Human papillomavirus: Does increased health care provider knowledge result in increased vaccine uptake?

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discover OPPORTUNITY

BACKGROUND

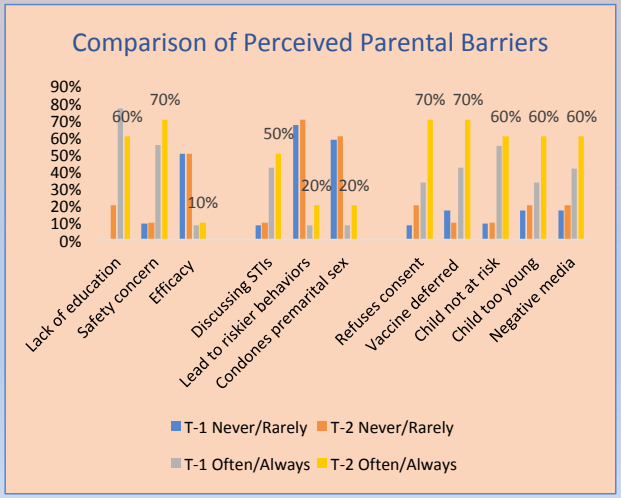
- Human papillomavirus (HPV) is responsible for cancers in over 30,700 men and women each year in the U.S.
- Routine vaccination is recommended for adolescents ages 11 to 12
- Provider recommendation is a strong predictor of the vaccine's uptake
- Lack of knowledge among providers is a known barrier to recommendation including the following:
  - Current CDC guidelines
  - Disease burden
  - Sexual risk-taking
  - Vaccine safety and efficacy
  - Addressing parental concerns
- The purpose of this program evaluation was to examine how the application of evidence-based education designed to increase knowledge specific to the HPV and the HPV vaccine among health care professionals in a northern Idaho health district impacted perceived barriers, recommendation, and uptake of the HPV vaccine in the target population

METHODS

- An in-person evidence-based PowerPoint presentation was delivered to staff representing the five Idaho Health District 1 clinics (PHD)
- An anonymous online survey, adapted from ***HPV-HINTS***, was completed by participants one week prior to and again three months after the intervention to determine change in HPV and HPV vaccine knowledge, perceived barriers to the vaccine's uptake, and recommendation practices (n=15/n=10)
- Vaccine rates among patients ages 11 to 12 years served by the PHD clinics were compared pre- and post-intervention employing the CDC CoCASA platform (2017 calendar year: n=234/n=252)

RESULTS

- Knowledge scores were initially high with overall increased scores among those who completed both surveys
- System barriers were perceived as low at the time of both surveys whereas parental barriers were perceived as high initially with an increase at the time of the second survey
- Change in recommendation practices reflected a decrease for females and an increase for males, resulting in consistent recommendation for all patients
- Although rates of patients receiving one or more dose(s) and those up to date decreased slightly, rates of missed opportunities for the district as a whole decreased following the intervention



DISCUSSION

- Identified knowledge gaps were consistent with current literature
- Staff responses to the second survey indicated an increased awareness of parental barriers to the vaccine's acceptance
- Increased recommendation practice specific to males could indicate an increase in knowledge specific to disease burden in this population
- Reduction in overall missed opportunities to vaccinate demonstrated a change in practice following the intervention

LIMITATIONS

- Small survey sample size limited the ability to generalize findings
- The 2017 change to the recommendation schedule coupled with a limited window of observation hindered the ability to determine change in vaccine rates following the intervention

IMPLICATIONS FOR PRACTICE

- When confronted with parental barriers to the uptake of the HPV vaccine, professionals are more likely to not recommend the vaccine or recommend deferring its receipt. Continued efforts that support professional knowledge specific to HPV and tools to address parental concerns are warranted.

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Reference:
Vadaparamil, S., ... & Giuliano, A. (2011). Missed clinical opportunities: Provider recommendations for HPV vaccination for 11-12 year old girls is limited. *Vaccine; 29*(47), 8634-8641. doi: 10.1016/j.vaccine.2011.09.006