



Hispanic Mothers and High School Girls Perspectives on HPV Vaccine Uptake

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Presenter Disclosures

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Background – Cervical Cancer and HPV

- HPV causal agent for cervical cancer (CC)¹
- CC incidence and mortality rates higher for Hispanic women in Texas²⁻⁴
- Prevalence of HPV in sexually active women ages 14-24 reached 90%⁵
- Prevention of HPV and CC possible with quadrivalent HPV vaccine (Gardasil™)⁶

¹Walshomers JM et al. Human papillomavirus is a necessary cause of invasive cervical cancer worldwide. *The Journal of Pathology*. 1999, 189(1):12-19. ²Walshomers SF et al. SEER Cancer Statistics Review, 1975-2007. Bethesda, MD: National Cancer Institute, 2009. ³Texas Department of State Health Services CeASB. Texas Cancer Registry. Cervical Cancer Incidence in Texas, 2003-2007, 2010. ⁴Texas Department of State Health Services CeASB. Texas Cancer Registry. Cervical Cancer Mortality in Texas, 2003-2007, 2010. ⁵Shorne SF et al. Prevalence of HPV infection among females in the United States. *JAMA*. 2007 Feb; 297(8):813-819. ⁶CDC. Quadrivalent human papillomavirus vaccine: Recommendations of the advisory committee on immunization practices (ACIP). *Morbidity and Mortality Weekly Report* 2007, 56(RR-2).


Background – HPV Vaccine



- Recommended for girls and women ages 11-26⁶
- Most effective if given before sexually active⁶
- Possible lifetime reduction CC risk by 20%-66%^{7,8}
- Parental decision making critical for vaccine uptake


⁶CDC. Quadrivalent human papillomavirus vaccine: Recommendations of the advisory committee on immunization practices (ACIP). *Morbidity and Mortality Weekly Report*, 2007, 56(RR-2). ⁷Sanders GD and Taira AV. Cost-effectiveness of a potential vaccine for human papillomavirus. *Emerg Infect Dis* 2003; 9:37-45. ⁸Koide S, et al. Projected clinical benefits and cost-effectiveness of a human papillomavirus 16/18 vaccine. *J Natl Cancer Inst* 2004; 96:504-15.

Gaps in the Literature



- Limited studies conducted among Hispanics
- Studies show Hispanic parents are accepting of the vaccine; but uptake still low
- Focus groups can help understand this discrepancy

Study Purpose



To examine HPV vaccine knowledge, attitudes, acceptability among Hispanic mothers and girls using strategic focus groups

Research Aims

Among Hispanic mothers and girls:

1. Assess awareness of CC and HPV
2. Identify beliefs about risks of acquiring HPV
3. Identify perceptions and acceptability of the vaccine
4. Identify factors considered in making the decision to (or not to) vaccinate

Methods

8 Focus Groups

- Hispanic mothers (n=4) & girls (n=4)
- 2 high schools and 1 CBO in Houston, Texas
- Spanish and English
- Transcripts coded using Atlas.ti
- Grounded theory approach



Focus Group Guide

- Mothers and girls asked similar questions:
 - What do you think of when you hear cervical cancer?
 - Have you all heard of the human papillomavirus or HPV?
 - What are your feelings about getting (giving your daughters) the HPV vaccine?
- Brief descriptions provided for CC, HPV, and the vaccine

Demographic Characteristics of Hispanic Mothers (n=24) and High School Girls (n=28) in an Urban School District Southeast Texas.

Characteristics	Mothers	HS Girls
Range of Subjects in Focus Groups	4-8	6-8
Mean Age (range)	39.8 (31-63)	15.5 (14-18)
Marital Status		
Married	54.2% (13/24)	NA
Common Law	12.5% (3/24)	NA
Single, never married	20.8% (5/24)	NA
Separated, Divorced, Widowed	12.6% (3/24)	NA
Average Number of Children (range)	3 (1-7)	NA
Grade		
9th	NA	32.1% (9/28)
10th	NA	35.7% (10/28)
11th	NA	14.3% (4/28)
12th	NA	17.9% (5/28)
Birthplace		
US-born	29.2% (7/24)	78.6% (22/28)
Foreign-Born (FB)	70.8% (17/24)	21.4% (6/28)
Range of Years in US FB (mean)	1-45 (16.9)	3-13 (6.9)
Generation Status		
First Generation	70.8% (17/24)	17.9% (5/28)
Second Generation	16.7% (4/24)	53.6% (15/28)
Third Generation	12.5% (3/24)	28.6% (8/28)

Themes Identified



- Knowledge gaps
 - CC beliefs and perceptions
 - Exposure to HPV and HPV vaccine information
- Fears and concerns
- Socio-cultural communication practices
- Decision-making about HPV vaccine

CC Beliefs and Perceptions

MOTHERS	HS GIRLS
"...it [cervical cancer] is something that can be cured if detected in time...getting your check-up every year..."	
"I don't have much knowledge about what cancer is, anywhere it might be, in the cervix or elsewhere."	
"As I understand it, at the moment, if you have sex and you don't protect yourself, your husband or boyfriend can be having sex with more people and you don't know it."	
"[Young girls] are having sexual relations earlier...and without any protection"; and "can have multiple partners without taking...the necessary measures to protect themselves."	"[Cervical cancer] can start whenever...when you get your period...it can start from then on."

HPV & Vaccine Info

MOTHERS	HS GIRLS
"Well, I do know that the human papillomavirus is sexually transmitted."	"I just heard of HPV but that was it. I didn't even know what it was."
"Some say, 'well I take a bath everyday...[others] every 3 rd day...viruses are everywhere.'"	"You can get it from a tattoo or needles."
"It's one, and the 2 nd two months [does the other], [then in] 3 months [does the other]. And...if you do the 1 st shot, [and then the] 2 nd shot, you miss it, then you have to...start all over...."	"Something about girls need to get it before they start having sexual relationships so it can reduce their chance of getting the virus."
	"Some females want to go and be hoes...; they mess around with every guy...and maybe they have it."
	"[Girls will] just be like...oh, there's protection. Oh I'll just take birth control and I won't get it [HPV]."
	"...I didn't know you could get it [HPV] by just not even having connections [vaginal sex] with another person...just by touching."

Fears and Concerns

MOTHERS	HS GIRLS
"Because science is just an invention. Just invention, invention, invention...but my daughter is not going to be a rabbit for invention."	"What if your allergic to it? Because you never know, maybe there's a new substance in it that you never heard of it."
"be a little more free to start [having sex]."	
"When giving the vaccine...it's like telling the girl, OK, you are ready to have sex...then you would have...to speak to her... this vaccine is to prevent this, but this does not mean that you are ready at this age."	"If [parents] don't really know what [the vaccine] is. They might be like, oh, you don't need it. Oh, it won't happen. Or they just think their kids aren't having sex. They might not know what's going on."
"If it is for her life and her health I do not think so. [I would find a way to pay for it]."	Well even though they can't [afford it], I think my mom would try." "They'll just be like, 'We don't have any money, you're not getting it.'"

Socio-Cultural Communication Practices

MOTHERS
"Many times parents find it embarrassing to talk about those subjects."
"because of lack of trust...[they can't] sit down with their [kids] at an early age and...explain."
"I have very good communication with my daughter...but this, what we are talking about now, well, I didn't have too much information."
"It is where they mostly go...their friends...the ones that are already sexually active corrupt those that aren't because they give them incorrect information...they do some things to stay on good terms with their friends."

Decision Making


MOTHERS	HS GIRLS
"I think it is OK because we are not with them...24 hours...at what age are they going to have sex?... a way that I...can protect my girl is by vaccinating her."	"I mean, no one really wants to get [HPV]...why not prevent it?"
"I was afraid and that's why I had my daughter vaccinated, because I know it is hereditary. Aunts have died."	"My mom was like, 'You're going to get that.' I was like, 'Why?' She goes, 'Because maybe you're already having sex.' ...So she made me get the shot."
"So I told [the doctor] that he could not give her an injection just because they told me so. I wanted information...to know why and for what I was giving her that injection. And since they did not give it to me, I didn't vaccinate her."	"I think they told my mom...[she] was the one who wanted me to get those...she didn't talk to me about them she just took me." "[Parents] should let their children be responsible for their own health and let them decide." "[M]y mom was like, 'Yeah, you know I want to take you.' And I told her, 'No.'"

Discussion

- **CC knowledge**
 - Mothers varied levels
 - Girls none to limited knowledge
- **HPV and vaccine awareness/knowledge**
 - Mothers and girls aware of HPV and vaccine
 - Both varied levels of knowledge; concerns about safety
 - Mothers concerned with condoning early sexual activity
- **Decision to vaccinate**
 - CC Prevention (mothers) vs. HPV Prevention (girls)
 - Girls expressed desire to participate in decision to vaccinate

Future Directions

- School or community-based interventions:
 - Fill knowledge gaps and clarify misconceptions
 - Skill-building for parents
 - Address fears and concerns
 - Community health worker → mother
 - Peer educator → girl



Limitations

- Selection bias
- Moderator bias
- Research done prior to recommendation of HPV vaccine for men and boys



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