

Analysis of Rural Primary Care Practice HPV Vaccination: A prospective analysis of parents' perception and intent to vaccinate with Gardasil 9 in Gibson Area Hospital Affiliated/Owned Primary Care Clinics

Ashley S. Randle-Mallory

Rural Student Physician Program, Department of Family and Community Medicine
University of Illinois College of Medicine at Peoria

Introduction/Background

According to the CDC, the human papillomavirus (HPV) is the most common sexually transmitted infection in the US. HPV has an extensive virology associated with symptoms: genital warts (subtypes 6,11) as well as cervical, vaginal, vulval, penile, and anal malignancy (16, 18, 31, 33, 45, 52, and 58). If HPV remains in the body, symptoms may manifest early or later in life depending on the infecting viral subtype. GARDASIL 9 is the newest HPV vaccine that protects females (ages 9-26) and males (ages 9-15) against more viral subtypes (6,11, 16, 18, 31, 33, 45, 52, and 58) than Gardasil (6, 11, 16, and 18). In addition to its 97% efficacy in prevention against anogenital warts and malignancies, if taken as advised, its side effects are mild. The Ford County Public Health Department (FCPHD) identified low HPV vaccination rates as one of 3 priorities identified for the new 2014-2019 Ford County Illinois Community Health Plan. The purpose of this study is to understand core beliefs, education, and willingness to vaccinate with the Gardasil 9 vaccine in parents and young adult women (YAW ages 18-26).

Methods

The study is a continuation of a retrospective analysis done last year. In the emergence of the new HPV vaccine, this study became a prospective analysis that identified whether parents and YAW, would be more likely to consent to the vaccination of their children and themselves, respectively. Two separate surveys were created: one for all parents and one for all YAW. Participants visiting local Ford County clinics were surveyed anonymously for one month to analyze three contributing factors influencing themes pertaining to HPV vaccinations: knowledge, beliefs about the virus/Gardasil 9, and intent/willingness to vaccinate. The willingness and influential barriers to vaccinate as recommended were explored most specifically. Preferential locations to receive vaccinations, in effort to create convenience and encourage active vaccinations of children and young adults were identified as well. Statistical analyses were performed to determine a significant difference between demographics and willingness, if p-values <0.05. Frequencies and percentage of responses were stored in Excel.

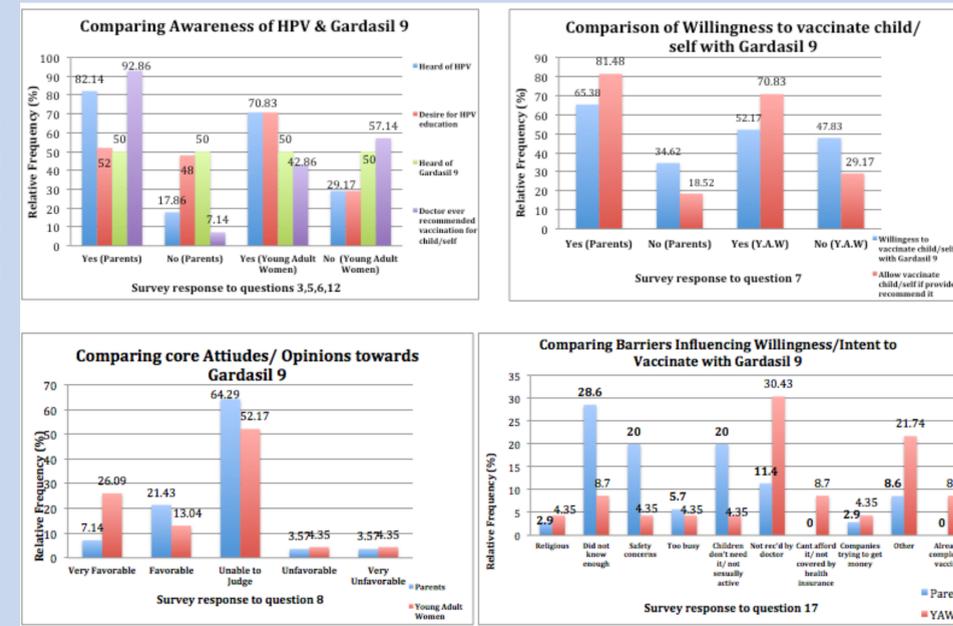
Results

•A total of 58 participants completed the survey. 6 surveys were excluded based upon series completion and ambiguous responses. 28 (53.84%) surveys were completed by parents and 24 (46.15%) were completed by young adult women. 2 participants from both groups completely declined vaccine. Based upon retrospective study, clinic patient population is approximately 7,252. The survey population represents less than 1% of clinic population.

•P-values for each of the comparisons between both groups were greater than 0.05, so we accept the null hypothesis that there is NO difference in awareness (P value=0.4435), willingness to vaccinate (P value=0.4435), and attitudes (P value =1) towards Gardasil 9. There is also no difference in barriers between both groups either.

•The null hypothesis for the barriers influencing willingness to vaccinate children (in the parental group) and self (in the Y.A.W group) was also accepted (P-value=0.9985). There was no difference observed between both groups.

•In regards to making a correlation between the 11 survey demographics and willingness to vaccinate, there was only a significant statistical difference observed in health insurance (public aid vs private) of the parental group. Parents' willingness to vaccinate their children when covered by public aid (P-values=0.013)



Conclusions

•Considering the very small sample size, it is difficult to truly say that there is a difference between both groups in awareness, willingness, attitude, and barriers.

•The significance in survey question 7 demonstrated that parents with public aid were more likely/willing to allow their children to be vaccinated with Gardasil 9 than those with private health insurance.

•In monitoring overall responses between both groups and the 3 themes, most of the participants were reportedly...:

- More aware of HPV and Gardasil 9 (although relatively new).
- More willing to vaccinate child/self with Gardasil, in general, if provider recommended it and it was funded
- Unable to judge or have a significant opinion towards Gardasil 9

Discussion

•Preferential locations, in order of most to least desirability, were clinics, hospitals, pharmacy/public health department.

•According to one study, practical methods that would increase HPV vaccination rates include county-sponsored social marketing campaign that increases awareness about the virus and its pathological course through media (television, radio, informational advertisements in clinics and heavily populated businesses such as grocery/large department stores); this is a recommendation for where to allocate the FCPHD IPLAN funding.

•In performing this study, more time would be needed to focus on one or both populations, ensure patients' understanding of difference between Gardasil and Gardasil 9, and better involvement with nursing/clinic staff would lead to a increase sample size.

References

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