

## Background

- Two hundred Human Papillomaviruses (HPV) viruses. HPV types 16 and 18 cause most HPV related cancers (NCI, 2015).
- Incidence of 14 million HPV cases yearly (NCI, 2016)
- Influence of social media, such as Twitter, Facebook, e-mail, and text messaging, have a significant impact on how we make everyday decisions.
- In 2006, the FDA introduced GARDASIL, an HPV vaccine, as a public health intervention (CDC, 2016).
- HPV vaccine: recommended for girls and boys beginning at age 11.
  - Two doses for ages 11 up to age 15
  - Three doses if beginning the HPV vaccine at age 15
- The vaccine is most effective prior to any sexual debut.
- HPV type cervical cancers have declined with the introduction of the HPV vaccine
- The HPV vaccine is underutilized (National Cancer Institute, 2015)
- Healthy People 2020 Objective: 80% of boys and girls ages 13 to 15 fully vaccinated against HPV
- African American children are under vaccinated against HPV
- Poor Uptake of the HPV vaccine is related to:
  - Low educational levels
  - Low income
  - Racial/ethnic background
  - High cost of the vaccine
  - Lack of provider initiation of discussion of the HPV vaccine (Wong & Do, 2012)

## Purpose

- Identify the impact social media education for parents and guardians may have on the uptake of the HPV vaccines.
- According to the CDC a higher proportion of African American children are under vaccinated for HPV (2013).

## Methods

### Design and Sample

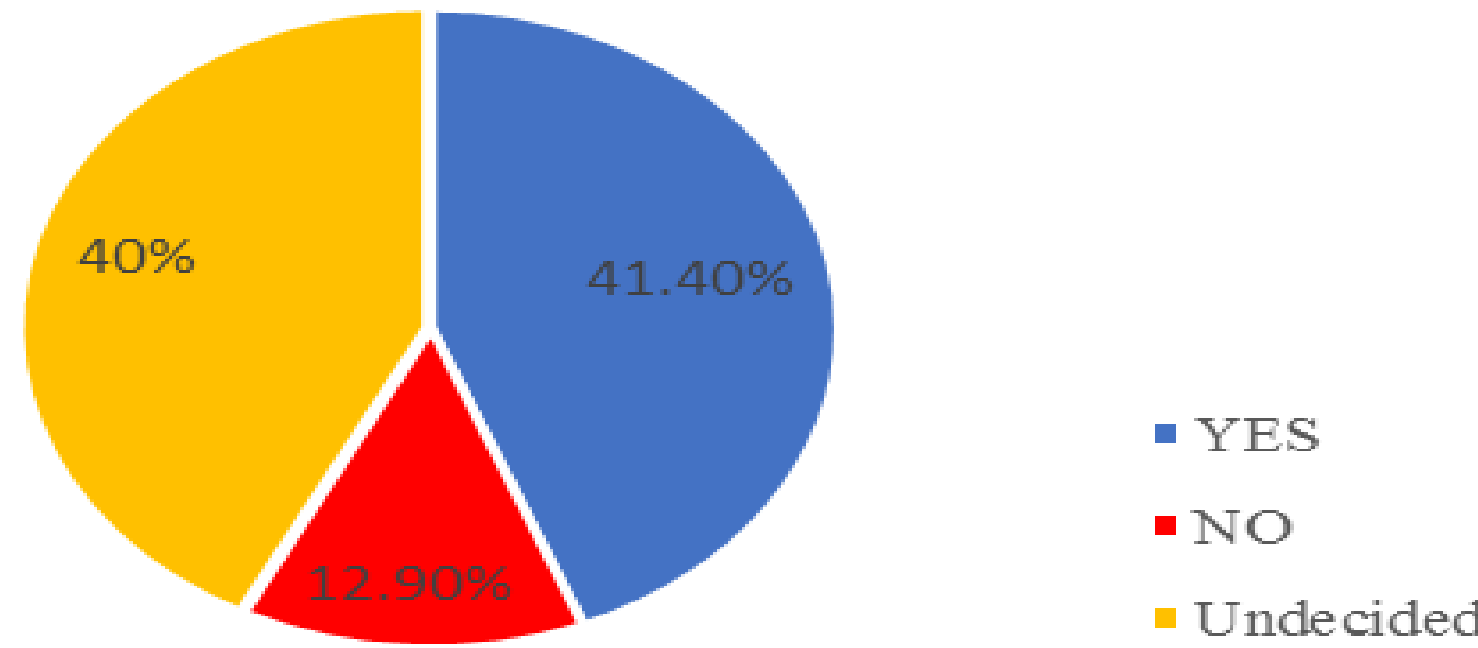
- Pre/posttest design
- Convenience sample of parents and guardians of African American preteens and teens ages 11-17 volunteered to measure the changes in uptake of the HPV vaccine after exposure to social media education (n=73)
- Pre/post survey included questions that assessed knowledge, attitude, and behavioral intentions related to HPV vaccine.
- Centers for Disease Control and Prevention’s educational videos, print materials, and webinars used to educate/promote the HPV vaccination.
- Disseminated through Facebook, Twitter, kiosks, e-mail, and text message
- TransTheoretical Model (TTM) used as project basis.
  - Appropriate model: parents/guardians progress through stages of changes while learning about HPV and the HPV vaccine

## Results

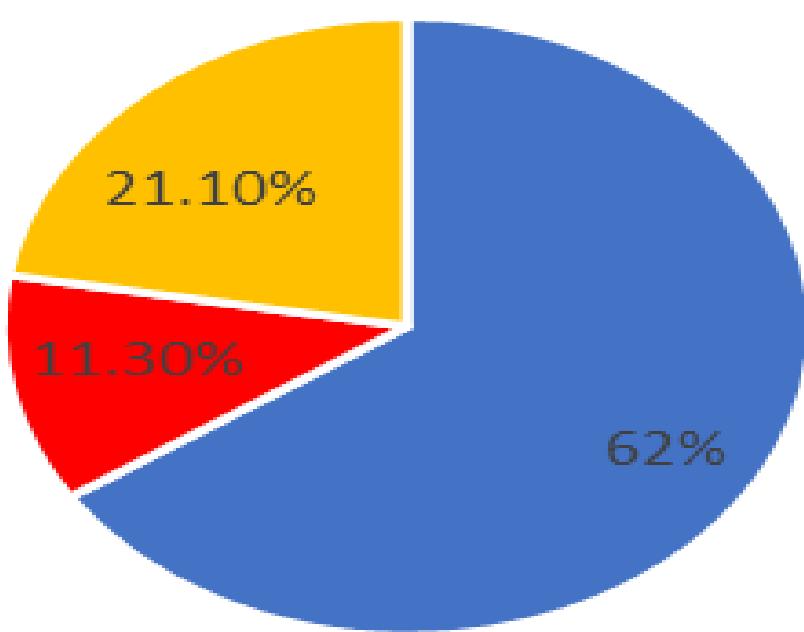
- Final sample of 73; eliminated 28 due to not meeting criteria.
  - 72.6% had four years of college or more.
  - 64.4% reported an annual income of \$75,000 or higher
  - Sample not typical in terms of education and income level for poor uptake of the HPV vaccine
- Prince George’s County has 40 zip codes, representing 23 cities
- The HPV SOME Pilot Project reached 15 zip codes representing 9 cities
  - Including 20743 zip code, Health Enterprise Zone( HEZ): medically underserved, no practicing primary care physicians and only one healthcare clinic to serve its 38,621 residents (DHMH, 2012).
  - Reaching a few residents in the 20743 zip code via social media is encouraging and may serve as a platform for future social media education pilot studies
- All survey questions demonstrated significance p-value < 0.05(Chi-square test).
- Parents’ and guardians’ knowledge, beliefs and intent to vaccinate their children were all influenced positively.
  - Increase from 41.4% to 62 % for parents’ and guardians’ that intended to vaccinate against HPV

## Results Continued

Pre Intervention



Post Intervention



Figures 1 and 2.Comaparison of parent/guardian’s intent to vaccine against HPV pre/post social media education intervention

- Common themes of barriers against HPV vaccination include:
  - Lack of readiness on the parents’ part
  - Concern the vaccine is too new
  - Distrust that the HPV vaccine can prevent some HPV related cancers
  - Disagreement on the HPV vaccination between spouses
  - Uncertainty about the side effects
- Themes that remain an educational barrier include:
  - The preteen/teen is not sexually active
  - Abstinence is taught in the home

## Conclusion

- Social media
  - An excellent method to disseminate health education
  - Can be the “go-to” place for public discussion regarding public health.
  - Social media is increasing as a platform for information exchange (Fox, 2011, Gustafson & Woodworth, 2014).
- HPV SOME pilot guided by the TTM: potentially a low-cost method to assist participants through the stages of change toward vaccination against HPV
- Healthy People 2020: Call to action for all states to align with the HPV vaccine objective
- Crucial: United States must effectively use HPV vaccine tool to help reduce HPV related infections and HPV related cancers in our nation
- Additional investigation is needed to explore other barriers aside from education and socioeconomics in parents of African American preteen/teens
- Social media education may prove effective for evidenced based health information for future health relate topics.



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