

Can primetime drama change health knowledge & priorities?

An evaluation of a Law & Order: SVU storyline, HIV/AIDS knowledge, global health, & domestic priorities

Janet Okamoto, MPH; Grace Huang, MPH; Sandra de Castro Buffington, MPH; Michelle Cantu, MPH; Thomas W. Valente, PhD



LAW & ORDER
SPECIAL VICTIMS UNIT



Presenter Disclosures

Thomas W. Valente, PhD

- 1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:


No Relationships to Disclose

Learning Objectives



- 1) Describe an evaluation of the effectiveness of a primetime television drama storyline about maternal HIV transmission and AIDS deniers.
- 2) Analyze the relationship between exposure to a health-related television storyline and HIV/AIDS related knowledge, attitudes, and opinions about the importance of various global health and domestic issues.

Introduction



- Entertainment media has become a useful and effective way of delivering health messages and information due to its appeal and reach.
- This study examined a health-related storyline that aired on the primetime drama Law & Order: SVU (NBC) and its effects on HIV/AIDS knowledge and opinions about the importance of global health and domestic priorities among viewers.

Introduction

- The Law & Order: Special Victims Unit “Retro” episode
 - Hollywood, Health & Society (HH&S) is a program of the USC Annenberg Norman Lear Center that connects health experts with television writers to provide them with accurate health information for their scripts.
 - Working with the writers and producers of Law & Order: Special Victims Unit, HH&S conducted a briefing with medical experts on global HIV/AIDS to inform writers specifically about HIV/AIDS dissenters – people who do not believe that HIV causes AIDS.
 - In the episode, detectives investigate the case of a baby with AIDS in New York City cared for by African characters from Gambia, a country with an HIV/AIDS dissenting president.
 - Investigators learn that the baby had been prescribed vitamins instead of lifesaving anti-retroviral drugs (ARV) by a doctor who is an AIDS denier.
 - Soon other similar AIDS cases, also patients of the doctor, come to light, such as the death of a young girl who, along with her mother, were treated by the doctor and told there was no such thing as AIDS.
 - The episode culminates with a trial of the doctor for malpractice in the treatment of his patients living with HIV and AIDS.



Present Study

- The aim of the present study was to determine the impact of exposure to this HIV/AIDS-related television storyline on HIV/AIDS knowledge and opinions about the importance of various global health and domestic issues.
 - Therefore, HIV/AIDS-related content of a primetime crime drama was evaluated to determine its effectiveness in increasing public health knowledge and influencing public opinions.

Methods



- Data Collection

- Respondents were solicited via e-mail to participate in an online survey about health issues from a database of primetime television viewers maintained by a private company.
 - As an incentive to increase response rates, three \$100 gifts chosen by lottery were offered to respondents.
- Participants completed the survey one week prior to the episode
- Immediately after the episode aired, another solicitation was sent.
- Participants were able to complete the follow-up survey up to one week after the episode aired.

Methods

- Measures

- *HIV/AIDS knowledge was measured with nine items*

- Items covered HIV/AIDS transmission, maternal transmission, prevalence rates, effective treatment, and awareness of AIDS deniers.
 - A sum of correct answers was calculated for each respondent, with a range of 0 to 9

- *Domestic & Global Health priorities were measured on a scale from 1 to 5.*

- Answer choices ranged from “not at all important” (1) to “extremely important” (5).
 - The domestic issues respondents were asked to rate included: the war on terrorism, the environment, the economy, Iraq, healthcare, and energy.
 - The global health issues respondents were asked to rate included such items as spreading democracy to other countries; controlling tobacco use in other countries; access to clean drinking water in other countries.
 - The scales was created by taking the mean of all items.

- *“Retro” Episode Exposure*

- Data Analysis

- *Analyses consisted of examining the associations between outcomes and episode exposure controlling for demographic characteristics.*

- *Both multivariate linear and logistic regression were used for this analysis.*

- For the panel data, lagged regression controlling for baseline outcomes was used.
 - The cross sectional analyses included a wave variable that indicated baseline or follow-up measurement.

Sample Characteristics

- To achieve comparable characteristics across the two samples, we restricted analysis to respondents who had complete data on all demographic, exposure, and outcome measures.
 - This resulted in an analysis sample of 913 respondents, with the panel sample representing 40.6 % of the total and the cross sectional sample making up the remainder.
 - Both samples were primarily female, young-to-middle-age adults, married, and predominantly White.
 - Mean Age:
Panel: 47.9 years; Cross Sectional: 46.5 years (baseline) & 45.7 (follow-up)
 - Married:
Panel: 62.5%; Cross Sectional: 21.1% (baseline) & 19.1% (follow-up)
 - Ever Had an HIV Test:
Panel: 35.9%; Cross Sectional: 37.7% (baseline) & 47.7% (follow-up)
 - Mean Hours of TV per Week:
Panel: 23.9 hours; Cross Sectional: 32.1 hours (baseline) & 23.1 hours (follow-up)

Results

- HIV/AIDS Knowledge and “Retro” Episode Exposure
 - In the panel sample, exposure to the Law & Order: SVU “Retro” episode was found to be marginally associated with HIV/AIDS knowledge based on the lagged analysis ($\beta=0.07$, $p<0.10$).
 - Subgroup analyses indicated that those who had never had an HIV test had significant knowledge increases ($\beta=0.09$, $p<0.05$) in the panel sample.
 - The association between knowledge and exposure was also significant for females ($\beta=0.11$, $p<0.05$) in the panel sample and there was a trend towards significance for females ($\beta=0.09$, $p<0.10$) in the cross sectional sample.
- Priorities and “Retro” Episode Exposure
 - Overall there did not appear to be a significant association between exposure to the “Retro” episode and a change in priorities.
 - In subgroup analyses, a negative association between exposure and domestic priorities was found ($\beta=-0.33$, $p<0.05$) for males, indicating exposure to the episode led males to rate domestic concerns lower.
- Awareness of AIDS Deniers and “Retro” Episode Exposure
 - Females showed a greater awareness of AIDS deniers (AOR=5.64, $p<0.05$) after exposure to the episode.

Results



Effects of Exposure to “Retro” Episode on HIV/AIDS Knowledge

	Cross Sectional Sample (N=542)		Panel Sample (N=371)	
	Simple Model (β)	Exposure Model (β)	Simple Model (β)	Exposure Model (β)
Baseline Knowledge	--	--	0.72**	0.72**
“Retro” Exposure	--	0.05	--	0.07 ⁺
Hours of TV/Wk	0.001	-0.01	-0.002	-0.01
Health Professional	-0.05	-0.05	-0.03	-0.03
Female	-0.04	-0.03	0.03	0.03
White	-0.01	-0.01	0.06	0.04
Income	0.03	0.03	-0.04	-0.04
Age	0.02	0.03	0.08*	0.09*
Married	-0.02	-0.02	0.06	0.06
HIV Test	0.24**	0.24**	0.04	0.04
Wave	-0.07	-0.07	--	--
R ²	0.05**	0.05**	0.53**	0.54**

+p<.10; *p<.05; **p<.01

Discussion

- Exposure to the storyline produced a small increase in overall knowledge about HIV/AIDS in the panel sample.
- The positive association between age and knowledge of HIV/AIDS may suggest that older Law & Order: SVU viewers have lower baseline levels of knowledge compared to younger TV viewers.
 - This may be due to more public awareness of the HIV/AIDS epidemic among younger people.
- Significant effects were found for subgroups of viewers
 - For example, only those who indicated they had ‘never had an HIV test,’ showed significant increases in knowledge associated with viewing the storyline, suggesting that the storyline had a positive effect on those who were less knowledgeable about the topic.
- Similar trends were found for episode exposure on the level of importance placed on global and domestic priorities among selected subgroups.
 - Females, those who had an HIV test, and non-Whites were positively influenced.



Limitations

- Some limitations should be noted with the interpretation of these results.
 - Interpretation of these results should be accompanied by caution regarding the generalizability of the present sample.
 - This study took place in November of 2008, concurrent with the recent U.S. presidential election, which may have had unknown consequences on the findings.
 - Media coverage and public interest in this event could have potentially influenced outcomes.

Implications

- This study further supports research showing impact of health messages in entertainment television, especially when messages are delivered by credible characters with whom the audience can relate and identify.
 - While findings indicated only modest increases in HIV/AIDS knowledge and certain global/domestic priorities, the current study demonstrated that entertainment TV can be an effective channel for educating the public.
- Entertainment media, when based on accurate, timely, and important topics can have a broad influence on many segments of the public.
- This study can serve as a springboard for continued collaborations between health professionals and writers to explore ways in which entertainment television can be used as a new platform for creating more public awareness of global and domestic priorities.