Published in final edited form as:

J Immigr Minor Health. 2016 October ; 18(5): 1060–1065. doi:10.1007/s10903-015-0225-x.

HPV Vaccine and Latino Immigrant Parents: If They Offer It, We Will Get It

Abraham Aragon¹, Margaux Genoff¹, Cynthia Gonzalez¹, Elyse Shuk¹, and Francesca Gany¹

Abraham Aragon: aragonea@mskcc.org

¹Department of Psychiatry and Behavioral Sciences, Immigrant Health and Cancer Disparities, Memorial Sloan-Kettering Cancer Center, 300 E. 66th Street 15th Floor, New York, NY 10065, USA

Abstract

HPV vaccination rates remain low in the fast growing Latino children population while we continue to observe large HPV-associated cancer disparities in the Latino population. In this study, we sought to elucidate Latino immigrant parents' barriers to obtaining the HPV vaccine for their children. Five focus groups were conducted with Latino immigrant parents of minors (i.e., 9–17 year old) who had not yet initiated the HPV vaccine series. Three major findings were identified from the focus groups: (1) low levels of awareness and knowledge of HPV and the HPV vaccine, (2) high confidence that parent can get the vaccine for their eligible child and (3) lack of provider recommendation as the main barrier to vaccination. Children of Latino immigrant parents could benefit from increased provider recommendation for the HPV vaccine while providing tailored HPV information to parents.

Keywords

HPV vaccine; Latino children; Latino immigrant parents; Vaccination barriers

Introduction

Latino children are the fastest growing population of children in the United States and currently constitute over 22 % of children under the age of 18 [1]. Over half of the 16 million Latino children have at least one parent who is an immigrant [1]. This growing population is at greater risk of developing Human Papilloma Virus (HPV) related cancers compared to other populations in the United States [2–5]. Latinas have the highest rate of cervical cancer in the U.S, approximately 66 % higher than non-Hispanic whites [2, 3]. Among Latino men in the U.S., the rate of penile cancer is 1.3 per 100,000 compared to 0.8 among non-Hispanic men [4]. In addition, Latinos have higher rates of HPV-associated anal cancer rates when compared to the general population [5]. These cancers are preventable in many cases through the use of the HPV vaccine. The HPV vaccine has been licensed by the U.S. Food and Drug Administration for use in adolescent girls and boys ages 9 through 26

years for the prevention of cervical and anal cancers, among others [6]. The Advisory Committee on Immunization Practices (ACIP) recommends routine vaccination for males and females starting at 11 years of age. Despite the significant advantages of childhood HPV vaccination, uptake of the vaccine among eligible Latino girls and boys (i.e., 9–17 year-olds) has been suboptimal [7, 8] compared to the general population. In 2013, approximately 55 % of all eligible girls of any ethnicity had the first dose of the vaccine and only 38 % had completed the full three doses [8, 9]. Moreover, HPV vaccination rates among males remain very low. In 2013, around 34 % of Latino boys 13–17 years of age received the first dose, while only 14 % completed the three doses [9]. These rates are well below the Healthy People 2020 objective of 80 % completion rate [10], and are of particular concern among the Latino population, at higher risk of HPV associated cancer

Parental awareness and acceptance of the vaccine is imperative for completion of the full three doses of the HPV vaccine at an early age (children between the ages of 9 and 13 years), and before a person's first sexual encounter. Among Latino immigrant parents, barriers to healthcare access, health information, and barriers related to language, cultural discordance, and legal and economic matters, have the potential to negatively impact children's access to care and to the vaccine [11, 12]. Due to the importance of understanding Latino immigrant parents' barriers to obtaining the HPV vaccine for their children, the HPV-associated cancer disparities observed in this fast-growing population, and the low rates of HPV vaccination, we sought to elucidate Latino immigrant parents' knowledge, attitudes, beliefs, and barriers regarding HPV vaccination for their children using exploratory focus groups.

Methods

We conducted five focus groups with Latino immigrant parents of minors (i.e., 9–17 year old) who had not initiated the HPV vaccine series for their child. Each group had between 5 and 10 participants, for a total of 36 participants. All focus groups were conducted in Spanish and followed a pre-determined guide developed by the authors to address each of the study's areas of interest: parents' knowledge, attitudes, beliefs, and barriers regarding childhood HPV vaccination. We used constructs from the Health Belief Model (e.g., knowledge, benefits, barriers) [13], Theory of Planned Behavior (e.g., intentions) [14], and Social Cognitive Theory (e.g., self-efficacy) [15], each of which has demonstrated efficacy in predicting cancer-related health behavior, when developing the focus group guide.

A purposeful sampling method [16] was used to enroll participants who would enhance understanding of the specific topics of interest and to identify both unique and common patterns in the population studied. A parent qualified to participate in the study if: (1) she/he was born in Latin America, including the Caribbean, Central and South America, (2) Spanish was her/his primary language, and (3) she/he had at minimum one child between the ages of 9–17 who had not received the HPV vaccine, as reported by the parent's at the start of the focus group. Participant recruitment took place in NYC neighborhoods with high concentrations of Latino immigrants in collaboration with groups such as community-based organizations and Latin American consulates. Prior to the start of each focus group, participants completed a questionnaire assessing socio-demographic variables, including

immigration background such as country of origin, length of time in the U.S., and English proficiency among others. Each participant received an incentive of \$30 for participating in the study.

Data Collection

Each focus group was held at a location in close proximity to recruitment sites, within NYC neighborhoods with large Latino immigrant populations. We conducted the focus groups at multiple locations including churches, schools, and community-based organizations. All focus group discussions lasted 75 min or less and were facilitated by a trained, Spanish-speaking moderator with ample experience in qualitative work. Focus group conversations were audio taped and a moderator's assistant took notes.

Data Analysis

The audio-recorded focus group discussions and notes were transcribed verbatim, including silences, pauses, and exclamations, following the methodology proposed by Elderkin-Thompson and Waitzkin [17]. Once the discussions were transcribed, three investigators independently synthesized and summarized the transcript content for each of the major topic areas from the focus group guide. They subsequently interpreted the underlying meaning of participants' comments and each investigator generated an analysis template that captured their thoughts for each focus group. The investigators then met together to reach consensus regarding the key findings for each group. The team identified recurring conceptual findings and collaboratively described the key themes. A hierarchical list of themes was then created for major conceptual categories and subjected to focus coding to determine subsidiary themes.

Data from the socio-demographic assessment was analyzed using IBM SPSS Statistics v22 [18]. Descriptive statistics were used to describe the study participants. This study was approved by the Institutional Review Board at Memorial Sloan Kettering Cancer Center.

Results

Sample characteristics are shown in Table 1. The majority of participants were female, reported limited English proficiency, and a large majority reported that their child had health insurance and a regular source of health care. Fifty-seven percent (57 %) of parents in the study had at least one daughter between the ages of 9 and 17 years while 43 % had at least one son. Forty-nine percent (49 %) of parents had at least one daughter and one son between those ages. Three major themes were identified from the focus groups: (1) lack of awareness and knowledge of HPV and the HPV vaccine, (2) high rates of self-efficacy (i.e., confidence that parents can get the vaccine for their eligible child) and (3) lack of provider recommendation as the main barrier to vaccination.

Lack of Awareness and Knowledge of HPV and the HPV Vaccine

There were mixed levels of knowledge about HPV among the groups; several participants possessed some understanding of the virus, although most participants indicated that they had no prior knowledge of HPV as a sexually transmitted disease or as a cause of cancer. Of

the vaccine, one participant stated that she had “never heard of it” and another participant claimed, “Very strange. I am hearing this for the first time and that the doctor doesn’t talk about this... they [don’t] inform you about this... It is very bad on the doctor’s part. If I didn’t come to [this] meeting, I wouldn’t have known.” Further, few parents understood that HPV was related to cancer. Fewer participants had heard about the HPV vaccine, and those who had heard about it had limited knowledge about its purpose, the eligibility requirements for the vaccine, and the vaccine’s dosing/schedule requirements. Even those who had vaccinated other children of theirs reported minimal knowledge about HPV and the vaccine. Most of these parents reported following the advice of their provider without being educated about the virus or the vaccine. Most participants mentioned that no medical providers had ever discussed the vaccine with them, even though they had visited their child’s doctor not long before participating in the study. One participant stated, “The truth is that I don’t think doctors [explain things well enough]. For example she, the doctor, told me that ‘it was time for the vaccine.’ But they don’t explain exactly what [the vaccine] is for.” In some instances, participants stated that they were learning about HPV and the vaccine for the first time in the focus group. A participant said, “For me, [if] the doctors haven’t informed me and if I didn’t come to this meeting, I wouldn’t have been able to ask the doctor.” Another woman reflected, “But, like [another participant] says, the mistake I made was to not get enough information from the doctor, because besides that I say that it’s a part of her [provider] job to explain it to you, as a parent say, ‘well the vaccine is going to help your daughter for this or that in the future.’ And she [provider] doesn’t do it ...But you don’t get the information correctly.”

High Rates of Self-Efficacy

The focus group activated parents’ interest in vaccinating their children. Once parents were informed about the vaccine during the focus groups, all expressed their intention of getting their eligible children vaccinated as soon as possible. When asked about barriers to accessing the vaccine, either by scheduling an appointment with the child’s regular source of care or having the time to take their child to obtain the vaccine, none of the parents in the groups reported these as barriers. Many felt strongly that they could and would take their children to get the vaccine in the near future. One focus group participant announced, “I have an appointment with my daughter tomorrow and I’m going to ask [the physician] for the vaccine.” Another woman with three daughters said, “I have one, two big [older] daughters and I didn’t get them [the vaccine] because I didn’t know. Now I can prevent the little one from getting it [HPV].”

We observed no differences in the willingness of the participants in vaccinating their children based on the child’s gender. Parents discussed vaccinating both their sons and daughters equally. When specifically asked if the gender of the child made a difference in vaccinating children, one parent responded “I don’t think so, you need to give the vaccine to both, I think it should be like that.” Furthermore, many parents revealed a general willingness to vaccinate children even if it meant paying out-of-pocket if they did not have insurance. One participant said, “If [the insurance] doesn’t cover it [the vaccine,] we [will] pay for health.”

Parents were motivated to protect the health of their children and were eager to obtain more information regarding the virus and vaccine. They proposed several venues to disseminate HPV vaccine information, including schools and churches, and mentioned these venues in every focus group. With regards to schools, one parent stated, “I think it would be very interesting to start in the schools in the parent-teacher meetings. I think that that’s the best moment, because even though not everyone goes, the majority does go and prevention starts from there with educating parents.” Parents were very receptive to getting information from multiple sources and demonstrated a strong interest in gaining knowledge about HPV. The parents agreed that information could be provided about the vaccine outside of the health care environment, although some said that they would prefer information to come from their provider.

Participants indicated that they had the resources to obtain the vaccine for their eligible children, either through health insurance, having a regular source of care, or having the financial means to pay for it themselves. When asked to the group if, hypothetically, their insurance did not cover the vaccine, one parent claimed, “And if it doesn’t cover it we will pay for health [another woman agreed and said ‘yes exactly’].” On several occasions, participants expressed that they felt capable of taking their children to the doctor to obtain the vaccine.

Main Barriers to Vaccination

While parents felt that overall there were few barriers that would inhibit accessing the HPV vaccine for their children, they did cite two major obstacles. First, the most common barrier reported in all focus groups was the lack of provider recommendation for the vaccine. Many participants expressed negative emotions (such as annoyance and anger) towards their provider for offering either insufficient or no information about the vaccine, or for not recommending the vaccine for their eligible child during their last clinic visit. Other participants did not react as strongly, but were curious as to why their child’s health care provider had not mentioned the vaccine. One participant stated, “Very strange...I am hearing this for the first time and that the...they [providers] don’t talk about this...they [don’t] inform you about this. Because when one takes the child [to the doctor] they know their ages and tell [about the vaccine]...It is very bad... on the doctor’s part...If I didn’t come to the meeting, I wouldn’t have known [about the vaccine].” A participant who expressed much surprise to the information she learned in the group said, “for me that...the doctors haven’t...haven’t informed me...and if I didn’t come to this meeting [focus group], I wouldn’t...wouldn’t have been able to ask the doctor...and well, this meeting was important to me.”

Overall, participants reported few barriers to accessing health care for their children. Almost all participants’ children ($n = 94\%$) were insured and had a primary care physician. Although a few participants mentioned the potential side effects of the vaccine (such as autism) as barriers, these were not predominant themes in the focus groups. Several participants stated that having a reassuring conversation with their provider would negate concerns about potential side effects. When asked specifically if the fact that HPV is a sexually transmitted disease would make participants conflicted in deciding whether to give

their children the vaccine, almost all responded that it would not be an issue. One mother said, “Look, my children asked and I told them right then [about sex]...I can’t keep it from them either... trying to hide the sun with one finger. There are things that have to be said... they have to learn to be responsible.” Another continued by saying, “[Parents] live in the real world, surely in our time it was different, but now parents are more realist because they need to inform themselves.”

Discussion

HPV-related cancers are highly preventable, yet these cancer rates are unnecessarily high among the Latino population in the United States [2–5]. Our study sought to understand Latino immigrant parents’ knowledge, beliefs, and barriers regarding vaccinating their children against HPV, a vaccine that has the potential to prevent over 70 % of HPV-related cancer cases. We found that Latino immigrant parents of children eligible for the HPV vaccine had low levels of knowledge about HPV and the vaccine, felt strongly overall about providing the vaccine to their children once they were made aware of the vaccine, and reported lack of provider recommendation for the vaccine as the main barrier for obtaining it.

Our findings suggest that although the vaccine has been approved for over seven years, information about the vaccine as well as information about HPV in general and its relation to cancer does not appear to have disseminated through the Latino immigrant parent population in New York City. Although some parents had partial knowledge about HPV and the HPV vaccine, most parents overall were either not informed or possessed inaccurate knowledge about it. When asked if their child’s provider ever gave them information about HPV and the vaccine, most focus group participants reported never having discussed or received information about it. Efforts to raise awareness about the vaccine and the consequences of the HPV infection should be tailored to this population. Additionally, interventions to spread this information more efficiently should be studied. Warner et al. found similar barriers and facilitators for vaccination in a Latino—mostly Mexican—population in Utah [19]. This study supported the generalization of our findings, particularly in the need to increase awareness among the population and to increase provider recommendation of the vaccine. Latino populations in the U.S. are extremely diverse, and common findings between different Latino populations, in different geographical areas, are encouraging when designing interventions to address this issue.

At the end of our focus group sessions, we provided a 15-min tailored informational session to the participants about HPV in general and the HPV vaccine. The information relayed was obtained from public sources such as the Centers for Disease Control and Prevention. We found that after providing this information, parents felt strongly about obtaining the vaccine for their eligible children, regardless of the child’s gender. Few had questions or reported barriers to requesting the vaccine from their child’s provider. This finding is encouraging and we believe future studies should further investigate mechanisms to educate and activate the population in settings where large numbers of Latino parents can be reached, with the goal of increasing population demand for the vaccine. As suggested by participants, venues commonly visited by Latino parents like schools and community-based organizations should

be included as sites where information regarding HPV and the HPV vaccine could be provided.

Common parental barriers to the HPV vaccine reported in the literature were not evident in this population [20]. Promiscuity, sex, and sexually transmitted disease were not raised as potential barriers for parents in the focus groups. This is promising because many other populations in the U.S. are less receptive to the HPV vaccine based on misinformation, such as the thought that the HPV vaccine increases promiscuity. It is vital that we promote evidence-based information in the Latino population to guard against the promulgation of myths that have increased barriers for the vaccine in other groups, barriers which have reduced vaccination rates in many populations across the country. Almost all parents in the focus groups identified lack of provider recommendation for the vaccine as the main reason why they had not vaccinated their children. This was the most salient topic discussed across all groups and we believe the most important aspect that needs to be addressed to increase HPV vaccination rates in this population.

Although the HPV vaccine is not required for school attendance, as is the Tdap vaccine, the Advisory Committee on Immunization Practices (ACIP) recommends that providers administer Tdap, meningococcal, and HPV vaccines during a single clinic visit [21]. Despite this recommendation, Tdap vaccine rates remain significantly higher than HPV vaccine rates (even for the 1st dose of the HPV vaccine) [9]. Furthermore, the Centers for Disease Control and Prevention found in a 2013 report that 84 % of unvaccinated eligible girls reported a healthcare encounter where they received a vaccine other than that for HPV [8]. This gap could indicate missed opportunities for providers to offer and administer the HPV vaccine, resulting in low HPV vaccination rates in this population.

Furthermore, over 80 % of Latino children in the U.S. were insured in 2010, and almost 87 % reported having a regular source of care [22]. This suggests that access to health care, including paying for the vaccine, may be a negligible barrier to obtaining the vaccine in this population. Our findings indicate that most parents felt confident that they could obtain the vaccine for their children. We believe this finding should be central when designing an intervention to increase provider recommendation rates, which would subsequently help to increase HPV vaccination rates.

This study has limitations that are worth noting. We used parental report on child's HPV vaccination status, potentially limiting the reliability of this information. We purposely sampled the Latino population in the community rather than clinics, to reach Latino parents even if they did not have access to care. It should be noted that our study only included parents who had not vaccinated any of their eligible children. It is possible, however, that parents with at least one child vaccinated might have different opinions regarding the vaccine.

Our findings offer three primary opportunities to address low rates of HPV vaccination among Latino children of immigrant parents: (1) increase population knowledge, (2) activate the population to seek the vaccine for their eligible child, and (3) increase provider recommendation for the vaccine. We believe interventions that address these three areas

have the potential to reduce HPV-related cancer health disparities evident in the Latino population and we encourage research and programs that include them in their design.

References

1. Fry, R.; Passel, JS.; Center, PH. Latino children: a majority are US-born offspring of immigrants. Washington: Pew Hispanic Center; 2009.
2. Edwards BK, et al. Annual report to the nation on the status of cancer, 1975–2006, featuring colorectal cancer trends and impact of interventions (risk factors, screening, and treatment) to reduce future rates. *Cancer*. 2010; 116(3):544–573. [PubMed: 19998273]
3. Kahn JA, Lan D, Kahn RS. Sociodemographic factors associated with high-risk human papillomavirus infection. *Obstet Gynecol*. 2007; 110(1):87–95. [PubMed: 17601901]
4. Hernandez BY, et al. Burden of invasive squamous cell carcinoma of the penis in the United States, 1998–2003. *Cancer*. 2008; 113(S10):2883–2891. [PubMed: 18980292]
5. Joseph DA, et al. Understanding the burden of human papillomavirus- associated anal cancers in the U.S. *Cancer*. 2008; 113(S10):2892–2900. [PubMed: 18980293]
6. Koutsky LA, Ault KA, Wheeler CM, Brown DR, Barr E, Alvarez FB, Chiacchierini LM, Jansen KU. A controlled trial of a human papillomavirus type 16 vaccine. *N Engl J Med*. 2002; 347(21): 1645–1651. [PubMed: 12444178]
7. Jemal A, et al. Annual Report to the Nation on the Status of Cancer, 1975–2009, featuring the burden and trends in human papillomavirus(HPV)-associated cancers and HPV vaccination coverage levels. *J Natl Cancer Inst*. 2013; 105(3):175–201. [PubMed: 23297039]
8. Centers for Disease Control and Prevention. Human Papillomavirus Vaccination Coverage Among Adolescent Girls, 2007–2012, and Postlicensure Vaccine Safety Monitoring, 2006–2013—United States. *Morb Mortal Wkly Rep*. 2013; 62(29):591–595.
9. Centers for Disease Control and Prevention. Teen Vaccination Coverage. 2013 National Immunization Survey-Teen (NIS-Teen). <http://www.cdc.gov/vaccines/who/teens/vaccination-coverage.html>
10. U.S. Department of Health and Human Services. Health People 2020. 2013. <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=23>
11. Durden TE. Usual source of health care among Hispanic children: the implications of immigration. *Med Care*. 2007; 45(8):753–760. [PubMed: 17667309]
12. Capps, RF.; Ost, M.; Reardon-Anderson, J.; Passel, J. The health and well-being of young children of immigrants. The Urban Institute; 2004. http://www.urban.org/uploadedpdf/311139_childrenimmigrants.pdf
13. Rosenstock IM. The health belief model and preventive health behavior. *Health Educ Q*. 1974; 2:354–386.
14. Ajzen, I. From intentions to action: a theory of planned behaviour. In: Kuhl, J.; Beckman, J., editors. *Action control: from cognitions to behaviors*. New York: Springer; 1985. p. 11-39.
15. Bandura A. Social cognitive theory of mass communication. *Media Psychol*. 2001; 3(3):265–299.
16. Patton, M. *Qualitative research and evaluation methods*. Thousand Oaks: Sage; 2002.
17. Elderkin-Thompson, V.; Waitzkin, H. Using videos in qualitative research. In: Crabtree, BF.; Miller, WL., editors. *Doing qualitative research*. 2nd ed. Thousand Oaks: Sage; 1999.
18. IBM Corp. Released 2013. *IBM SPSS Statistics for Windows, Version 22.0*. Armonk, NY: IBM Corp;
19. Warner EL, Lai D, Carbajal-Salisbury S, Garza L, Bodson J, Mooney K, Kepka D. Latino parents' perceptions of the HPV vaccine for sons and daughters. *J Community Health*. 2015; 40(3):387–394. [PubMed: 25269400]
20. Holman DM, Benard V, Roland KB, Watson M, Liddon N, Stokley S. Barriers to human papillomavirus vaccination among US adolescents: a systematic review of the literature. *JAMA Pediatr*. 2014; 168(1):76–82. [PubMed: 24276343]

21. Centers for Disease Control and Prevention. General recommendations on immunization: Recommendations of the Advisory Committee on Immunization Practices. MMWR. 2011; 60(RR-2)
22. U.S. Census Bureau. Current Population Survey, 2012 Annual Social and Economic Supplement. <https://www.census.gov/hhes/www/poverty/data/incpovhlth/2012/index.html>.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 1

Socio-demographic characteristics (N = 36)

Gender (%)	
Female	91
Male	9
Age	
Mean	42
Range	25–65
SD	10.43
Level of education (%)	
Less than a high school education	38
High school graduate	27
Some college education	15
College or post-college graduate	21
Marital status (%)	
Partnered or married	58
Single	25
Divorced or separated	17
Household income (%)	
< \$19,000 per year	28
\$19,000 to \$35,000	24
More that \$35,000	17
Not sure or prefer not to answer	31
Total number of children	
Mean	1.97
Range	1–4
SD	0.97
Country/territory of birth (%)	
Colombia	16
Dominican Republic	11
Ecuador	30
Mexico	25
Peru	8
Other	10
Time living in US	
Mean	16 years
Range	1–45
SD	10.66
English proficiency (%)	
Not at all	15
Not well	53
Well	27

Very well	6
Preferred language for health care (%)	
English	3
Spanish	97
Parent insured? (%)	
Yes	53
No	47
Child insured? (%)	
Yes	94
No	6
Child have primary care physician (n = 35) (%)	
Yes	94
No	6