

Editorial

HPV Vaccination in Males: Are we where we want to be?

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Submitted: 11 November 2013

Accepted: 13 November 2013

Published: 15 November 2013

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Human Papilloma Virus (HPV) affects approximately 20 million people in the US [1]. Roughly 7,000 males and 18,000 females acquire cancer yearly due to HPV [1]. HPV quadrivalent vaccine contains four serotypes, 6,11,16,18. 90% of genital warts are caused by serotypes 6 and 11 while oropharyngeal and anogenital warts are caused by serotypes 16 and 18 [2]. In 2009 the Advisory Committee on Immunization Practices (ACIP) recommended permissively to vaccinate males with HPV vaccine. Two years later, the ACIP affirmed its recommendations for routine vaccination of all males ages 11years – 12 years with catch up for males through the age of 26 years [3].

HPV vaccination rates for males in 2010-2011 was approximately 0.5%-0.7% for a complete three dose series and 2%-4.9% for at least one dose of the vaccine [3,4]. As of 2012, less than 50% of eligible females were vaccinated [5]. Rate of vaccination in males was lower than in females during the first year of vaccine recommendation [4].

HPV vaccination is lower than the vaccination rates of the other vaccines administered at the same age. I think it is prudent to look into the reasons on why our adolescents, especially male adolescents are not being immunized. Several studies have been done in attempt to answer this question.

Adolescents may have received vaccines in several different provider offices and having one complete record is sometimes challenging. Getting records from the other providers and from school may delay vaccination [6]. (5) HPV vaccine is not mandated by schools and therefore the parents and adolescent may tend to postpone vaccination which can be a missed opportunity [7].

Lack of appropriate and sufficient knowledge about the vaccine can cause parents to postpone vaccine administration. One study showed as much as 39% of parents were concerned about infertility with use of HPV vaccine [8]. These parents tended not to vaccinate their boys. Other reasons voiced by parents included the young age of their sons, safety of the vaccine, and their child's wish not to be vaccinated [9].

Other barriers to vaccination are adolescents are less likely to come into office for well visits or to seek medical care. Adolescents and adults ages 18years- 24 years for age are less likely to have health insurance with approximately 34% having partial or no insurance [6].

A national survey of physicians, which included Pediatricians

and Family Medicine Physicians, identified three areas as the greatest barrier to HPV vaccination. The most common barriers were, cost of the vaccine, parents' belief that their sons do not need this vaccine, and the sporadic office visits commonly seen with adolescents [10]. It was also found that physicians were most likely to offer the HPV vaccine to their patients who were practicing in an urban setting and were more likely to counsel about sex as early as 11 years-12 years of age [10] Physicians were well aware of the high risk of HPV infection among their minority patients and were more likely to incorporate HPV vaccine as part of routine practice [11].

Another survey of private physicians (OB/GYN, Pediatricians, & Family Practitioners) prior to October 2011 found, among other barriers, that is not clear who should vaccinate [12]. Pediatricians were referring to GYN, GYN referring to Pediatricians while other referred to the health department [12]. Time constraints during the office visit were also voiced as a barrier to discussion of HPV vaccine [12]. Also a high cost and lack of appropriate reimbursement was also a concern [12]. If it was perceived by the physician that the patient's insurance would not cover the vaccine and the patient would not be able to pay, vaccination was less likely to be discussed [12].

Certain steps can be taken to decrease the barriers to HPV vaccination. Offering vaccines in schools and pharmacies may increase the vaccinations rates. This is especially true if the patient has not seen their primary care doctor recently [13]. School mandated vaccination has helped achieve a very high vaccination rate in children [6]. Requiring ACIP vaccine recommendations for school admittance may help improve rates of vaccination in adolescent as well as children [6]. The IIS (Immunization Information System) can be very helpful if all providers and facilities giving vaccines participate. Making this program national would provide the upmost help in reducing missed opportunities to vaccinate [6].

Physicians should also take every opportunity to vaccinate with HPV as well as other vaccines whether the adolescent presented for well visit or another reason [14]. Physicians should also take the time to explain the vaccine and its importance. Common side effects can also be discussed. The most common side effects include local injection site reactions such as pain and swelling [15]. Other side effects but less common include systemic reaction, syncope, and anaphylaxis [15]. A study done

using information from VAERS (vaccine adverse event reporting system) from 2010-2012 found no increase in incidence of Guillain Barre Syndrome with HPV vaccine [5]. Physicians who recommended vaccination at each adolescent visit had increased rate for vaccination [16].

As Primary Care Doctors, it is our obligation to assure our patients are protected from vaccine preventable illnesses. We must spend the time to educate our families and guide them to appropriate decisions regarding their health. We must also advocate for our patients so that they may receive the appropriate healthcare coverage.

REFERENCES

1. Macartney KK, Chiu C, Georgousakis M, Brotherton JM. Safety of human papillomavirus vaccines: a review. *Drug Saf.* 2013; 36: 393-412.
2. David W Kaplan. Barriers and Potential Solutions to Increasing Immunization Rates iAdolescents. *Journal of Adolescent Health.* 2010; 46: S24-S33.
3. Bellia-Weiss T, Parsons M, Sebach AM, Rockelli LA. Promoting HPV prevention in the school setting. *NASN Sch Nurse.* 2013; 28: 86-93.
4. Stupiansky NW, Alexander AB, Zimet GD. Human papillomavirus vaccine and men: what are the obstacles and challenges? *Curr Opin Infect Dis.* 2012; 25: 86-91.
5. Griebeler M, Feferman H, Gupta V, Patel D. Parental beliefs and knowledge about male human papillomavirus vaccination in the US: a survey of a pediatric clinic population. *Int J Adolesc Med Health.* 2012; 24: 315-320.
6. Ojha RP, Jackson BE, Tota JE, Offutt-Powell TN, Singh KP, Bae S. Guillain-Barre syndrome following quadrivalent human papillomavirus vaccination among vaccine-eligible individuals in the United States. *Hum Vaccin Immunother.* 2013; 10.
7. Osazuwa-Peters N. Human papillomavirus (HPV), HPV-associated oropharyngeal cancer, and HPV vaccine in the United States-Do we need a broader vaccine policy? *Vaccine.* 2013; 31: 5500-5505.
8. Schuler CL, Hanley CJ, Coyne-Beasley T. Misconception: Human Papillomavirus Vaccine and Infertility. *Clin Pediatr (Phila).* 2013.
9. Laz TH, Rahman M, Berenson AB. Human papillomavirus vaccine uptake among 9-17 year old males in the United States: the National Health Interview Survey, 2010. *Hum Vaccin Immunother.* 2013; 9: 874-878.
10. Allison MA, Dunne EF, Markowitz LE, O'Leary ST, Crane LA, Hurley LP, et al. HPV vaccination of boys in primary care practices. *Acad Pediatr.* 2013; 13: 466-474.
11. McRee AL, Reiter PL, Pepper JK, Brewer NT. Correlates of comfort with alternative settings for HPV vaccine delivery. *Hum Vaccin Immunother.* 2013; 9.
12. Reiter PL, McRee AL, Pepper JK, Gilkey MB, Galbraith KV, Brewer NT. Longitudinal predictors of human papillomavirus vaccination among a national sample of adolescent males. *Am J Public Health.* 2013; 103: 1419-1427.
13. Reiter PL, Gilkey MB, Brewer NT. HPV vaccination among adolescent males: results from the National Immunization Survey-Teen. *Vaccine.* 2013; 31: 2816-2821.
14. Aragonés A, Bruno D, Gany F. Attitudes surrounding implementation of the HPV vaccine for males among primary care providers serving large minority populations. *J Health Care Poor Underserved.* 2013; 24: 768-776.
15. Centers for Disease Control and Prevention (CDC). National and state vaccination coverage among adolescents aged 13-17 years--United States, 2012. *MMWR Morb Mortal Wkly Rep.* 62: 685-93.

Cite this article

Tanuos H, Wassef A (2013) HPV Vaccination in Males: Are we where we want to be? *Ann Pediatr Child Health* 1(1): 1001.