Parental and Provider Attitudes on the HPV Vaccine Recommendation in North Dakota

Danielle Pinnick,ceb Molly Howell, MPH,c Tracy Miller, MPH, PhD

BACKGROUND
Human Papillomavirus is the most common sexually transmitted disease in the United States, highest in both prevalence and incidence.1 While some strains cause genital warts, the large majority of strains may lead to abnormal cell development and cancer. HPV infection is a causative agent for a number of cancers, including cervical, vaginal, anal, and oropharyngeal.2 Two vaccines introduced in the past decade provide immunity to the “high-risk” strains of HPV that lead to cancer, but uptake on these vaccines nationwide and in the state of North Dakota remains low, despite vast evidence showing safety and efficacy.3,4

OBJECTIVE
To assess parental and provider opinions on the HPV vaccine and determine target areas for improvement in its recommendation.

RESULTS: PROVIDER SURVEY (n=135)
Recommendation Strength
Choice or Necessity
Similarity to Other Adolescent Vaccines

RESULTS: PARENT SURVEY (n=195)
Parental Demographic Correlation to vaccine acceptance

Accepted/Plan to Vaccinate Declined/Do Not Plan to Vaccinate

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>not at all</th>
<th>Somewhat</th>
<th>Very</th>
<th>Total</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPV vaccine was not required for school</td>
<td>8</td>
<td>10</td>
<td>5</td>
<td>45</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Child is not going to receive the vaccine</td>
<td>26</td>
<td>9</td>
<td>8</td>
<td>43</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Worried this would change child's attitude about sexual activity</td>
<td>10</td>
<td>6</td>
<td>5</td>
<td>30</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Not needed</td>
<td>15</td>
<td>5</td>
<td>2</td>
<td>22</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Disease or cancer</td>
<td>36</td>
<td>6</td>
<td>2</td>
<td>48</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>not at all</th>
<th>Somewhat</th>
<th>Very</th>
<th>Total</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why not to vaccinate</td>
<td>8</td>
<td>10</td>
<td>5</td>
<td>45</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fear about cost</td>
<td>10</td>
<td>8</td>
<td>5</td>
<td>23</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES
13. The output, code, and data analysis for this presentation was generated using Qualtrics software. Version 2016.2.593. Copyright © 2016 Qualtrics. Qualtrics and all other Qualtrics product or service names are registered trademarks or trademarks of Qualtrics, Inc., UT, USA. http://www.qualtrics.com.

CONCLUSION
Parents who had vaccinated or intended to vaccinate their children against HPV selected trust in a health care provider recommendation as the main reason, while those refusing the vaccination most commonly indicated safety concerns. Conversely, when asked to speculate on why they thought parents refused this vaccine, providers most commonly selected that parents felt the vaccine was unnecessary – highlighting a possible disconnect between the two groups during the medical encounter. Educating North Dakota’s healthcare providers on how to address safety concerns with parents may have a positive impact on vaccine uptake. For providers, demographics such as occupation, years in specialty, age, and acceptance of vaccine for their own children correlated with stronger vaccine recommendations and confidence. For parents, demographics correlations with acceptance of the HPV vaccine set included those reporting as unaffiliated with organized religions and those in the 45 to 54 year-old age range.

a) North Dakota Department of Health–Division of Disease Control b) North Dakota State University Department of Public Health