



Journal Reviews



Journal Review Highlights

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In each issue of Trends the clinical editor reviews recent and compelling journal articles and offers insight from the clinician's point of view.

Counseling Adolescents on HPV and Cervical Cancer Prevention

Sussman AL, Helitzer D, Sanders M, et al. HPV and cervical cancer prevention counseling with younger adolescents: implications for primary care. *Ann Fam Med*.

July to August 2007;5(4):298-304.

In a multidisciplinary study to identify issues and problems encountered in offering adolescent populations cervical cancer prevention, Sussman et al. developed a series of guidelines on counseling. Content was culled from an advisory group of experts and in-depth interviews with 37 primary care clinicians in New Mexico. The makeup of the clinicians included 32 females and 5 males—13 from family practice, 12 from ob-gyn, 5 from pediatrics, and 7 others. Many were nurse practitioners.

Four potential challenges were identified by the study. One is the context in which clinicians report doing counseling on HPV infection and cancer prevention. The surveys revealed that many primary care clinicians did not specifically discuss HPV issues and prevention of cervical cancer. However, it should be noted that the study was done before the release of the first HPV vaccine. This will likely change. The second issue is the recommended age of giving HPV vaccine. To be most effective, clinicians will have to become comfortable addressing sexual transmission of HPV virus with youngsters and their parents—not an easy task, for sure. A third area identified was that of differences in acceptance based on diverse cultural and religious beliefs among Native American and Hispanic populations. These groups have not been well represented in research studying knowledge, attitudes, and beliefs about HPV vaccine. Keeping these issues in mind while counseling on a sexually transmitted virus presents a significant challenge. Finally, the challenges of compliance with a three-dose vaccine and reimbursement are a major concern. The study points out the need for improvements in counseling strategies that include emphasis on prevention and the inclusion of parents in the discussions and recommendations to vaccinate. It is obvious that ob-gyn, pediatric, and family medicine practices will have to carry the load for this to be successful.

It is worth noting that the American Academy of Family Physicians has issued a policy statement not supporting mandated vaccination with HPV vaccine for school entry. Their position is based on the fact that HPV vaccination is a “one protects one” situation. They are concerned that limited resources need to be allocated for vaccines that protect mass populations from highly contagious diseases in the school setting, as well as the cost-benefit and time-of-benefit factors of the equation. We will wrestle with these issues for some time to come.

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Dr. Thomas F. Purdon is a recent past-president of the American College of Obstetricians and Gynecologists (ACOG), as well as past-president of the advocacy group Ob-Gyns for Women's Health. He was previously on the governing board for the Jacobs Institute for Women's Health. His research contributions have been in the areas of hormone therapy, estrogen therapy in surgically induced menopausal women, and dysfunctional uterine bleeding for the Surgical Treatment Outcomes Project. Special interest areas include management of abnormal uterine bleeding, hysteroscopy, and endometrial ablation. Dr. Purdon was an ACOG representative to the 2001

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Prevalence of HPV in Young Women

Jit M, Vyse A, Borrow R, et al. Prevalence of human papillomavirus antibodies in young female subjects in England. *Br J Cancer*. October 8, 2007;97(7):989-991.

Seropositivity and conversion for the human papillomavirus in young females is the focus of this study, which comes from several government health agencies and infirmaries in the United Kingdom. Sera from 1,483 young females, ages 10 to 29, taken for microbiologic and biochemistry tests were studied for neutralizing antibodies to HPV types 6, 11, 16, and 18. Between 60 and 90 tests were done on the young women for each year of age.

The data, like many on HPV prevalence, continue to offer surprises and concerns. Seroprevalence of antibodies in females aged 10 to 29 years was 10.7% for HPV 6, 2.7% for HPV 11, 11.9% for HPV 16, 4.7% for HPV 18, and 20.7% for any of the four types tested. In addition, 7.7% were seropositive for at least two assayed types. As expected, increasing age was significantly associated with seropositivity for all HPV types tested.

Testing positive for one HPV type was significantly associated with being positive for another, except for the case of HPV 18. HPV 18 seropositivity was significantly associated only with HPV 16 seropositivity and not HPV 6 or 11. The rise in seroconversion begins to start up by age 14, climbs higher after age 16, and reinforces the importance of starting a vaccination program at earlier ages.

The authors comment that seropositivity is likely to underestimate the proportion of women who have had an HPV infection. Other studies suggest seroconversion ranging from 65 to 90% for HPV DNA-positive subjects. The explanation for the differences involves a number of factors, including the tests used, how long HPV DNA persists, and whether or not there is progression to disease.^{1,2} Seroconversion may coincide with DNA detection, or it may follow some months later.

The results from the United Kingdom are similar to some of the studies in the United States. These results confirm the recommendation to start an HPV vaccine program early, in the 9- to 11-year-old age group. The prevalence of both types 16 and 18 in some patients as well as the prevalence of seropositivity in this general population continues to enforce the need for cytologic screening for all patients for some time to come. This need is also supported by the fact that there was some decline in seroprevalance around age 25, suggesting that seroprevalance may not be a straightforward marker of all past HPV infections. The authors also note that antibody levels are likely to decline over time.² The need for more antibody and DNA testing in older patients and continued surveillance for all women are certainly underscored.

ASCCP Consensus Guidelines Conference held in Bethesda, Maryland.

Given his life-long commitment to improving health outcomes for women, Dr. Purdon speaks frequently to the national medical community on the management of abnormal uterine bleeding, risk assessment strategies for breast cancer, and the continuing controversy over hormone therapy. He also serves as a consultant for United Community Health Centers, a community-based group of primary care clinics in southern Arizona that serves women of all socioeconomic levels.

Dr. Purdon was recently chosen as one of the "Best Doctors in Tucson," 2005–2006, by Best Doctors, Inc. and as published in Tucson Lifestyle magazine, and Best Doctors in America 2007–2008. He is frequently asked to speak and conduct surgical teaching sessions on endometrial ablation in the United States as well as in Mexico and Central and South America.

References

- 1 Dillner J. The serological response to papillomaviruses. *Semin Cancer Biol*. December 1999;9(6) 423-430.
- 2 Carter JJ, Koutsky LA, Hughes JP, et al. Comparison of human papillomavirus types 16, 18, and 6 capsid antibody responses following incident infection. *J Infect Dis*. June 2000;181(6):1911-1999.

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