2015

Increasing Awareness of the HPV Vaccine

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INCREASING PUBLIC AWARENESS & KNOWLEDGE OF THE HPV VACCINE

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November 2015

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PROBLEM

- More preteens and teens could be receiving the HPV vaccine
  - Guidelines recommend ages 9 – 26
- At TCHC, there were largely 2 camps of unvaccinated children I saw:
  - Those whose parents held personal beliefs about the vaccines or the immune system
  - Those who had not yet been educated on HPV or the vaccine
- Most patients I saw in their 20s had started the vaccine
- The majority of preteens and teens I saw had not received the HPV vaccine
- It may be too late to wait until patients can decide for themselves
- The parents that are lacking education should be identified and receive it
- It may be impossible to change some patient's personal beliefs

COST & BURDEN IN U.S.

- Cost of HPV infection for both men and women [1]
  - Estimated lifetime total cost ages 15–24 y.o. = $2.9 billion
  - Treatment of anogenital warts in all age groups in year 2000 = $167.4 million
  - Only HIV is more expensive in terms of STI
- Cost of annual cervical screening and treatment for HPV-related disease [2]
  - Estimated avg. $26,415 per 1000 women
  - Ages 20 – 29 avg. $51, 863 per 1000 women due to higher prevalence
  - Estimated $3.4 billion annually
  - 90% of cost attributed to strategies for prevention
    - Treatment of precancerous lesions
    - Routine paps and guideline recommendations
  - 10% of cost due to treatment of cancer

COMMUNITY PERSPECTIVE

- MA, 18F, patient at TCHC
  - Currently 8 months pregnant and unvaccinated against HPV
  - Did not get vaccine because she is afraid of needles
  - Was not aware that HPV could cause cancer or how common it is
  - Willing to receive vaccine after receiving educational information
  - May already be too late for MA given she is already sexually active
- IW, 16F, patient at TCHC
  - Currently unvaccinated
  - Mother does not want vaccine because she believes "body can fight the infection"
    - Interestingly she requested a flu vaccine
  - IW stated "I'm not of legal age to be sexually active"
  - When counseled alone and provided educational information, Ivy changed her mind
  - We still need to convince Ivy's mother

INTERVENTION

- Target under-educated population with patient handout
  - Under-educated = does not know about complications of HPV infection
- Educate all patients ages 9 – 26 and their parents
- Specifically address in lay terms 3 main areas:
  - Define what HPV is
  - Describe what HPV can cause
  - Explain why the HPV vaccine is recommended for children
- Provide additional sources of information

RESPONSE

- The most common reason for declining vaccine after receiving educational information was due to a parent's personal beliefs
- Among unvaccinated patients who were unaware of HPV complications, most were willing to receive vaccine after receiving educational information
- Most preteens and teens were willing to receive vaccine when counseled alone, but they always deferred to the parent's decision
- Parent's personal beliefs against vaccines were wide ranging:
  - "lack of safety data"
  - "body can fight the infection"
  - "not sexually active yet"

EFFECTIVENESS & LIMITATIONS

- The intervention was effective in the population of patients that had not been informed of the potential complications of HPV infection
- The intervention was not effective when a parent declined due to personal beliefs against the vaccine
- The results were limited by a small sample size:
  - TCHC is not primarily a pediatric clinic
  - The length of the intervention thus far has only been 5 weeks
- The intervention is also challenged by the fact that decision making capacity is deferred to parents in most of the target patients

RECOMMENDATIONS

- Really focus on targeting parents with education when children reach the age of 9, which is current recommended guideline
  - Most persuasive point = increased efficacy when given at younger age
- The intervention is effective in the right population
  - Identify those who have not received educational information
  - Assume everyone is under-educated until they are vaccinated
- It may be impossible to change some patient's personal beliefs
  - Provide these patients with educational information and support their decision
- Unfortunately some patients are at risk due to their parent's decisions
  - Counsel these patients alone at every visit and provide educational information
  - Given time patients whose parents decline may request on their own

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- 3. Villa LL, Ault KA, Giuliano AR, et al. Immunologic responses following administration of a vaccine targeting human papillomavirus Types 6, 11, 16, and 18. Vaccine 2006; 24:5571.
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