

What Drives Health Professionals to Tweet About the HPV Vaccine?

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

[Latoya Simmons] Welcome to this edition of *PCD Sound Bites*. I'm your host, Latoya Simmons. Every year in the United States, 31,000 women *and* men are diagnosed with a cancer caused by the human papillomavirus, also known as HPV. Many of these cancers can be prevented by getting the HPV vaccine. People are using social media, particularly Twitter, to look for health information and communicate about their health. As a result, researchers have started to look at how health professionals are using social media to relay health information. Today, I'm speaking by phone with Dr. Philip Massey, an assistant professor at Drexel University in Philadelphia, Pennsylvania. His research specifically looks at what motivates health professionals to tweet about the HPV vaccine. Thank you for joining me, Philip.

[Philip Massey] Thank you for having me.

[Latoya Simmons] Phillip, give us a brief overview of your study.

[Philip Massey] Well, as you mentioned in your opening, the HPV vaccine has the potential to be a great tool in the fight against cancer. But despite it being available for over a decade for adolescents, the rates of vaccination are still quite low at 40 percent, compared to 80 to 90 percent of other adolescent vaccines. So because of this large difference, we in the cancer and communications fields have tried to understand why. And by doing so, we've identified an important factor to help close this gap, and that factor is a recommendation from a health care provider. So that's if a doctor recommends the vaccine, there's a very good chance that the child or adolescent will get the vaccine. So, this is the main motivator for our study. We wanted to see if and how this same pattern was present on social media, as many health care providers, parents, and adolescents use social media to talk about health. So, we wanted to see how health care providers were talking about the HPV vaccine on Twitter.

[Latoya Simmons] What were the health care providers tweeting about regarding HPV?

[Philip Massey] Well, we wanted to look at a very specific type of communication: tweets sent by health care providers intended for parents. And we looked at these tweets over a year period and found different times that this Twitter activity spiked, that's another way of thinking about things going viral. So, these viral moments were different for providers and parents. Let me give you an example to help with that. So, for providers, new studies or publications were key factors that increased activity. They'd tweet about new evidence or new scientific literature. But tweets intended for parents, that was a different factor that drove the increased activity and it really focused around awareness days, and tweets that talked about personal experiences and stories.

[Latoya Simmons] Were these tweets popular among followers?

[Philip Massey] That's a really good question and a tough one to answer. So, in this line of research we sometimes measure popularity by retweets. A retweet is if a follower read your

tweet and decided to tweet the same thing to their followers. And if you take this metric of retweets, then there were fewer retweets from providers, that's tweets about new scientific evidence, compared to tweets intended for parents. So you might say that parent-focused tweets were more popular.

[Latoya Simmons] Did national campaigns and awareness days play a role in tweet and retweet volume?

[Philip Massey] Well, these are very important in terms of supporting a larger volume of tweets and also more retweets. As we see in a variety of instances from politics to sports to health care, national campaigns and awareness days can serve to mobilize and motivate a very large number of people, especially on social media, to take part in this larger national conversation. So these were really important, and very importantly the most successful or impactful ones have at its core the goal of taking these special, extraordinary moments and motivating behaviors and changing attitudes for a sustained period.

[Latoya Simmons] What was the focus of most of the tweets, and were they directed at a particular audience?

[Philip Massey] Again, a great question. And we looked across a year of tweets, and the time when providers had the greatest activity, specifically, was an article that focused around cost-effectiveness analysis of HPV vaccine for boys. And this was in contrast to the greatest activity of parent-focused tweets that focused on risk, side effects, women, and girls. And this parent-focused activity really centered around World Cancer Day on February 4.

[Latoya Simmons] Why do you think this particular research is so important to public health?

[Philip Massey] I think this research is just the start of understanding how new media tools, in this case, Twitter, can be used, not only for health care communication, but also for health education and health care delivery. If we know that a provider's recommendation, for instance, is key for families when deciding to vaccinate, we need to ask ourselves, is the same factor critical for families on social media. And if so, how can we improve this opportunity, how can we maximize the tool to strengthen prevention efforts in health care delivery, in general, so new media, social media, and virtual reality, for that matter. These things aren't going away, and how we chose to use the tools for public health and health care will be determined and informed, in part, by research such as this.

[Latoya Simmons] Thank you, Philip. You can read his study, "What Drives Health Professionals to Tweet About #HPVvaccine," online at cdc.gov/pcd.

The findings and conclusions in this report are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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