Contents lists available at ScienceDirect





Papillomavirus Research

journal homepage: www.elsevier.com/locate/pvr

Parental acceptance of human papillomavirus vaccinations and community pharmacies as vaccination settings: A qualitative study in Alabama



Salisa C. Westrick^{a,*}, Lindsey A. Hohmann^a, Stuart J. McFarland^a, Benjamin S. Teeter^b, Kara K. White^a, Tessa J. Hastings^a

^a Health Outcomes Research and Policy, Harrison School of Pharmacy Auburn University, 020 James E. Foy Hall, Aub urn University, AL 36849, USA
^b University of Arkansas for Medical Sciences, 4301 W Markham St, Little Rock, AR 72205, USA

ARTICLE INFO

Keuwords:

Human papillomavirus

Community pharmacy

Adolescent immunization

Cervical cancer prevention

ABSTRACT

Purpose: To determine parents' knowledge and attitudes regarding human papillomavirus (HPV) vaccinations in their adolescent children and to describe parents' perceptions of adolescent vaccinations in community pharmacies.

Methods: In-depth interviews were completed with parents or guardians of children ages 11-17 years from Alabama's Lee and Macon counties. One-hour long, open-ended telephonic or in-person interviews were conducted until the saturation point was reached. Using ATLAS.ti software and thematic analysis, interview transcripts were coded to identify themes.

Results: Twenty-six parents were interviewed, most of whom were female (80.8%) and white (50%). A total of 12 themes were identified. First, two themes emerged regarding elements facilitating children's HPV vaccination, the most common being positive perception of the HPV vaccine. Second, elements hindering children's vaccination contained seven themes, the top one being lack of correct or complete information about the HPV vaccine. The last topic involved acceptance/rejection of community pharmacies as vaccination settings, and the most frequently cited theme was concern about pharmacists' clinical training.

Conclusions: Physician-to-parent vaccine education is important, and assurances of adequate pharmacy immunization training will ease parents' fears and allow pharmacists to better serve adolescents, especially those who do not see physicians regularly.

1. Introduction

Human papillomavirus (HPV) is one of the most common sexually transmitted infections. According to the Centers for Disease Control and Prevention (CDC), about 79 million Americans are currently infected and 14 million people become infected each year [1]. Three vaccines are approved, including Gardasil^{*} (for girls and boys age 9–26 years), Gardasil 9^{*} (for girls age 9–26 years and boys age 9–15 years), and Cervarix^{*} (for girls age 9–26 years) [2]. All three vaccines protect against HPV strains 16 and 18, which cause over 70% of cervical cancer cases. Gardasil^{*} also protects against an additional two and Gardasil 9^{*} protects against an additional seven less common strains [2]. Administration is recommended between the ages of 11 and 12 as a three-dose series over six months [2].

Despite the availability of vaccines to prevent HPV, the U.S. vaccination rate falls below the 80% national objective [3]. The national vaccination rates in 2014 for adolescents ages 13–17 years who

received at least one dose were 60% for girls and 41.7% for boys [3]. Among those who initiated the series, only 69.3% of girls and 57.8% of boys completed all three doses [3]. Additionally, disparities in HPV vaccination coverage continues to be a problem. For example, the southern United States has lower vaccination rates than elsewhere in the country. Disparities in knowledge also exist; parents of adolescents in rural areas are less aware of the HPV vaccine because they are less likely to be presented with the information [5,6].

Recommendations from healthcare professionals are key to HPV vaccine acceptability [7–10]. Interestingly, physicians do not rank the HPV vaccine as important when compared to other vaccines (Tdap and meningococcal vaccines) and often discuss the HPV vaccine last during patient visits [11]. Furthermore, previous research has reported the associations between HPV vaccine acceptability and parental characteristics, including sociodemographic factors, knowledge, perceived vaccine effectiveness, risk perceptions, and vaccine cost [12–16]. Given variations in vaccination coverage in certain regions of the

* Corresponding author.

http://dx.doi.org/10.1016/j.pvr.2016.12.003

Received 9 August 2016; Received in revised form 10 October 2016; Accepted 21 December 2016 Available online 21 December 2016

2405-8521/ © 2017 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/BY-NC-ND/4.0/).

E-mail addresses: westrsc@auburn.edu (S.C. Westrick), lah0036@auburn.edu (L.A. Hohmann), sjm0020@auburn.edu (S.J. McFarland), BSTeeter@uams.edu (B.S. Teeter), kkw0005@auburn.edu (K.K. White), tjh0043@auburn.edu (T.J. Hastings).

U.S., it is important to explore attitudes and knowledge among parents of adolescents residing in southern states where vaccination rates are low.

The low completion rate of the HPV vaccine series is concerning [17]. Although lack of physician recommendation is a key barrier to HPV vaccine series initiation, additional barriers, such as irregular preventive care, may hinder series completion [18]. Taking into account this potential difference in barriers, pharmacies may be a good choice for completing the series. Thus, this study explores parental perceptions of pharmacists as non-traditional immunizers for HPV vaccinations in adolescents. Because pharmacists/pharmacies are readily accessible during extended hours and on weekends, with no appointments or visit copayments required [19-23], pharmacies are well-suited to accommodate many adolescents who do not frequently visit physicians, and provide a convenient alternative vaccination setting [24]. Given pharmacists' established role as providers of adult immunizations, pharmacy-based vaccination services have great potential to increase HPV vaccination and completion rates among adolescents [25,26]. However, little is known about parental acceptance of pharmacists as immunizers for HPV vaccinations in their adolescent children.

The objectives of this study were to determine parents' knowledge and attitudes related to HPV vaccinations for their adolescent children as well as describe parents' perceptions of adolescent vaccinations in community pharmacies. Better understanding of these may help to improve communication of HPV information between parents, adolescents and healthcare providers, and identify opportunities for community pharmacists to help traditional immunizers increase HPV vaccination coverage and completion rates.

2. Methods

2.1. Study design and participants

This was a qualitative study using telephone or face-to-face interviews with open-ended questions. All procedures were approved as an expedited review by the Institutional Review Board at the first author's institution. The population of interest was parents/guardians of adolescent children, regardless of children's HPV vaccination status. Participants were recruited from Lee and Macon counties in Alabama in June-August 2014 via newspaper advertisements, flyers in public/ community locations, a website hosted by the first author's institution, Craigslist ads, and a Facebook group for people in the community. All advertisements included the study's website address and the first author's telephone number. The website contained detailed information about the study, the IRB-approved consent form, and an interest form. Individuals were screened for eligibility via the online or telephone-administered interest form. Individuals were eligible to participate if they were: parents or legal guardians of children ages 11-17 years, residents of Lee or Macon County in Alabama, and able to read and write in the English language. Individuals were excluded from participation if they resided in the same household as another participant. Next, the principal investigator contacted eligible individuals to explain the study's details, obtain a mail/email address to send a consent form, and schedule an interview. Written consent was obtained from each participant before conducting interviews. A financial incentive of \$35 was provided to each participant upon interview completion.

2.2. Data collection and measures

A total of 26 interviews were conducted, 11 via telephone and 15 inperson. Recruitment continued until the saturation point was reached (when no new information was obtained from additional interviews). Each interview session included two components: 1) administration of a participant questionnaire, and 2) in-depth interviews. The participant

questionnaire was used to elicit demographic characteristics, including age, sex, race, education level, annual income, insurance status, children's usual source of care, and children's vaccination history. Next, in-depth interviews were conducted using open-ended questions to elicit participants' knowledge and perceptions of HPV vaccines and provision of the vaccination in a community pharmacy. For example, questions included "describe the relationship with your pharmacist" and "what kind of things, positive or negative, have you heard about the HPV vaccine?" If interviewees had limited knowledge of HPV or the vaccine, information in the CDC HPV Vaccine Information Statement was provided, followed by asking, "What do you think about this information?" Interviews ranged from 18 to 50 min with an average of 31 min, and were digitally audio-recorded and transcribed verbatim. Throughout the data collection period, quality control procedures were implemented. For example, the three interviewers listened to and discussed the first five recorded interviews to ensure consistency among interviewers.

2.3. Data analysis

Using ATLAS.ti 7.5.6 Qualitative Data Analysis software (ATLAS.ti Scientific Software Development GmbH, Berlin, Germany) and thematic analysis, interview transcripts were coded to identify themes using methods outlined by Braun and Clarke [27] and validated by Conklin et al. [28]. First, patterns within the data were independently identified by two researchers (SM and KW) and used to generate open codes. These codes were discussed and agreed upon, with discrepancies resolved via discourse and consensus. To ensure reliability, open coding was repeated by two additional researchers (LH and TH) for three randomly selected participants. Finalized codes were agreed upon and themes were named by the research team. The primary coder (SM) then identified the frequency of each theme, and themes were clustered into broad topic categories.

3. Results

Of the 26 interviewed parents (Table 1), many were female (80.8%) and between 40 and 49 years of age (42.3%). Half of the participants self-identified as White, with 42.3% having some college education and 30.8% reporting an annual household income from \$50,000-\$99,999. Among participants, 42.3% had children who received an influenza vaccine during the previous year while only 15.4% had children who received at least one dose of the HPV vaccine.

Themes from in-depth interviews were organized into three broad topic categories for ease of presentation and include: 1) elements facilitating HPV vaccine uptake (or acceptability), 2) elements hindering HPV vaccine uptake, and 3) perceptions of and barriers to community pharmacies as nontraditional vaccination settings. A total of 12 themes were identified regarding HPV vaccination (Table 2).

3.1. Elements facilitating HPV vaccine uptake

Two themes were identified from the interviews regarding elements facilitating actual or intended vaccine uptake in participants' children, including: 1) positive perception of the HPV vaccine, and 2) influence of a reputable source of information. Positive perception of the HPV vaccine was the most frequently cited theme. For example, one participant stated that she believed the HPV vaccine would enable her child to "avoid...symptoms and the risk of cancer." Another mother stated that, "If [the HPV vaccine] would have been an option for me, I would have done it." The second theme involved the influence of a reputable source of information. Many parents cited information from pediatricians or family physicians as leading them to vaccinate their children against HPV. For example, one parent stated, "[our family physician] is the only person that I allow to influence my [vaccination] decision." Download English Version:

https://daneshyari.com/en/article/5741203

Download Persian Version:

https://daneshyari.com/article/5741203

Daneshyari.com