

Social networking websites for health communication: Social support and misinformation surrounding human papillomavirus

¹ Rachel Caskey, MD, MAPP, Sections of General Pediatrics and General Internal Medicine, University of Illinois at Chicago, Chicago, IL

² **Marissa Rousselle**, MPH, Community Health Science, University of Illinois at Chicago School of Public Health, Chicago, IL

³ G. Caleb Alexander, MD, MS, Section of General Internal Medicine, University of Chicago, Chicago, IL

DEFINITIONS

- **Health Seeker:** An individual who searches for health information online
- **Web 1.0:** Static web pages with 'read-only' content
- **Web 2.0:** Applications that facilitate interactive information sharing and user-created
- **Social Networking Site (SNS):** Online space that allow individuals to present themselves, articulate their social networks, establish and maintain connection with others
- **Web 3.0:** Read-Write-Execute Web, organized and streamlined access to existing web-based content

PURPOSE

- This study is necessary to evaluate the content and quality of HPV-related information available on the two most popular social networking sites, Facebook and MySpace.
- To our knowledge, the use of SNS for health communication, particularly around sexual health issues such as HPV, has not yet been widely studied.

BACKGROUND

Internet and Social Networking Sites

- In 2009, 93% of American teens 12-17 years old and 79% of adults went online
- 73% of teens and 47% of adults had a SNS profile
- Facebook and MySpace are the most popular SNS
- There may not be a digital divide with regard to SNS access for youth

Online Health Seeking

- 68% of teens and young adults ages 15-24 search for health information online
 - 44% sought information about sexual health topics
 - 39% changed their personal behavior based on information they found online
- 79% of adults are online health seekers
 - 16% sought information regarding vaccination
 - 11% regarding sexual health topics

Human Papillomavirus

- HPV is the most common sexually transmitted infection in the US
- HPV causes 99% of all cervical cancers
- There are two vaccines currently approved for use by the FDA: Gardasil is approved for use in females and males 9-26 years old; Cervarix approved for use in girls alone
- The Advisory Committee on Immunization Practices recommend routine vaccination of girls 11 to 12 with either vaccine

METHODS

- Cross-sectional document analysis was performed on publicly available text collected from MySpace and Facebook, December 2007 through July 2008
- Purposive sampling of public SNS domains including profiles, blogs, and forums using search terms: Human Papillomavirus, HPV, cervical cancer, HPV vaccine, and Gardasil (N=124)
- The codebook was developed *in vivo* for a 10% random stratified sample
- Inter-rater reliability was assessed with a resultant average percent agreement of 95.2%
- Grounded theory was used to code data with Atlas.ti

RESULTS

- A number of uses for SNS regarding Health Communication around HPV were identified: (1) Share personal experiences with HPV infection, cervical cancer, and the HPV vaccine; (2) Provide facts about HPV; (3) Ask questions and obtain answers; (4) Support and encouragement; (5) Discussion of current events; (6) Organize, advocate, fundraise
- However, the quality of information shared is a concern as it was often medically incorrect, lacked a credible source, and perpetuated common misconceptions and stigmas surrounding HPV.

RECOMMENDATIONS

- Use SNS for free, readily accessible, rapid qualitative research
- Public Health should be at the forefront of the Web 3.0 movement
- Public Health agencies with credible health information should actively promote their resources
- Promote population-level health literacy
- Hold journalists accountable to accurately represent health issues in the news

CONCLUSIONS

- Internet-based social media may be an appropriate channel to examine popular opinions on emerging health topics
- Social Networking Sites hold promise to engage individual health consumers through interactive health promotion messaging