

## The Impact of TV's Health Content: A Case Study of ER Viewers

In recent years, a growing number of health organizations have been working with Hollywood writers and producers to encourage them to incorporate public health information in their shows. These efforts are based on the theory that popular TV shows can be a powerful and effective medium for informing viewers. Certainly these shows offer a wide audience for public health organizations, but due to the lack of evaluative studies, evidence of the effectiveness of this approach has been anecdotal at best.

The surveys reported on in this summary are an attempt to fill that gap. Working with a writer/producer of the NBC drama *ER* to get advance information about upcoming episodes, researchers at the Kaiser Family Foundation conducted 10 separate national random-sample telephone surveys of regular viewers. The surveys were conducted between March 1997 and April 2000 with more than 3,500 regular *ER* viewers 18 and older (300-500 per survey).

This series of surveys was a unique opportunity to conduct real-world experiments on the impact of entertainment media as an information source on health and health policy. The surveys provide insight into the actual responses of viewers watching *ER* as they normally would, without any knowledge that they would later be surveyed.

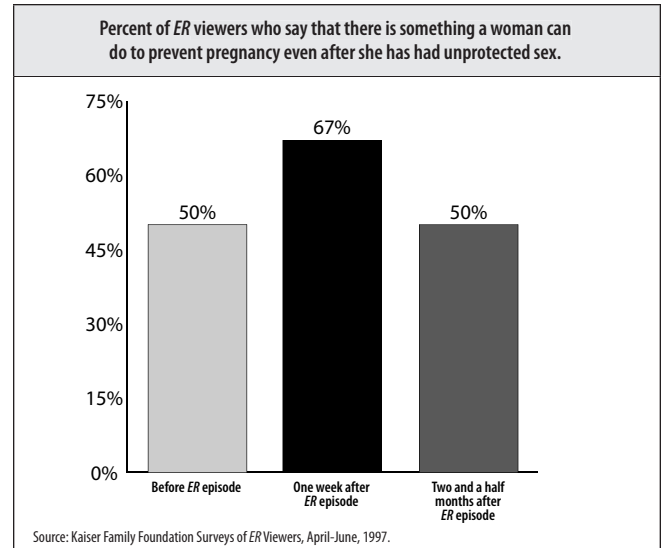
Six of the surveys tested whether viewers' awareness of specific health topics increased after those issues were addressed in individual episodes of the show (emergency contraception and human papilloma virus). Four other surveys were part of a more general assessment of viewers' interest in health-related story lines and the personal actions they may have taken based on these story lines.

### Awareness of emergency contraception

One *ER* episode, aired April 10, 1997, briefly addressed emergency contraception through a short vignette about a patient who has been the victim of a date rape and who requests information about what she can do to prevent pregnancy. The entire vignette lasts almost three minutes, and the discussions about using birth control pills for emergency (postcoital) contraception last about twenty seconds. To test the effect of this brief, but very specific, piece of health care information, two separate samples of regular *ER* viewers were interviewed, one before and one after this episode.

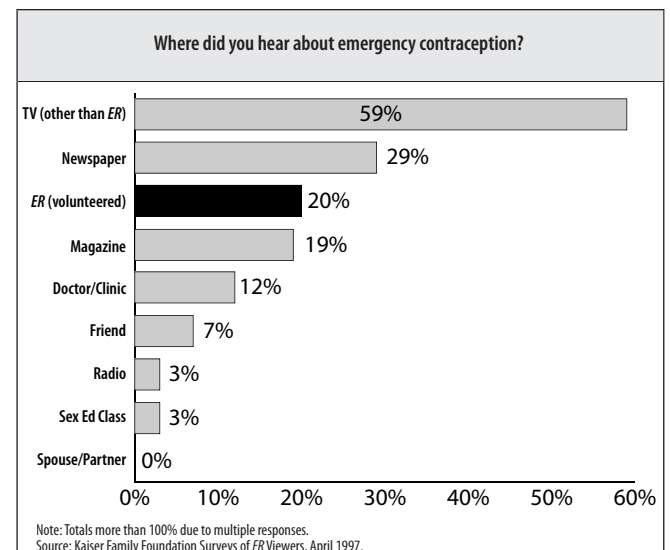
Viewers' awareness of emergency contraception increased seventeen percentage points in the week after the episode

aired. To measure whether effects persisted over time, a separate sample of regular *ER* viewers was asked about emergency contraception two and a half months later, by



which time awareness of emergency contraception had decreased to pre-episode levels.

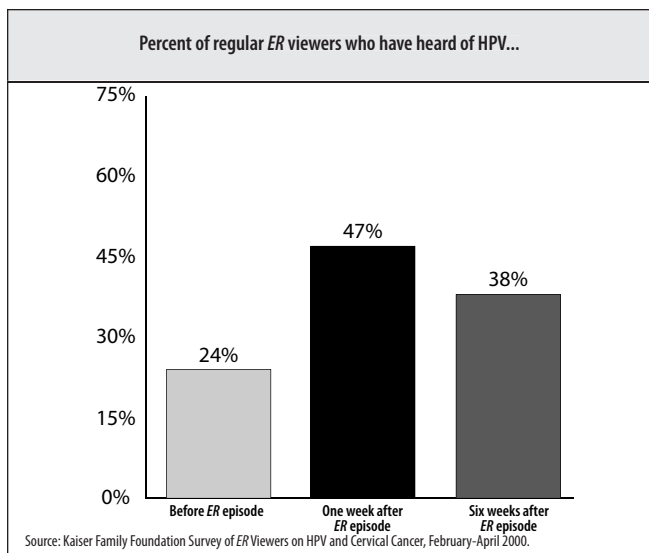
There is evidence that many of the viewers surveyed increased their knowledge *because of this ER episode*. Among regular viewers who had watched the emergency contraception episode and said they had heard of emergency contraception, 20 percent volunteered that they had learned about the issue from *ER*.



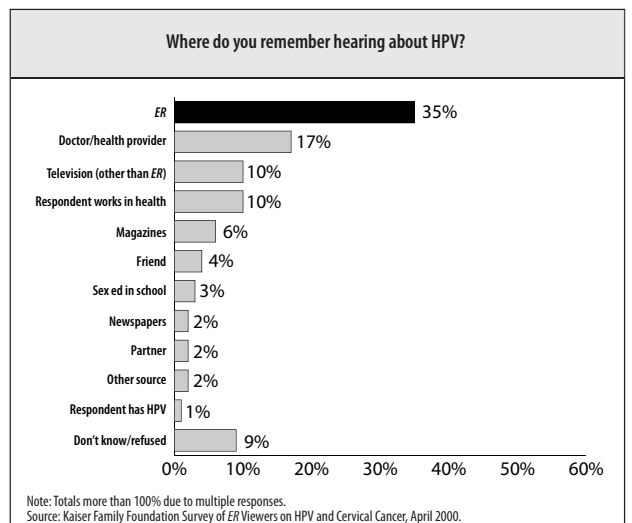
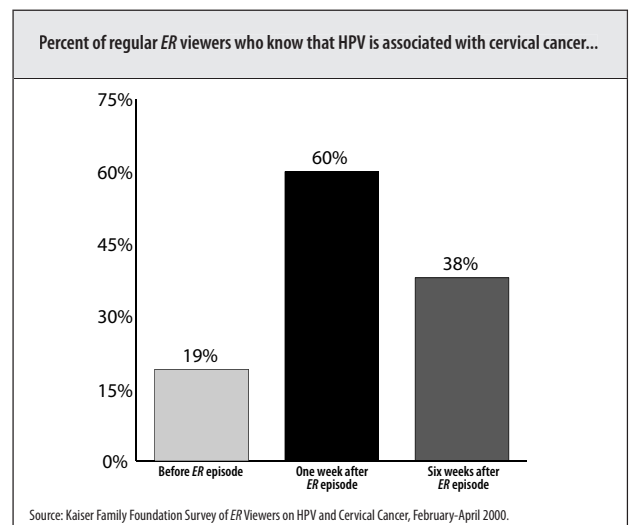
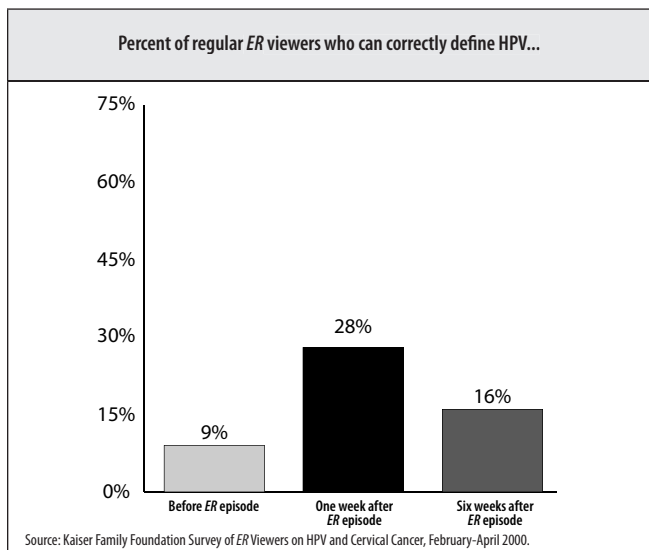
## Awareness of the sexually transmitted disease human papilloma virus (HPV):

A second experiment was conducted in conjunction with an episode mentioning HPV (aired February 24, 2000) to test shifts in knowledge, and retention of any knowledge gain. In a short vignette that focused on HPV for less than a minute, nurse Carol Hathaway sees a teenage patient who is diagnosed with cervical cancer. Nurse Hathaway explains that the cancer could be related to the sexually transmitted disease HPV.

Three samples of regular *ER* viewers were surveyed one week before, one week after, and six weeks after the episode. As before, viewers' knowledge rose substantially. Specifically, the proportion of viewers who said they had heard of HPV nearly doubled in the week after the episode aired, from 24% to 47% of regular viewers. The proportion who could correctly define HPV and who were aware of its link to cervical cancer tripled.



As with emergency contraception, there is evidence that many viewers surveyed increased their knowledge because of the *ER* episode. Thirty-two percent of those who had watched the episode and had heard of HPV volunteered that they had learned about it from *ER*. However, as was the case with the episode on emergency contraception, the increased level of awareness was not sustained over time.

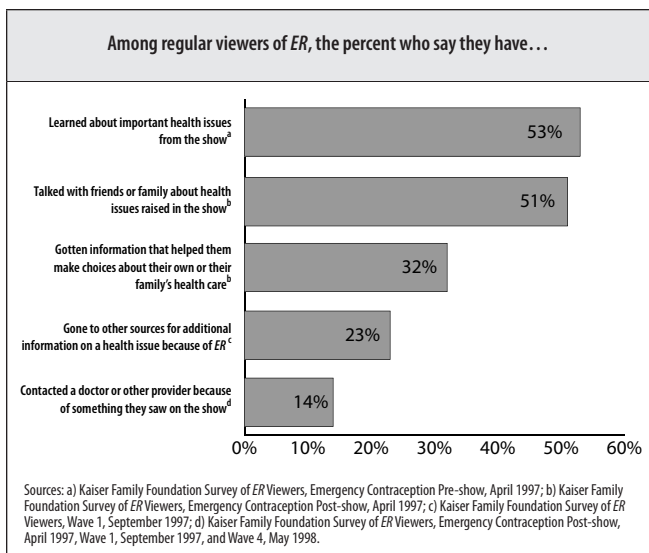


## Viewer responses to health content

Another issue addressed in the surveys was whether *ER* episodes led viewers to take any action with respect to health issues. Slightly more than half of regular viewers said that in addition to being entertained by *ER*, they also learned about important health issues from watching the show. Similarly, about half (51%) said that they talked with family and friends about the health issues that were addressed on the show.

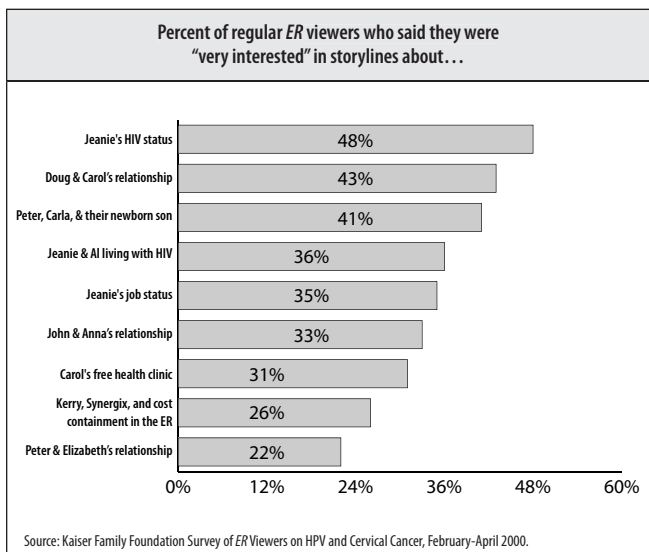
A third of viewers said that they had gotten information from *ER* that helped them make choices about their own or their family's health care. About one in five said that they had gone to other sources to find additional information about a health issue because of something they saw on *ER*.

One in seven viewers (14%) said that they had contacted a doctor or other health care provider about a health problem because of something they saw on *ER*. In a separate survey of physicians conducted by the Kaiser Family Foundation in 2001, one in five doctors said they are consulted either "very" or "somewhat" often by patients wanting to talk about specific diseases or treatments they heard on entertainment shows like "*ER*." Just one in four doctors (26%) said their patients "never" talk to them about issues they heard about on entertainment television.



### Viewer interest in health-related story lines

Viewers indicated substantial interest in the health-related story lines on *ER*, particularly when the story was centered on a personal drama involving one of the main characters of the show. However, the more abstract policy-oriented health story lines – about nurse Carol Hathaway’s establishment of a free health clinic for low-income patients, and about *ER* chief Kerry Weaver’s cost containment efforts – were of less interest to viewers.



### Discussion

These surveys document that some viewers learn about health topics from entertainment television, including some who have been motivated to seek additional health information, even engaging in discussions about health issues with their friends and families, and sometimes their doctors. Importantly, this natural experiment highlights that repetition of messages is the key to increased comprehension and longer-term retention among audiences.

This finding has implications for those involved in the delivery of health information to the public. Dramatically depicting health-related issues through entertainment television may be a mechanism to inform the public about key health topics. On the other hand, fictional depictions could lead to viewers’ obtaining inaccurate information or taking away critical misperceptions about health topics. It seems, therefore, worth the effort to try to make the content as accurate and science-based as possible, and to take advantage of opportunities to convey public health messages that can improve health and sometimes save lives.

### Methodology

The surveys reported on in this snapshot were designed and analyzed by staff at the Kaiser Family Foundation in consultation with Princeton Survey Research Associates (PSRA), and fieldwork was conducted by PSRA. A series of ten separate national random-sample telephone surveys of regular *ER* viewers were conducted during the period from March 1997 through April 2000. A total of 3,500 regular *ER* viewers were surveyed (300-500 per survey). A “regular *ER* viewer” is anyone reporting that they usually watch three out of four new episodes of the show. The margin of error ranges from plus or minus 5 to plus or minus 6 percentage points for each of the ten surveys.

Three of the ten surveys were conducted during April – June 1997, evaluating the impact of an episode that contained a vignette on emergency contraception. One of these surveys was conducted a week before the episode aired (the pre-show survey), the second was conducted with a separate sample of regular *ER* viewers the week after the episode aired (the post-show survey), and the third was conducted with yet another sample of regular *ER* viewers two and a half months after the episode aired (the follow-up survey).

Another three of the ten surveys were conducted during February – April 2000, evaluating the impact of an episode that contained a vignette discussing the human papilloma virus (HPV). These surveys also included one pre-show survey, one post-show, and a follow-up survey (this one conducted 6-7 weeks after the episode aired). The remaining four surveys were conducted throughout the 1997-1998 television season, to investigate interest in health-related story lines and personal actions taken based on these story lines.

The physician data comes from the Kaiser Family Foundation’s National Survey of Physicians, conducted by mail among a nationally representative random sample of 2,608 physicians, during March – October 2001. Foundation staff designed and analyzed the survey, and fieldwork was conducted by the Research Triangle Institute. The margin of error is plus or minus 3 percentage points.

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