

Barriers and Facilitators to HPV Vaccine Uptake in American Indians/Alaska Natives in King County, Washington

Urban Indian Health Institute

Lauren White, Alyssa Yang, MPH, Leah Dodge, MPH

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A Division of the Seattle Indian Health Board

Urban Indian Health Institute

UIHI's Story:

- Established in 2000 as a Division of the Seattle Indian Health Board, a community health center for urban American Indians and Alaska Natives, (AIAN)

- One of 12 Tribal Epidemiology Centers in the nation
  - Focused on nationwide urban AI/AN population

- Supports 9 interns/practicum students on a range of AIAN health focused projects

HPV and Vaccine Background

HPV – Human Papillomavirus

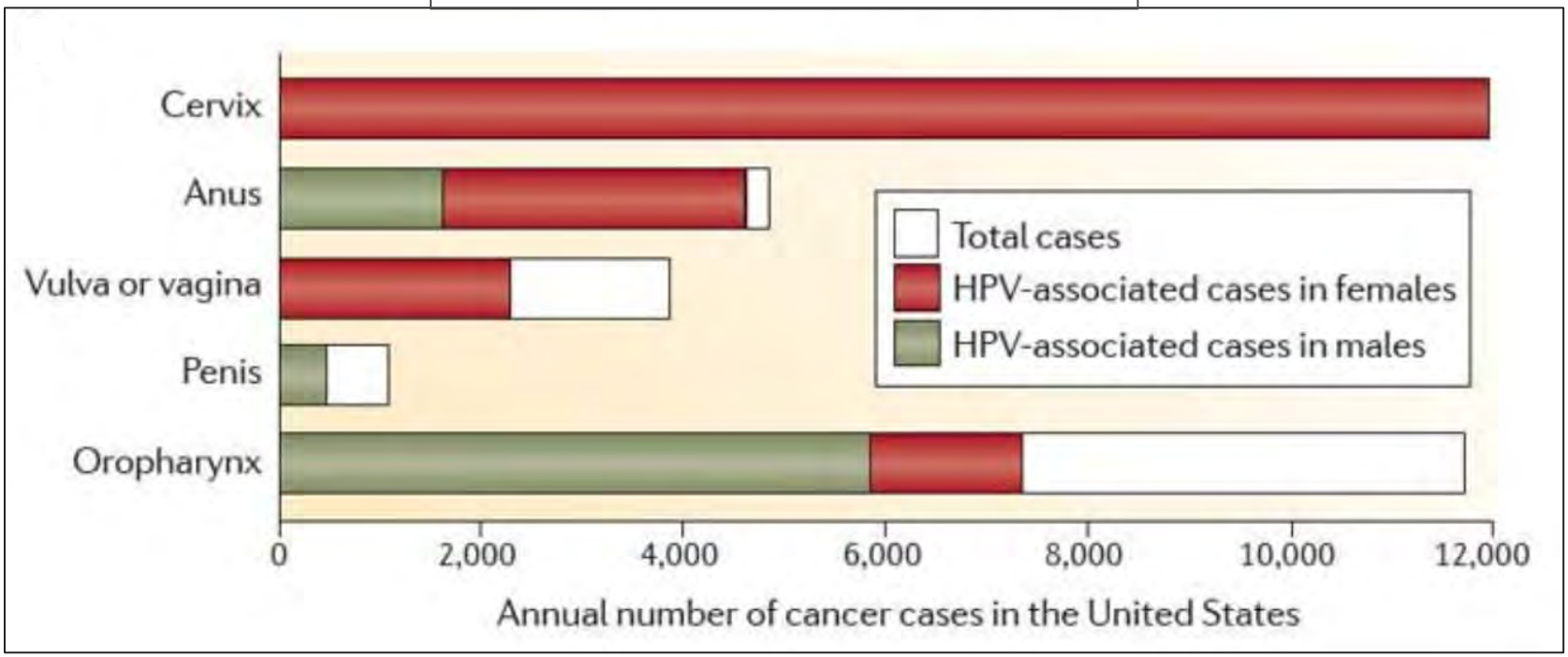
- The **most common** STI; most people come into contact with HPV at some point in their life time
  - 79mil Americans currently infected; 14mil newly infected annually

- **>150 known types** of HPV virus

  - Low Risk HPV strains, (LrHPV) → Warts
  - High Risk HPV strains, (HrHPV) → Cancers
    - Cervix
    - Anus
    - Penis
    - Vulva/Vagina
    - Mouth
    - Throat

Prevalence of HPV Associated Cancers

Schiller and Lowy, 2012.



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HPV and Cancer in American Indians

- AIAN women suffer from higher rates of cervical cancer
  - In general, AIANs are diagnosed at later stages of disease

- In Washington state:
  - Incidence of cervical cancer is three times higher among AIANs than non-hispanic white counterparts
  - Rate of mortality due to cervical cancer is twice as high as non-hispanic whites

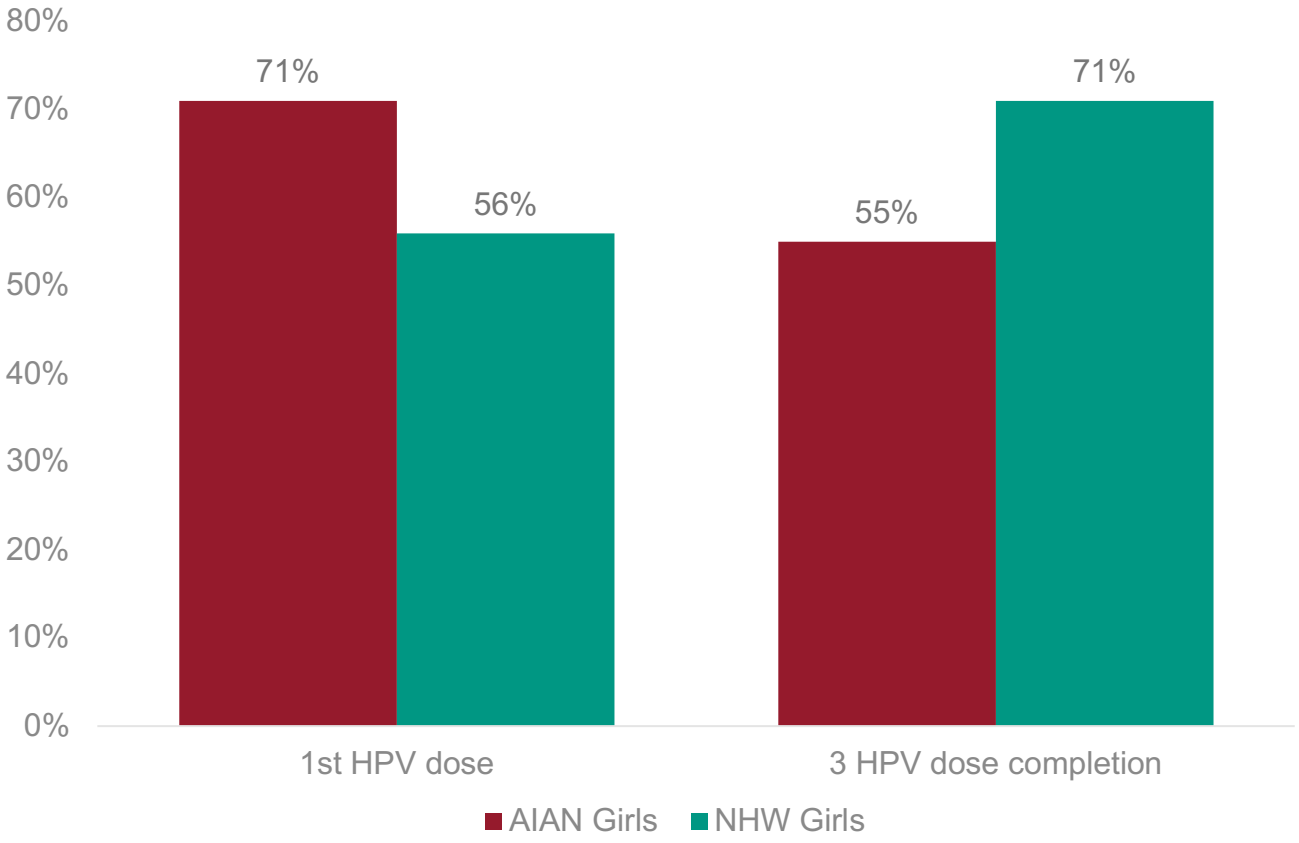
Becker et al, 2008; Washington State Cancer Registry, Washington State Center for Health Statistics

HPV Vaccine

- Three vaccines available since 2006
- The most recent vaccine, Gardasil 9, has an efficacy rate of **96.7%**
  - Protects against cervical and non-cervical cancers and some warts
  - Does not protect against existing infections
- Recommended for girls and boys aged 11-12yrs
  - Vaccination initiated before 15 years follow **2-dose** schedule
  - Vaccination initiated after 15 years follow **3 dose** schedule

Joura et al, 2015; CDC

HPV Vaccination Rates: US girls ages 13-17



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National Center for Immunization and Respiratory Diseases (CDC, 2014)

Exploratory Pilot Study:
Barriers and Facilitators to HPV Vaccine Uptake

Research Process: Partnership and Planning

- Fred Hutch Health Disparities Research Center
  - UIHI epidemiologists Alyssa Yang and Leah Dodge wrote grant and submitted proposal on HPV pilot project
- American Indian Cancer Foundation
  - Adapted focus group materials from similar project
- Seattle Indian Health Board
  - End deliverables designed for clinic practice at SIHB

Project Overview: Exploratory Study

Quantitative

- HPV vaccination rates from 2010-2015 patient data in urban Washington AIANs
  - Washington State DOH vaccination data
  - Factors such as sex, age at time of vaccination, and other vaccine history

Qualitative

- **Patient, (parent and child), focus groups exploring barriers and facilitators to receiving HPV vaccines**
  - Supplemented with key informant interviews
- Provider surveys exploring experiences and practices related to presenting and discussion HPV vaccines with patients

HPV Focus Groups

- Goals/Questions
- Recruitment
- Analysis
- Preliminary Results



Goal: Explore barriers and facilitators to HPV vaccination

Questions:

1. What factors most influence AIAN decision making around HPV vaccination?
   - Do particular factors serve more as **barriers** or **facilitators** to HPV vaccine uptake?

2. Where do AIANs get their information about HPV and the vaccine?
   - Do information sources influence decision making around HPV vaccines?

Focus Group Recruitment

Advertisement

- Flyers in clinic rooms, exam rooms, and program areas
- Advertisement on social media, (Facebook)
- Recruitment in clinic waiting rooms
- $35 gift card and transportation voucher offered

Enrollment

- 5 parent, (had children 11-17 years), participants
- 4 young adult, (18-26 years), participants

Focus Group Analysis

- Transcription
- Three coders
  - Two rounds of coding
- Dedoose Software Analysis
- Frequency of codes
- Code Co-occurance

Focus Group Results

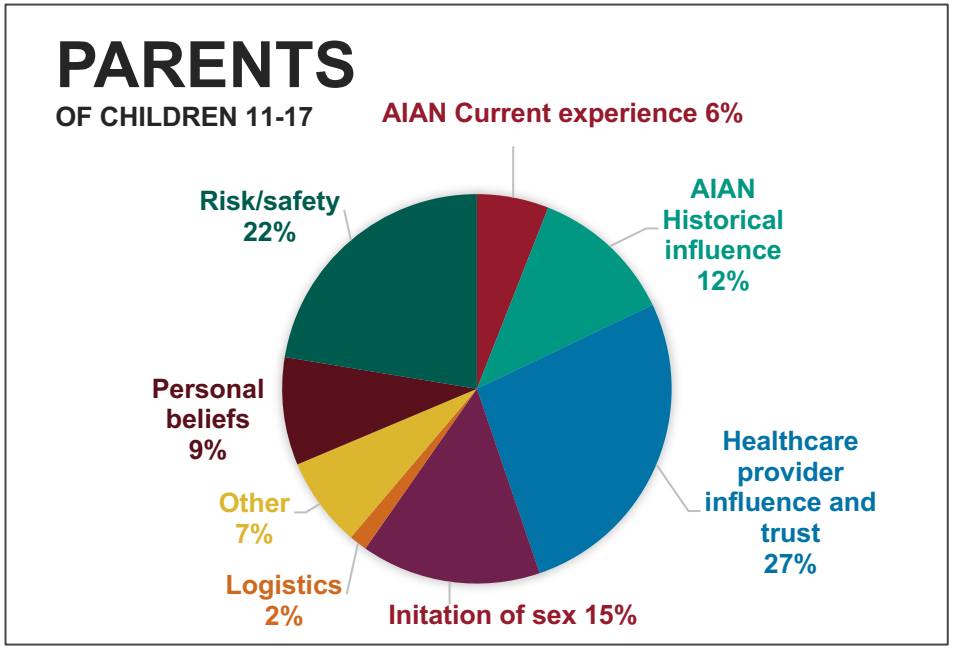
What factors most influence AIAN decision making around HPV vaccination?

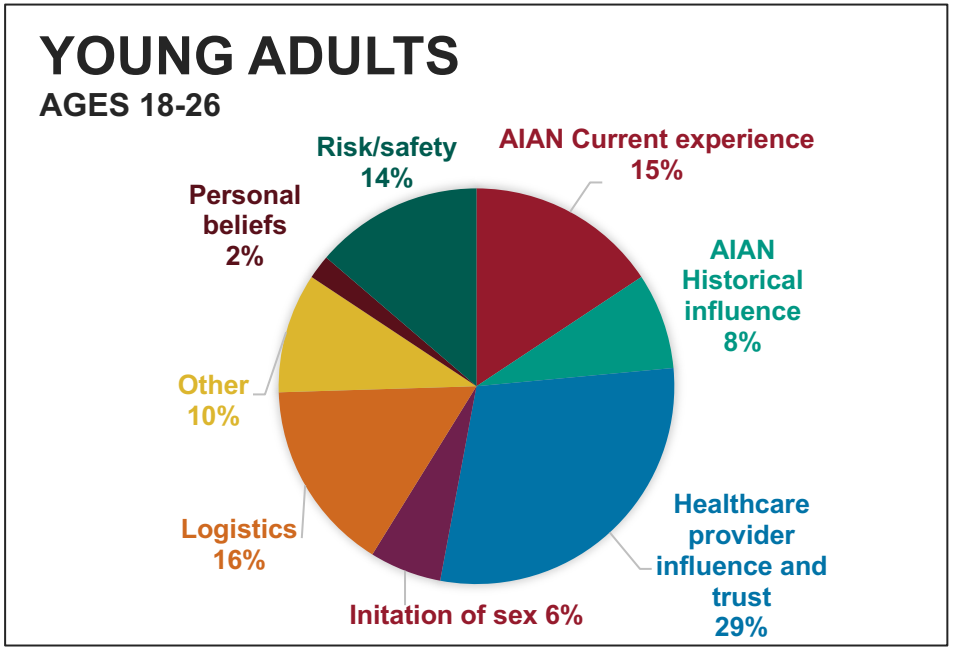
- **Codes identified from literature:**
  - AIAN Experience
    - Current
    - Historical
  - Healthcare Provider Influence and Trust
  - Initiation of Sex
  - Logistics
  - Personal Beliefs
    - Risks/Safety
  - Other

Factors:

Coded from focus group discussion.

- Healthcare provider influence and trust single most important factor
- Initiation of sex was a relatively a lessor occurring factor





Focus Group Results

What factors most influence AIAN decision making around HPV vaccination?

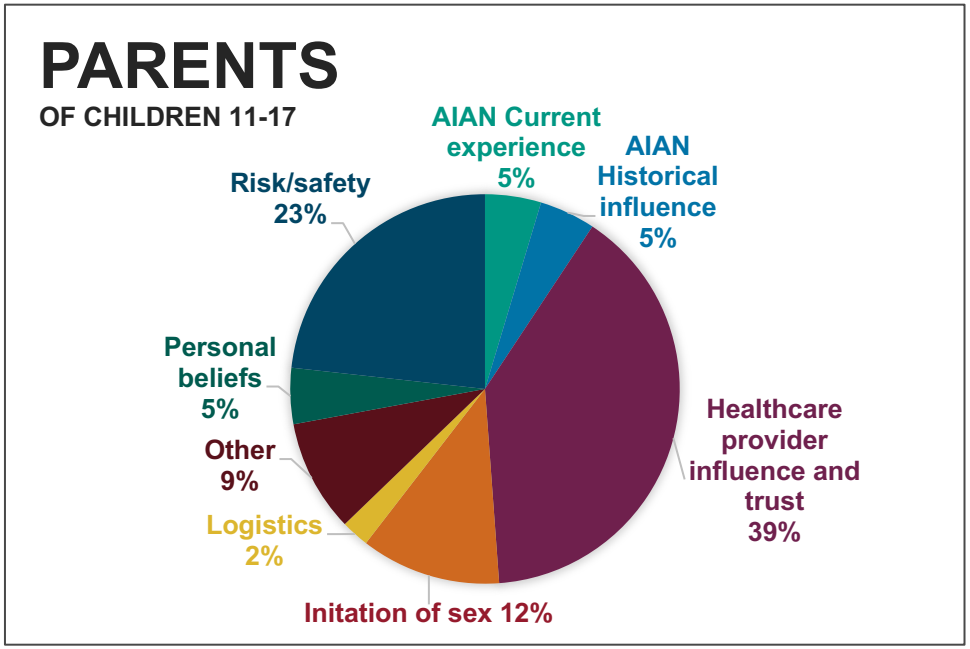


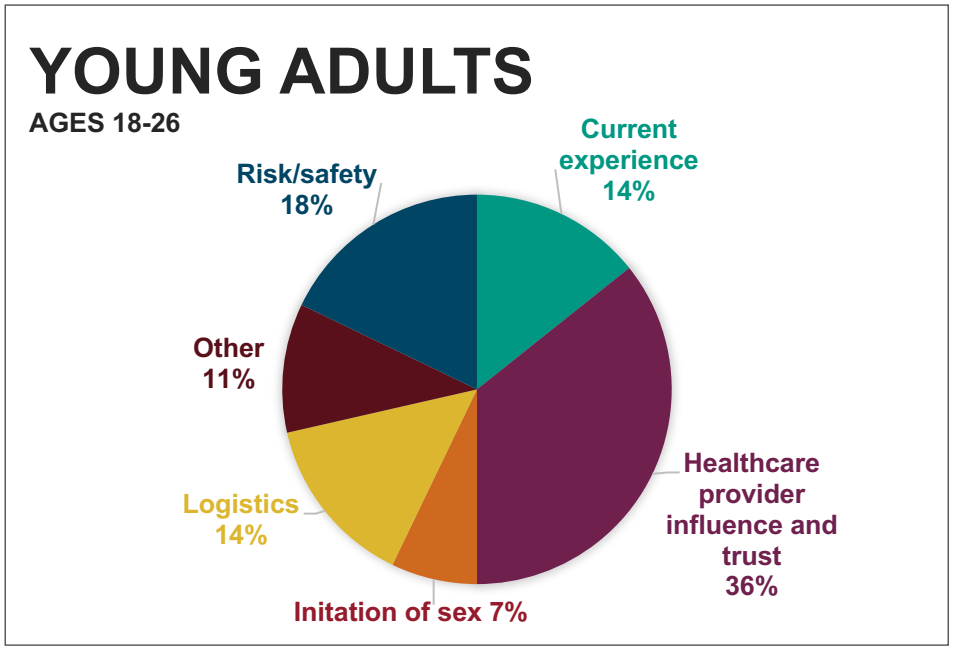
Do particular factors serve as barriers or facilitators?

Facilitators:

Factors co-occurring with reasons FOR receiving HPV vaccinations.

- Historical Influence an unexpected facilitator for parents
- Healthcare provider influence and trust highly prominent

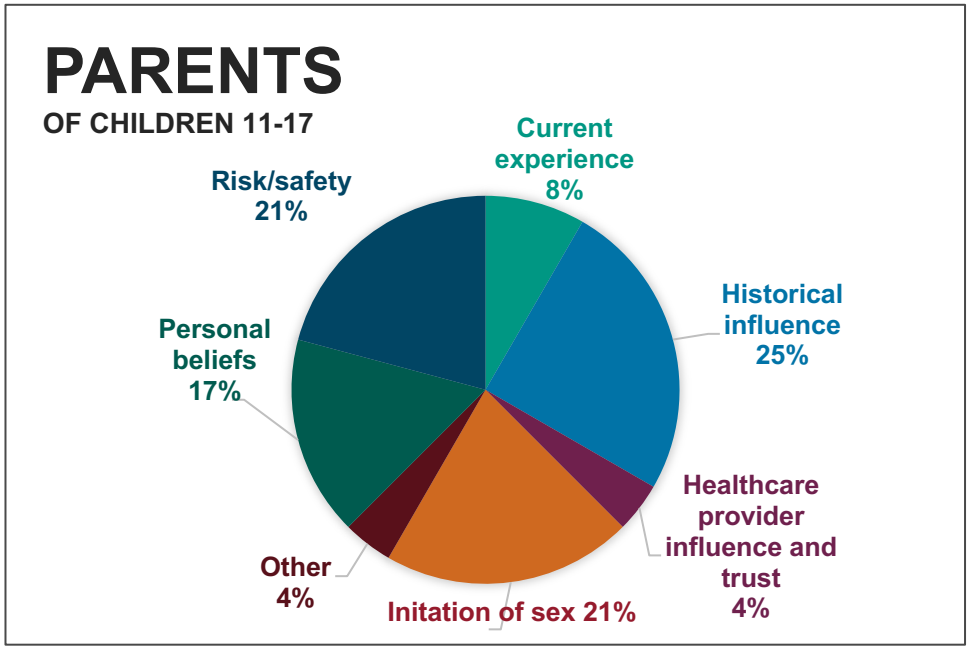


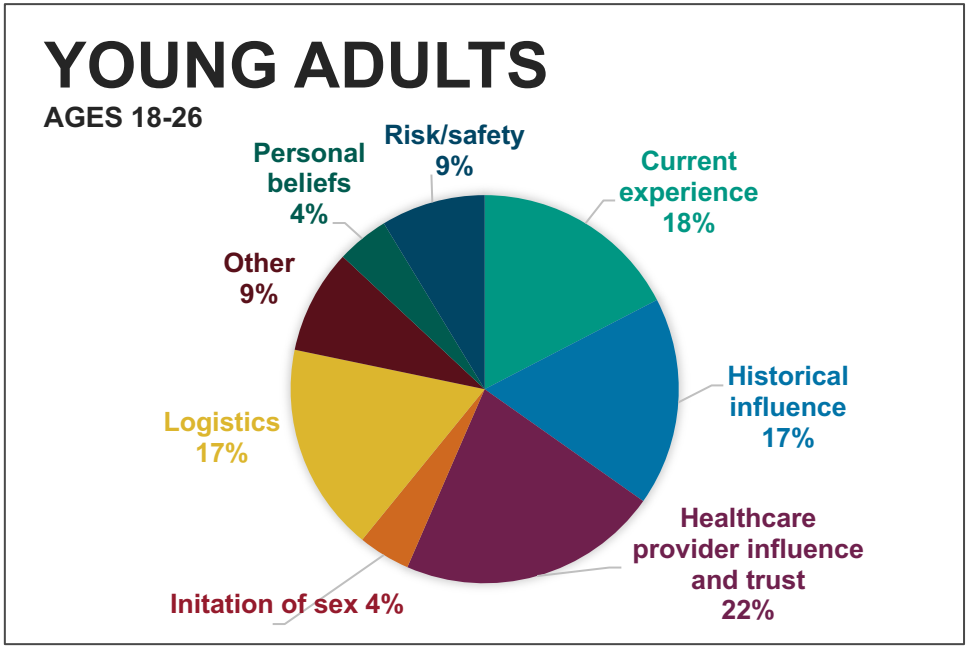


Barriers:

Factors co-occurring with reasons for NOT receiving HPV vaccinations.

- Healthcare provider influence less prominent,
- Historical influence much more prominent
- Initiation of sex a more prominently co-occurring with reasons not to vaccinate





Focus Group Results

Where do AIAN people get information about the HPV vaccine?

-and-

Do information sources influence decision making around HPV vaccines?

Focus Group Results

Number of codes for each information type:

Parent	All Information	%	To Vaccinate	%	NOT To Vaccinate	%
Healthcare Provider	10	71%	10	71%	0	0%
Internet	1	7%	1	7%	0	0%
Other	3	21%	3	21%	0	0%
All	**14**	**100%**	**14**	**100%**	**0**	**0%**

Young Adult	All Information	%	To Vaccinate	%	NOT To Vaccinate	%
Healthcare Provider	5	**45%**	5	**63%**	0	**0%**
Internet	4	36%	2	25%	2	**67%**
Other	2	**18%**	1	**13%**	1	**33%**
All	**11**	**100%**	**8**	**100%**	**3**	**100%**

Focus Group Main Takeaways:

- Relationship with healthcare providers the single most important factor influencing HPV uptake for both groups
  - Participants reported high trust relationships with urban clinic doctors
    - Some had the same doctor over several generations

"…If my doctor recommends it, and then my daughter can benefit, we'll just do it, that's what I really know about it. Not much." –Parent FG participant

"Its like we trust doctors so much if they say get it, we do it. I don't know. That's kinda' scary to think about." –Young Adult FG participant

Focus Group Main Takeaways:

- Both groups reported historical experiences as factors influencing HPV vaccination uptake
  - Differences in language and discussion around historical experiences between generations

"…when you go to see the doctor, you wanna be talking with a doctor who's like you, if that makes sense. There's no cultural competent care and mistrust from the history. If grandparents didn't take our parents and our parent's aren't gonna take us, it just trickles down." –Young Adult FG participant

"I think the biggest barrier in my own community…the barrier is fear. Why should we trust the government? …The government provides the vaccines. They're trying to kill us all. That's the mentality." –Parent FG participant

Focus Group Main Takeaways:

- Parents mainly get their information from healthcare providers, but reported their children get information from the internet
- Young adults reported getting their information from the internet!

"…my children, they're very smart…they have a world at their hands and they use it. "What's going on in Singapore? Mom, did you hear these German—" they can find anything! There is a way to reach them." –Parent FG participant

"I'd Google. Then after researching it, I would probably come here to get info." – Young Adult FG participant

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Conclusions and Future Work

Conclusions:

- Fostering trusting relationships with healthcare providers is a critical opportunity to increase HPV vaccine uptake in AIAN populations

- Important differences between generations in how information is accessed
  - For younger populations, the internet is an important source of information, often accessed *before* clinic visits

Future Work:

- Further assessment of vaccination rates among AIAN populations
  - Eliminate vaccination rate disparities

- Partner with clinics serving AIAN populations to facilitate trusting relationships and open communication with healthcare providers



Urban Indian Health Institute
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611 12th Avenue South, Seattle, WA 98144
Phone: (206) 812-3030 Fax: (206) 812-3044
Email: info@uihi.org Website: www.uihi.org