

## Evidence-Based Television

BY ANDREW HOLTZ, MPH



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**B**eginning with my first column, I've contended that health care professionals benefit from understanding more about the *whats*, *whys*, and *hows* of media portrayals of medicine and health. Even when the stories are fiction, the effects on people, both patients and policymakers, are real. Now I can point to fresh data.

In May, more than 17 million Americans were part of a national health education experiment. The participants were exposed to...okay, enough of the research jargon...viewers plunked themselves down in front of their TV sets to get their regular Thursday night fix of *Grey's Anatomy*.

What these viewers didn't know was that nestled among the personal revelations, emotional confrontations, and comic interludes of the hit show was a notable, yet little known, health fact: With treatment, pregnant women with HIV have a better than 98% chance of delivering an uninfected child. In a minor storyline that made

**"The message for people in the health community is that they need to be paying attention so that they know what people are saying and learning and hearing about health."**

three brief appearances in the episode, the character of Dr. Izzie Stevens (played by Katherine Heigl) counseled a couple that was pregnant unexpectedly. They had not planned on having children because the wife was infected with HIV.

A national telephone survey by the Kaiser Family Foundation just before the episode aired found that barely one out of seven regular *Grey's Anatomy* viewers knew how well treatment could shield a fetus from infection with HIV. The same question was then asked just after the show aired.

"We found an absolutely huge impact in

terms of people's awareness of the facts that were presented in the episode," said Vicky Rideout, Kaiser Family Foundation VP and Director of the Program for the Study of Media and Health.

#### Increase in Understanding of More than Four Times from Before the Show

The number of viewers who knew the facts had more than quadrupled, to almost two out of three. That result means that after one hour of prime time TV, some 8 million Americans had gained a whole new under-

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## Prime Time Survey

**T**he Hollywood, Health & Society program at the University of Southern California is designed to provide television writers with accurate health and medical information and connect them with credible experts. Program funding originally came from the Centers for Disease Control and Prevention and other public agencies. The funders wanted to see evidence of effectiveness, so beginning in 2003, USC graduate students began systematically logging the health content of the top shows on prime time TV.

A content analysis that looked at every episode of the 10 most highly rated prime time TV shows from the spring seasons of 2004, 2005, and 2006 found health everywhere. Overall, six out of 10 shows had at least one health storyline. And the prevalence rose from half in 2004 to two thirds in 2006.

"I was a little surprised by how much health information there actually is on prime time and that the bulk of it is actually pretty educational and fairly accurate," said lead author Sheila T. Murphy, PhD, of the USC Annenberg School for Communication.

### Emphasis on Peculiar Conditions

But while the findings belie the common presumption that TV medicine is mostly exaggerated and wrong, Dr. Murphy did see what she calls the *House* effect: a heavy emphasis on peculiar conditions. "One out of every four health storylines ends up being something kind of rare or unusual or obscure that probably isn't going to be relevant.

"So while viewers may be presented with medical information that is by-and-large accurate, how useful is it to know, as *House* fans learned in one episode, that at least one case has been documented of sexually transmitted African Sleeping Sickness?

Most TV viewers can rattle off the titles of hit medical shows, including *House*, *Grey's Anatomy*, *ER*, or even *Scrubs*. But much of the health content on TV is contained in crime dramas, or even comedies. For example, the report refers to an episode of *The Simpsons* that noted that thyroid problems are treatable. The episode also ventured into health policy: When Homer's boss cut prescription drug coverage, the "Doh!"-man made a run to Canada to save money. The show had it all: medical facts, policy debates—and laughs.

The analysis of nearly a thousand TV shows concluded that health care gets mostly positive reviews on popular TV. The episode of *The Simpsons* was one of relatively few that confronted problems in the health care system.

"It may be painting a little bit too rosy a picture of medical care, because it rarely shows any kind of a barrier. Only 10% of the storylines show there being any problem getting admitted to a hospital or even having a long wait or worrying about insurance coverage; that tends to be very rarely shown," Dr. Murphy said.

And the survey suggests that health care providers may be feeling their own version of the "CSI Effect." Even as whiz-bang TV show forensics raises the expectations of jurors hearing real-world cases, TV portrayals of super-docs and no-holds-barred testing and treatment may encourage some patients to demand more aggressive interventions and unrealistically expect positive outcomes.

In addition to analyzing the shows with the highest overall ratings, the researchers also looked at the top shows among African Americans and Hispanic audiences. The views are different. For example, African Americans tend to watch more comedies, which means they see fewer health storylines, while also being exposed to less of the violence in crime dramas.

Vicky Rideout at the Kaiser Family Foundation says this survey complements the experiment they did with *Grey's Anatomy*: "The study that we did with Hollywood, Health and Society is the first time there have been basic overall data about how frequently health messages occur in prime time TV. It's an important marker to put out there," she said.

But when I asked Dr. Murphy about when to expect future reports on more recent seasons, I was startled to learn that the research project has been cut back, due to objections from some legislators who think the program is frivolous (*OT 2/25/08*).

"We only do a very, very scaled down version that is focusing specifically on medical shows, which have the most health content, but as you can see there is a lot of health content in the other shows, too," she said. "So we can't compare over time because of the budget cuts, which is sad, very sad, because we got it up and running, got it going well. But we need to pay coders; it's not for free."