagnosis with a sexually transmitted infection (STI) [1]. In addition, economic modeling studies suggest that HPV vaccination can result in significant savings in health care dollars [2–4]. The extent of economic benefit,

however, may depend on age at vaccination, duration of immunity, whether males as well as females are immunized, and the potential reduction in recommended frequency of Pap smears after vaccination [2–4]. Data from 2002 indicate that 5.7% of females and 7.9% of males report having had sexual intercourse by age 14 [5], with many adolescents engaging in other forms of sexual activity before initiating sexual intercourse. Ideally, therefore, vaccination would be directed toward preadolescents and early adolescents in order to provide the greatest public health benefit offered by prophylactic HPV vaccines [6]. In addition, there have been questions as to whether health care providers, parents, and adolescents will be comfortable with administering or recommending a vaccine designed to prevent infection with an

\*Address correspondence to: Dr. Gregory D. Zimet, Department of Pediatrics, Section of Adolescent Medicine, Indiana University School of Medicine, 575 N. West Drive, Room 070, Indianapolis, IN 46202.

E-mail address: gzimet@iupui.edu

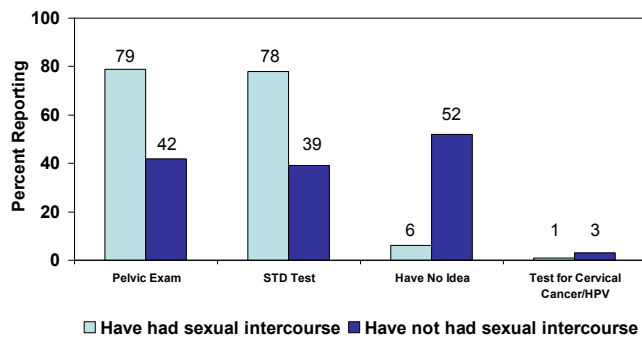


Fig. 1. Young women's understanding of the term Pap smear. Subjects were asked to check all of the choices that mean the same thing as Pap smear. Adapted from [15].

STI that is poorly understood by many women [6,7]. This article will review the research relevant to adolescents', parents', and health care providers' understanding and attitudes about HPV and HPV vaccination, and recommend strategies designed to foster vaccine acceptance among adolescents and their parents.

### Knowledge and attitudes about HPV

It is well established that adult as well as adolescent women have limited understanding of HPV [8–13]. In two United Kingdom studies, only 30% of women participants had ever heard of HPV [10,12] and in a Canadian study only 13% of adolescents had heard of HPV [9]. Similarly, among a sample of university students in the United States, 37% had ever heard of HPV [13]. Although research with patients attending health clinics in the United States found more encouraging results (67% indicated that they had heard of HPV), it is still concerning that one-third of the participants had not heard of the infection [11]. Prior experience with an abnormal Pap smear result is associated with greater knowledge about HPV [10,12], suggesting that HPV-related educational efforts may often occur after women have experienced an adverse consequence of HPV infection. Conversely, a separate study found poor knowledge about Pap smears and no association between prior experience with abnormal Pap smear results and knowledge [14]. Even among persons who have heard about HPV, misconceptions about the virus are widespread. For instance, few women know about the links between genital HPV infection, abnormal Pap smear results, and cervical cancer [8–12]. Furthermore, a recent study reported that 68% of the adolescent and young adult women incorrectly thought that Pap smears and pelvic examinations were the same procedures [15] (Figure 1), a result consistent with findings from an earlier study [16]. Adolescent and adult women also generally do not know who should get a Pap smear and have a poor understanding of the meaning of Pap smear results [8,9,14]. Overall, these sets of findings sug-

gest that more effort needs to be made to educate young women and the parents of adolescents about HPV and HPV vaccination before infection takes place.

Although women have been poorly educated about HPV, research indicates that there is a great desire for information about HPV infection [11,17]. Holcomb et al found that women are interested in learning about HPV, how the virus is transmitted, and how they can prevent becoming infected [11]. Furthermore, 86% of the participants in this study thought that information about HPV should be given to individuals before they initiate sexual activity. Two additional findings are particularly relevant for physicians and emphasize the value of physician-provided education. Women whose primary source of information about HPV was a doctor had better knowledge about HPV compared with those who identified alternative sources. Also, after pamphlets and brochures, respondents identified health care providers as the best source of information about HPV. Providers were identified as important sources of education more frequently than were health education classes, the Internet, friends, or family. Anhang et al reported similar results, noting that the women in their study wanted more information about HPV transmission, prevention, treatment, and the risks associated with HPV infection [17]. Moreover, consistent with research described above, there was a great deal of confusion about some aspects of HPV infection, including the distinction between high-risk and low-risk types. Overall, women were interested in gaining an understanding of their personal risk for HPV infection and its clinical sequelae, and were eager to learn more about HPV.

### HPV vaccination: personal acceptability

Clearly, adolescent and adult women are concerned about HPV and want to be better informed about infection, transmission, screening, and prevention. However, this desire for education about HPV does not imply that an HPV vaccine will be widely accepted by women. Given that HPV is an STI, potential barriers to vaccine acceptance may include the stigma associated with STIs and the possibility that acceptance of the vaccine may be seen as an admission of risky sexual behavior [7]. Although HPV vaccines may be presented to adolescents and their parents as a vaccine that prevents cervical cancer, thereby avoiding or minimizing the STI issue, any vaccine that protects against the HPV types responsible for both genital warts and cervical cancer would undoubtedly be categorized as an STI vaccine. In addition, consumers of health care have a right to receive complete, accurate information about HPV infection and vaccination.

Interestingly, concerns about the STI issue have so far proven to be largely unfounded. The empirical research to date has found high levels of interest in HPV vaccination among adolescents and young women [18–21]. Adult and adolescent women recruited from health care clinics were

Download English Version:

<https://daneshyari.com/en/article/10511938>

Download Persian Version:

<https://daneshyari.com/article/10511938>

[Daneshyari.com](https://daneshyari.com)