Questions and concerns about HPV vaccine: A communication experiment

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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 (1st dose), but did not complete series
HPV vaccine information wanted from child’s healthcare provider

<table>
<thead>
<tr>
<th>Topic</th>
<th>Wanted a little information %</th>
<th>Wanted a lot of information %</th>
<th>Wanted the most information about %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety and side effects</td>
<td>28</td>
<td>40</td>
<td>44</td>
</tr>
<tr>
<td>Diseases prevented by HPV vaccine</td>
<td>44</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td>Age to start HPV vaccine series</td>
<td>43</td>
<td>39</td>
<td>12</td>
</tr>
<tr>
<td>Vaccination for boys and girls</td>
<td>37</td>
<td>30</td>
<td>8</td>
</tr>
<tr>
<td>Vaccination for children not sexually active</td>
<td>39</td>
<td>35</td>
<td>7</td>
</tr>
<tr>
<td>School requirements for vaccination</td>
<td>43</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>National recommendations for HPV vaccine</td>
<td>46</td>
<td>35</td>
<td>5</td>
</tr>
</tbody>
</table>
### School requirements for HPV vaccination

- **Vaccination for children not sexually active**
- **Safety and side effects**
- **National recommendations for HPV vaccination**
- **Vaccination for boys and girls**
- **Age to start HPV vaccine series**
- **Diseases prevented by HPV vaccine**

#### MESSAGES - LACK OF KNOWLEDGE

<table>
<thead>
<tr>
<th>Topic</th>
<th>Proportion More Confident in HPV Vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases prevented by HPV vaccine</td>
<td>46%</td>
</tr>
<tr>
<td>Age to start HPV vaccine series</td>
<td>36%</td>
</tr>
<tr>
<td>Vaccination for boys and girls</td>
<td>44%</td>
</tr>
<tr>
<td>National recommendations for HPV vaccination</td>
<td>34%</td>
</tr>
</tbody>
</table>

#### MESSAGES - CONCERNS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Proportion More Confident in HPV Vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety and side effects</td>
<td>30%</td>
</tr>
<tr>
<td>Vaccination for children not sexually active</td>
<td>35%</td>
</tr>
<tr>
<td>School requirements for HPV vaccination</td>
<td>25%</td>
</tr>
</tbody>
</table>

### Proportion more confident in HPV vaccine

- **No HPV vaccine doses**
- **One dose of HPV vaccine**

**MESSAGES**

- **Concerns**
- **Lack of knowledge**

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

- **MESSAGES - LACK OF KNOWLEDGE**
  - Diseases prevented by HPV vaccine: 46% more confident
  - Age to start HPV vaccine series: 36% more confident
  - Vaccination for boys and girls: 44% more confident
  - National recommendations for HPV vaccination: 34% more confident

- **MESSAGES - CONCERNS**
  - Safety and side effects: 30% more confident
  - Vaccination for children not sexually active: 35% more confident
  - School requirements for HPV vaccination: 25% more confident
Parents’ motivation to get HPV vaccine after video message exposure

<table>
<thead>
<tr>
<th>Message characteristics</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topics</strong></td>
<td><strong>means (SD)</strong></td>
<td><strong>Adjusted b</strong></td>
</tr>
<tr>
<td>Lack of knowledge/needed more information</td>
<td>2.51 (1.08)</td>
<td>.17*</td>
</tr>
<tr>
<td>Concerns</td>
<td>2.24 (1.09)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Reading grade level required</strong></td>
<td>-</td>
<td>.01*</td>
</tr>
<tr>
<td><strong>Length (seconds)</strong></td>
<td>-</td>
<td>.03**</td>
</tr>
<tr>
<td><strong>About cancer prevention</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2.33 (1.09)</td>
<td>-</td>
</tr>
<tr>
<td>Yes</td>
<td>2.52 (1.09)</td>
<td>.08**</td>
</tr>
<tr>
<td><strong>Expressed urgency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2.42 (1.09)</td>
<td>-</td>
</tr>
<tr>
<td>Yes</td>
<td>2.36 (1.10)</td>
<td>-.05*</td>
</tr>
</tbody>
</table>

*p*<.05; **<.001
MLM adjusted for parent and child characteristics
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**.

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**Clarify**

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

**Counsel**

Give a reason to vaccinate.

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

Communication Training Tools

Boost Your HPV IQ
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