### 

Questions and concerns about HPV vaccine: A communication experiment

PARTH SHAH, PHARMD PHD PUBLIC HEALTH SCIENCES DIVISION FRED HUTCHINSON CANCER RESEARCH CENTER

Shah PD, Calo WA, Gilkey MB, Boynton MH, Alton Dailey S, Todd KG, Robichaud MO, Margolis MA, Brewer, NT. *Pediatrics*. 2019;142(2):pii: e20181872

## Disclosures

This study was funded by the CDC (PI Brewer: grant #3U48DP005017-03S6) and was also supported by a cooperative agreement from the CDC and the NCI (#U48 DP005017-01S8).

Funders played no role in: 1) study design; 2) the collection, analysis, and interpretation of data; 3) the writing of the report; or 4) the decision to submit the study for publication.

Brewer has served on paid advisory boards and/or received research grants from Merck, Pfizer and GSK. The other authors have no financial disclosures relevant to this article.

## Background

Many messages are available online to aid providers in communicating about HPV vaccine

However, little research has focused on which of these messages reduce hesitancy and why



## Communication experiment

- 1. The survey randomized parents to 7 common topics about HPV vaccine
- 2. For each topic, parents watched 4 videos of a pediatrician delivering a message addressing that topic
- 3. The survey asked parents to rate their **confidence** in HPV vaccine and **motivation** to get their child vaccinated after watching each video



## National online survey of U.S. parents

1,196 Parent of child ages 9 to 17

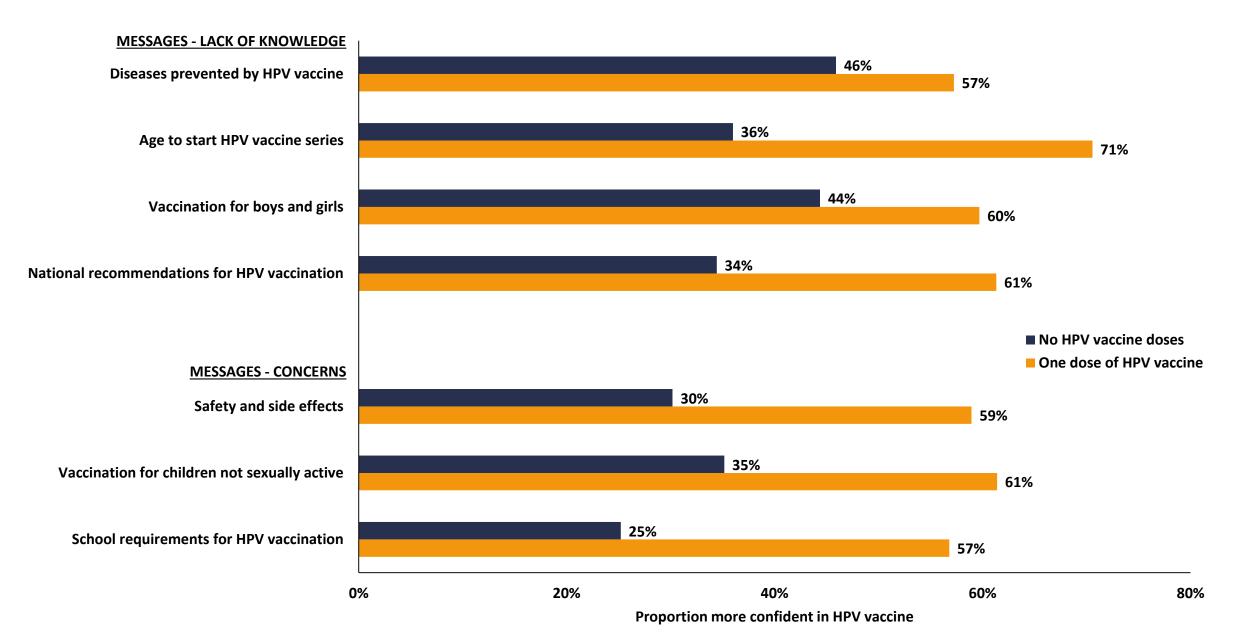
Child had either:

- 1) Not started HPV vaccine series
- 2) Initiated vaccination (1<sup>st</sup> dose), but did not complete series

# HPV vaccine information wanted from child's healthcare provider

Торіс	Wanted a little information %	Wanted a lot of information %	Wanted the most information about %
Safety and side effects	28	40	44 🛑
Diseases prevented by HPV vaccine	44	40	18
Age to start HPV vaccine series	43	39	12
Vaccination for boys and girls	37	30	8
Vaccination for children not sexually active	39	35	7
School requirements for vaccination	43	28	6
National recommendations for HPV vaccine	46	35	5

#### Parents who were more confident after message exposure



# Parents' motivation to get HPV vaccine after video message exposure

	means (SD)	Adjusted b
Message characteristics		
Topics		
Lack of knowledge/needed more information	2.51 (1.08)	.17*
Concerns	2.24 (1.09)	-
Reading grade level required	-	.01*
Length (seconds)	-	.03**
About cancer prevention		
Νο	2.33 (1.09)	-
Yes	2.52 (1.09)	.08**
Expressed urgency		
Νο	2.42 (1.09)	-
Yes	2.36 (1.10)	05*

## General communication principles

1. Include a cancer prevention message

Kids respond more strongly to HPV vaccine when they are younger. This may give better protection against some cancers.

## General communication principles

1. Include a cancer prevention message

2. Avoid expressing urgency when addressing questions or concerns

We are giving the HPV vaccine today so your child will have the best possible protection.

## General communication principles

1. Include a cancer prevention message

2. Avoid expressing urgency when addressing questions or concerns

3. Prepare to engage in longer conversations when parents express concerns

### Announce

#### Note child's age.

Announce children this age are **due** for vaccines that prevent several diseases, placing HPV cancers in **middle of list**.

Say you will vaccinate today.

Now that Sophia is 12, she is due for three vaccines. Today, she'll get vaccines against meningitis, HPV cancers, and whooping cough. If a parent hesitates...

## Connect

Ask the parent for their main concern.

Show the parent you are **listening**.

## Clarify

Use a research-tested **message** to address their concern.

### Counsel

Give a reason to vaccinate.

Clearly **recommend** getting HPV vaccine **today**.

© hpviq.org

#### Messages for the Clarify Step

- Age. Kids respond more strongly to HPV vaccine when they are younger. This may give better protection against some cancers.
- **Sex.** This really isn't about sex. The HPV vaccine is about preventing cancer.
- **Safety.** This vaccine is one of the most studied medications on the market. The HPV vaccine is safe, just like the other vaccines given at this age.
- Effective. Over 30,000 Americans get cancer from HPV every year. Most could be prevented with the HPV vaccine.
- **Guidelines.** Experts at the CDC agree that kids should get the HPV vaccine by age 11 or 12 to prevent several cancers.
- **Boys.** HPV infections don't care if you're a boy or girl. The virus can cause cancer and many other diseases.
- **Requirements.** School requirements don't always keep up with medical science. The HPV vaccine is an important vaccine that can prevent many cancers.



## **Evidence-based tools for HPV vaccine quality improvement**

Assessment and Feedback Tools

Boost Your

Communication Training Tools

15

## Acknowledgements

#### <u>UNC</u>

Noel Brewer, PhD Melissa Gilkey, PhD Marcella Boynton, PhD Susan Alton Dailey, MSW MPH Karen Todd, MD Marjorie Margolis, MPH Meagan Robichaud, MPH

#### Penn State William Calo, PhD JD

16



## THANK YOU

Email: pshah@fredhutch.org

**Twitter: @MedicareParthD**