

Science of Science Communication

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Session 1—The case of the HPV vaccine

These readings are in the nature of a case study on the role that the “science of science communication” played—or didn’t but could have—in the introduction of the HPV vaccine in 2005-06 and thereafter. After some initial background on contemporary HPV vaccination coverage, the material is arranged more or less chronologically. As you read, try to conjure the state of mind of someone who might have been trying to anticipate and interpret dynamics relating the public engagement with information—scientific and otherwise—relating to the HPV vaccine as events unfolded.

Also consider these questions:

1. Do you believe that “uptake” of the HPV vaccine in the U.S.—or simply the level of vaccination in our society among vulnerable groups, along with beliefs about and attitudes toward the wisdom of vaccination—is satisfactory? If not, do you think you can give a satisfying account of why it isn’t? If you believe, in contrast, that “uptake” in the U.S. is just fine, can you give a satisfying account of why so many people feel otherwise?
2. Was the public controversy surrounding the HPV vaccine inevitable? Could it have been avoided or mitigated?
3. Do you think the conditions that attended the introduction of the HPV vaccine were conducive to informed decisionmaking by young adults or by parents considering whether to have their adolescent children vaccinated? By government officials or citizens assessing whether the vaccine should be included in the schedule of mandatory immunizations? Are conditions today conducive to informed decisionmaking by these actors?
4. Do you think the FDA and the CDC had an informed sense of how the public might react to the HPV vaccine? If not, why not? If so, do you think they acted sensibly in light of what they knew? If not, why not?
5. Do you think the public health researchers who investigated likely public reaction foresaw the possibility of such controversy? Did they supply governmental actors and others with the information necessary for them to make the best possible decisions about introduction of the vaccine? Did they furnish governmental actors and others good counsel? Were the methods—including the theories that informed the types of data collection and analysis they performed—sound? If not, how would you improve them?
6. Do you think the public health establishment—government actors, health-communication researchers, the medical profession—understand *now* why there was public controversy surrounding the vaccine when it was introduced? If not, why not? What do *you* think happened? What sorts of empirical study would you engage in to figure this out?
7. Do you think public health researchers have a good understanding of the factors that influence vaccine uptake today? What do you think of the quality of the methods (including the theoretical frameworks that inform data collection and analysis) that they are using to investigate these issues?
8. Based on the career of the HPV vaccine, are there steps that should be taken to promote the interest that citizens—as health consumers and as participants in democratic decisionmaking—have in the communication of the best available scientific evidence? If so, what are they?

Readings (indexed to pagination of course readings):

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10. Note on universal childhood vaccination schedules & mandates.....	9
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23. Gollust, et al. Controversy undermines support for state mandates. <i>Health Affairs</i> , 29, 2041-46 (2010)	50
24. Kahan et al. Who fears the HPV vaccine, who doesn’t & why? <i>L. & Hum. Behavior</i> , 34, 501-16 (2010)	56
25. Beil, L. The Truth About the HPV Vaccine. <i>Cosmopolitan</i> , Mar. 4, 2014.....	72
26. Fishman, J., et al. Parent and Adolescent Knowledge of HPV and Subsequent Vaccination. <i>Pediatrics</i> 134, e1049-e1056 (2014).....	78
27. Perkins, R.B., et al. Missed Opportunities for HPV Vaccination in Adolescent Girls: A Qualitative Study. <i>Pediatrics</i> , e666 (2014).....	86
28. Darden, P.M., et al. Reasons for Not Vaccinating Adolescents: National Immunization Survey of Teens, 2008–2010. <i>Pediatrics</i> , 131, 645-51 (2013)	95
29. National, Regional, State and Selected Local Area Vaccination Coverage Among Adolescents , <i>MMWR</i> (2014)	102