



## Human papillomavirus vaccine communication: Perspectives of 11–12 year-old girls, mothers, and clinicians



Tanya L. Kowalczyk Mullins<sup>a,b,\*</sup>, Anne M. Griffioen<sup>c</sup>, Susan Glynn<sup>a</sup>, Gregory D. Zimet<sup>d</sup>, Susan L. Rosenthal<sup>e</sup>, J. Dennis Fortenberry<sup>d</sup>, Jessica A. Kahn<sup>a,b</sup>

<sup>a</sup> Division of Adolescent Medicine, Cincinnati Children's Hospital Medical Center, 3333 Burnet Avenue, MLC 4000, Cincinnati, OH 45229, USA

<sup>b</sup> University of Cincinnati College of Medicine, 3235 Eden Avenue, CARE/Crawley Building Suite E-870, Cincinnati, OH 45267, USA

<sup>c</sup> Johns Hopkins University, Bloomberg School of Public Health, 615N. Wolfe Street, Baltimore, MD 21205, USA

<sup>d</sup> Division of Adolescent Medicine, Indiana University, 410 West 10th Street, HS 1001, Indianapolis, IN 46202, USA

<sup>e</sup> Departments of Pediatrics and Psychiatry, Columbia University and New York Presbyterian Morgan Stanley Children's Hospital, 622 West 168 Street, Vanderbilt Clinic 4th Floor – Room 402, New York, NY 10032, USA

### ARTICLE INFO

#### Article history:

Received 20 March 2013

Received in revised form 8 July 2013

Accepted 16 July 2013

Available online 3 August 2013

#### Keywords:

Adolescents

Human papillomavirus (HPV)

HPV vaccination

Communication

### ABSTRACT

**Objectives:** Because little is known about the content of human papillomavirus (HPV) vaccine-related discussions with young adolescent girls in clinical settings, we explored communication between 11- and 12 year-old girls, mothers, and clinicians regarding HPV vaccines and concordance in reports of maternal and clinician communication.

**Methods:** We conducted individual interviews with 33 girls who had received the quadrivalent HPV vaccine in urban and suburban clinical settings, their mothers, and their clinicians. Data were analyzed using qualitative methods.

**Results:** From the perspectives of both girls and mothers, clinicians and parents were the preferred sources of HPV vaccine information for girls. Vaccine efficacy and risks/benefits of vaccination were the most commonly reported desired and actual topics of discussion by mothers, girls, and clinicians. Clinician recommendation of vaccination was reported by nearly one-fifth of girls and nearly half of mothers. The most common concordant messages were related to efficacy of the vaccine, with concordance in 70% of triads. The most common discordant messages were related to sexual health. Approximately half of clinicians (16) reported discussing sexual health, but only 5 mothers (15%) and 4 girls (12%) reported this. Triads recruited from suburban (vs. urban) practices had higher degrees of concordance in reported vaccination communication.

**Conclusions:** HPV vaccine efficacy and safety are important topics for clinicians to discuss with both girls and mothers; educating mothers is important because parents are a preferred source of vaccine-related information for girls. Because girls may be missing important vaccine-related messages, they should be encouraged to actively engage in vaccine discussions.

© 2013 Elsevier Ltd. All rights reserved.

### 1. Introduction

Human papillomavirus (HPV) is the most common sexually transmitted infection (STI) in the U.S., with a prevalence of 32.9% among 14–19 year-old women [1]. The introduction of the quadrivalent and bivalent HPV vaccines provides an opportunity to prevent HPV infection and related sequelae, including genital warts

and cervical cancer. Both vaccines provide protection against infection with HPV types that cause cervical cancer (types 16 and 18) [2,3], and the quadrivalent vaccine protects against two additional types that cause genital warts (types 6 and 11) [2]. The Advisory Committee on Immunization Practices recommends that the HPV vaccine series be initiated at age 11–12 years for girls [4]. Girls should be vaccinated before the onset of sexual activity because HPV infection is acquired rapidly following sexual initiation [5], and the vaccines are not effective against established vaccine-type HPV infection [6]. However, 11–12 year-old girls are among those with the lowest HPV vaccination rates [7]. Clinicians are less likely to consistently recommend vaccination to 11–12 year-old compared to older girls [8,9], and parents are less likely to agree to vaccination for younger compared to older daughters [10,11].

**Abbreviations:** HPV, human papillomavirus; STIs, sexually transmitted infections; STDs, sexually transmitted diseases.

\* Corresponding author at: Division of Adolescent Medicine, MLC 4000, Cincinnati Children's Hospital Medical Center, 3333 Burnet Avenue, Cincinnati, OH 45229, USA. Tel.: +1 513 636 2245; fax: +1 513 636 1129.

E-mail address: [tanya.mullins@cchmc.org](mailto:tanya.mullins@cchmc.org) (T.L.K. Mullins).

Communication with a healthcare provider is one of the most important factors in parental vaccination decisions [12–14]. Thus, the nature of conversations between clinicians, parents, and girls about HPV vaccination may be driving, in part, the lower rates of clinician recommendations for and parental acceptance of vaccination in 11–12 year-old compared to older girls. However, few studies have explored the content of such conversations from the perspectives of adolescents, parents, and clinicians. Furthermore, although studies have examined perceptions of the HPV vaccine among youth [15–18] and parents [15,19,20], little is known about perceived informational needs of 11–12 year-old girls and how those compare to the needs of parents. Understanding what information about HPV vaccines girls and mothers believe to be important could enhance clinician delivery of developmentally appropriate vaccine-related messages, which may lead to improved vaccine uptake. Finally, effective communication about the HPV vaccine requires accurate and convincing delivery of information by the clinician, as well as understanding and acceptance of that information by girls and their mothers. Messages that are perceived and retained by the recipient of communication may differ from messages that are intended to be communicated, and retained messages may be more salient in the context of vaccination decisions. Concordance can serve as a proxy for the degree to which the information the clinician intends to communicate is actually communicated and its saliency to the recipients. However, little is known about concordance between clinicians', mothers', and girls' reports of communication about HPV vaccines in the context of a vaccination visit or whether specific sociodemographic characteristics are associated with concordance. Thus, we conducted a study with the following aims: 1) to examine girls' and mothers' perspectives on maternal communication, 2) to examine girls', mothers', and clinicians' perspectives on clinicians' communication, 3) to examine concordance by girls, mothers, and clinicians in reports of actual maternal and clinician communication with girls about vaccination, and 4) to explore whether participant characteristics are associated with concordance in communication.

## 2. Methods

Between 6/30/08 and 11/3/09, we enrolled 11–12 year-old girls within 2 days after they received the first dose of the quadrivalent HPV vaccine as part of a routine clinical visit ( $N=33$ ), their mothers or adult female primary caregivers ( $N=32$ ), and their clinicians ( $N=19$ ) into an ongoing longitudinal study examining the impact of HPV vaccination on girls' attitudes and behaviors. In order to ensure sample diversity, we recruited from one urban, hospital-based general pediatric resident clinic and two suburban private pediatric practices. Girls and their mothers were approached about the study by their clinician. If both agreed to participate, the mother provided written informed consent for herself and her daughter, and the girl provided written assent. Clinicians provided written informed consent. The hospital's Institutional Review Board approved the study.

Girls, mothers, and clinicians were interviewed separately by the trained research coordinator in a private location. One mother was interviewed twice, once for each daughter enrolled in the study. Some clinicians were interviewed more than once because more than one of their patients was enrolled. All interviews were analyzed independently because each one focused on communication between a particular girl, mother, and clinician. Therefore, this analysis of baseline interviews included 33 girl/mother/clinician triads; 17 triads were recruited from the urban practice and 16 from suburban practices. Nearly half of girls ( $n=16$ ) were white; 17 girls were non-white (15 African-American/Black, 2 multiracial) [21]. In this sample, girls' race and practice location were 100% correlated: all white girls were recruited at a suburban practice and all

non-white girls were recruited from an urban practice. Interview guides were designed to explore: 1) girls' and mothers' perspectives on girls' informational needs about HPV vaccines (i.e. what information should be communicated to girls and by whom); 2) girls' and mothers' perspectives on maternal communication with girls about HPV vaccines (i.e. what information mothers should communicate to girls and reports of actual communication); and 3) girls', mothers', and clinicians' perspectives on clinician communication about vaccines (i.e. information that clinicians should communicate to girls and mothers, and reports of actual communication). The semi-structured interviews, which lasted 15–30 min, were audio-taped and transcribed by an independent transcriptionist. Field notes were recorded by the research coordinator and added to the cleaned transcripts for analysis. A team of researchers analyzed the data using the 5-stage Framework Analysis, which produces a thematic framework [22,23]. To examine concordance in communication, we focused on participant responses to the open-ended questions regarding communication (i.e., girls were asked "Has your mother told you anything about HPV vaccines/shots? If so, what did she tell you about the vaccine?") Concordant messages were defined as those reported by more than one member of the girl–mother dyad or the girl–mother–clinician triad. The relationship between concordant messages and race and recruitment location (urban vs. suburban) was examined.

## 3. Results

### 3.1. Perspectives on girls' informational needs about HPV vaccines

Girls' and mothers' perspectives regarding what topics should be discussed with girls about the HPV vaccine and by who were generally similar (Table 1). The most commonly reported topic by both girls and mothers was vaccine efficacy in preventing infection and disease, especially cervical cancer. The second most commonly reported topic by both girls and mothers was information about the risks/benefits of vaccination. In contrast, several mothers, but no girls, noted that education about sexual health (including topics such as sexuality, STIs, and HPV) should be communicated to girls in the context of HPV vaccination. A few mothers noted that girls should be aware that vaccination is not permission to have sex. Both mothers and girls reported that the most important people to communicate this information to girls were clinicians and parents.

### 3.2. Perspectives on maternal communication with girls about HPV vaccines

Girls' and mothers' perspectives regarding what mothers should communicate with daughters about HPV vaccines, and what was actually communicated, were largely similar (Table 2). Just over half of girls reported that mothers should discuss vaccine efficacy in preventing infection and disease, while several reported that mothers should communicate their support for vaccination. When asked about actual maternal communication, approximately half of girls noted that mothers had in fact discussed vaccine efficacy, and several noted that mothers had discussed vaccine risks/benefits. Only one girl reported that her mother had discussed sexual health. Similarly, most mothers reported discussing vaccine efficacy in preventing HPV infection and related diseases, including cervical cancer, and vaccine risks/benefits. However, in contrast to what was reported by girls, more than one-third of mothers reported discussing sexual health.

Concordance in reports of actual maternal communication occurred in 14/33 girl–mother dyads (42%). Most concordant messages were related to the efficacy of HPV vaccines in preventing infection and disease. In 12/33 dyads (36%), both the mother and

Download English Version:

<https://daneshyari.com/en/article/10966267>

Download Persian Version:

<https://daneshyari.com/article/10966267>

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