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Televised Movie Trailers

Undermining Restrictions on Advertising Tobacco to Youth

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Objective: To determine the proportion of televised movie trailers that included images of tobacco use during 1 year and the extent of youth exposure to those trailers.

Design: Content analysis combined with Nielsen data measuring media exposure. All movie trailers (N=216) shown on television from August 1, 2001, through July 31, 2002.

Main Outcome Measures: Exposure among youth aged 12 to 17 years to televised movie trailers that included smoking imagery.

Results: Of the movie trailers televised during the study period, 14.4% (31 trailers) included images of tobacco use. Tobacco use was shown in 24.0% of the 23 trailers for R-rated (restricted) movies and 7.5% of the 8 trailers

for PG-13- and PG-rated (parental guidance) movies. Ninety-five percent of all youth aged 12 to 17 years in the United States saw at least 1 movie trailer depicting tobacco use on television during this 1 year, and 88.8% saw at least 1 of these trailers 3 or more times.

Conclusions: Nearly all US youth aged 12 to 17 years were exposed to images of tobacco use on television in the context of a movie trailer during the study period. Given the relationship between youth exposure to tobacco use in movies and smoking initiation, the public health community should work to enact policy to reduce or eliminate the influence of tobacco use in televised movie trailers.

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ALTHOUGH TOBACCO ADVERTISING was banned from television in 1971,¹ tobacco use can still be seen across a spectrum of programming, including televised movie trailers (movie advertisements aired on television). Trailers pair tobacco use with popular movie stars and edgy action shots. These images translate into positive images of tobacco that are conveyed to a broad audience, including a large population younger than 18 years. To our knowledge, this is the first study to examine the extent of youth exposure to tobacco use in televised movie trailers.

This research is conducted in the context of a growing body of literature on the prevalence of tobacco use in movies and the association between exposure to tobacco use in movies and youth smoking.² Recent research indicates that images of tobacco use in movies are common,³ even in youth-oriented movies,⁴⁻⁷ and that youth are exposed to and recall these tobacco images.⁸ The most recent data regarding prevalence of smoking in movies are from a 2004 study by Polansky and Glantz.⁹ This study, which includes all US-produced, live-action movies released from 1999

through 2003, indicates that 90% of R-rated (restricted) movies, 80% of PG-13-rated movies, and 50% of PG- and G-rated movies include images of smoking (PG-13 indicates parents strongly cautioned; PG, parental guidance suggested; and G, general audiences).⁹

A number of studies have documented the relationship between exposure to movie stars' use of tobacco in films and youth smoking initiation or susceptibility to tobacco use.¹⁰⁻¹⁴ Pechmann and Shih¹⁰ demonstrated that ninth grade non-smokers who watched a movie in which the lead characters smoke were more likely to report intentions to smoke compared with their peers who watched the same movie from which the smoking images had been removed. This study showed that seeing an antitobacco advertisement before viewing the movie eradicated this association.¹⁰ A 1999 survey of more than 6000 youth by Distefan et al¹¹ found tobacco use of favorite movie stars to be associated with youth smoking status.¹¹ A longitudinal study expanding on this research demonstrated that, among girls who did not smoke at baseline, those with a favorite movie star who smoked had double the risk of smoking 3 years later.¹² Girls may

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be more likely than boys to see role models smoking; a study by Escamilla et al¹⁴ shows that female stars smoke as often in PG- and PG-13-rated movies as they do in R-rated movies.

Frequency of exposure to tobacco use in movies also has a role in susceptibility to smoking. Sargent et al¹⁵ demonstrated a positive, dose-response association between exposure to tobacco use in movies and susceptibility to smoking. Longitudinal follow-up of these students more than a year later indicated that 17% of those in the highest quartile of exposure had begun smoking compared with 3% of those in the lowest quartile. Multivariate analysis indicated that 52% of these initiations were a result of having seen tobacco use in movies.¹⁶ A recent national cross-sectional study¹⁷ confirmed these results.

The goals of this study were to determine the proportion of movie trailers televised during a 1-year period from August 1, 2001, to July 31, 2002, that included images of tobacco use and to assess the extent of youth exposure to those trailers. The public health community is urged to work for the enactment of policy that will reduce or eliminate youth exposure to televised images of tobacco use in movie trailers.

METHODS

SAMPLE

The sample for this study consisted of all movie trailers (movie advertisements aired on television) televised in the United States from August 1, 2001, through July 31, 2002. Only trailers advertising movies released to theaters were included in the sample. Video Monitoring Service, a media content monitoring company used by corporations to assess their marketing and public relations efforts, was hired to identify all of the movie trailers televised during this period. The trailers were also purchased from Video Monitoring Service so they could be analyzed for this study. The analysis included the full-length, uncut versions of each of the trailers. The final sample included 216 trailers.

CONTENT AND STATISTICAL ANALYSIS

A content analysis of the trailers was conducted to determine whether they included images of tobacco use. Tobacco use was defined as use of any tobacco product by any character. The tobacco product (eg, cigarette or pipe) had to be clearly displayed to be registered as an instance of tobacco use; visible smoke from an unseen source was not considered tobacco use. Each trailer was viewed and coded twice, each time by a different trained analyst (E.S.W.-S. and A.M.S.) working independently. Differences in tobacco use coding occurred in 5 instances. In these 5 cases, the trailers were reexamined by the analysts and differences were resolved. Simple frequencies were calculated to determine the proportion of trailers that included images of tobacco use, overall and by movie rating, and tabulated with Stata 7 software (StataCorp, College Station, Tex).

MEASUREMENT OF EXPOSURE

Youth exposure to the trailers that included images of smoking was measured using gross rating points (GRPs) and gross impressions among youth aged 12 to 17 years. Gross rating points are the standard unit of measurement for television exposure and are a function of the reach of an advertisement multiplied by the

frequency with which the target audience was exposed to it. Advertisement reach is a measure of the scope of the target audience; that is, it describes the population that is exposed to the advertisement. Frequency is a measure of the number of times individuals in the target audience are exposed to an advertisement. One GRP equals 1% of exposure among the intended audience, on average. For example, if a movie trailer aired at 250 GRPs, everyone in the target audience saw it, on average, 2.5 times. Gross impressions represent the number of times an advertisement was seen by the collective target audience. Data were purchased from Nielsen Media Research, the primary source of television ratings in the United States, used by all major television broadcasters to assess program performance and to set prices for advertising. Nielsen data are reported as they were received, with no additional analysis conducted.

RESULTS

Overall, of the 216 movie trailers televised from August 1, 2001, through July 31, 2002, 14.4% (31 trailers) included images of tobacco use. Tobacco use was most common in trailers advertising R-rated movies: 24.0% of R-rated movie trailers (23 trailers) included images of tobacco use. Among trailers for PG-13- and PG-rated movies, 7.5% (8 trailers) included tobacco use. There were no images of tobacco use in trailers for G-rated movies.

Nielsen data indicate that 95.0% of all youth aged 12 to 17 years in the United States saw at least 1 movie trailer depicting tobacco use on television during this 1 year (**Table**). Nearly 89.0% (88.8%) of these youth saw at least 1 of these trailers 3 or more times. In total, these 31 trailers generated more than 270 million impressions among US youth aged 12 to 17 years. This means that, over the course of a single year, movie trailers showing tobacco use were seen 270 million times among youth aged 12 to 17 years. At 11 090 GRPs, this translates into 111 advertisement exposures per youth, on average. The trailer for the PG-13-rated movie *The Sum of All Fears*, which contained numerous images of smoking, alone achieved more than 48 million impressions among 91.1% of all US youth aged 12 to 17 years. In terms of GRPs, this means that the advertisement was seen 20 times per youth, on average.

COMMENT

This study demonstrates that nearly all youth in the United States see tobacco use on television in the context of movie trailers. All available research suggests that these images increase the likelihood of tobacco use among youth. For most youth, tobacco use will be cigarette smoking, and among those who smoke, one third will eventually die of tobacco-related disease.^{18,19} To reduce the number of today's youth who will ultimately die as a result of tobacco use, the influence of televised movie trailers on youth smoking must be addressed.

There are 2 steps the public health community should take to reduce or eliminate the influence of tobacco use in televised movie trailers. First, the public health community should call on the motion picture industry to eliminate tobacco imagery from movie trailers. There is precedent for such a recommendation: in 2000, the Federal Trade

Table. Exposure of Youth Aged 12 to 17 Years to Tobacco Use in Movie Trailers Televised From August 1, 2001, Through July 31, 2002*

Movie (Rating)†	Gross Rating Points	Gross Impressions	Saw Trailer ≥1 Times, %	Saw Trailer ≥3 Times, %
<i>The Sum of All Fears</i> (PG-13)	1967	48 391 398	91	83
<i>Zoolander</i> (PG-13)	1149	28 265 400	89	76
<i>Big Fat Liar</i> (PG)	1144	28 142 400	90	80
<i>Reign of Fire</i> (PG-13)	1000	24 597 294	87	73
<i>Black Hawk Down</i> (R)	860	21 163 380	88	75
<i>How High</i> (R)	830	20 418 000	87	73
<i>A Beautiful Mind</i> (PG-13)	721	17 736 600	86	70
<i>Baby Boy</i> (R)	583	14 339 340	85	66
<i>Slackers</i> (R)	550	13 530 000	85	64
<i>Hart's War</i> (R)	528	12 979 944	84	63
<i>The Majestic</i> (PG)	476	11 709 600	83	61
<i>The Royal Tenenbaums</i> (R)	370	9 104 460	78	50
<i>The Wash</i> (R)	268	6 596 244	73	40
<i>Deuces Wild</i> (R)	265	6 510 636	74	41
<i>The Curse of the Jade Scorpion</i> (PG-13)	214	5 264 400	68	33
<i>Birthday Girl</i> (R)	139	3 429 732	60	20
<i>Y Tu Mama Tambien</i> (R)	17	410 328	14	0
<i>The Man Who Wasn't There</i> (R)	5	123 000	5	0
<i>Happy Accidents</i> (R)	3	73 800	3	0
<i>Big Bad Love</i> (R)	1	22 878	1	0
Total	11 090	272 808 834	95	89

Abbreviations: PG, parental guidance suggested; PG-13, parents strongly cautioned; R, restricted.

*Data from Nielsen ADVIEWES, Nielsen Media Research, 2005.

†The following movie trailers generated no gross rating points (and minimal gross impressions) among youth aged 12 to 17 years: *High Heels and Low Lifes* (R); *The Devil's Backbone* (R); *Devious Beings* (R); *Greenfingers* (R); *Crush* (R); *How To Kill Your Neighbor's Dog* (R); *The Importance of Being Earnest* (PG); *Lantana* (R); *Proof of Life* (R); *The Salton Sea* (R); *Sexy Beast* (R).

Commission found that the motion picture industry was intentionally marketing violent, R-rated movies to children and teenagers.²⁰ The recommendation of the investigating committee was to “establish or expand codes that prohibit target marketing to children and impose sanctions for violations.”^{20(p54)} The Federal Trade Commission recommended that the industry trade associations “monitor and encourage their members’ compliance with these policies and impose meaningful sanctions for noncompliance.”^{20(p54)} A 2004 update on progress in this area showed little change on the part of the motion picture industry.²¹ The public health community should join with those who would like to see the 2000 Federal Trade Commission recommendation enforced and should insist that the recommendation be expanded to prevent youth exposure to tobacco imagery in all motion picture marketing, including televised movie trailers.

Second, the public health community should call on networks to refuse to air movie trailers that include smoking imagery. Network standards and practices groups routinely disallow content that is considered inappropriate. Because recent research suggests that televised movie trailers function as de facto tobacco advertisements in terms of their effect on public health, networks should be urged to treat them as they would traditional tobacco advertising.

Because of the consolidation of the media industry, parent companies in many cases own both motion picture companies and a major television network. Working toward the aforementioned policies should, therefore, exert pressure on these companies from 2 fronts,

which may provide the incentive needed to change practices regarding airing images of smoking. Taking these important first steps to reduce youth exposure to televised images of tobacco use could prevent many youth from smoking.

The extent of youth exposure to tobacco use via televised trailers described here is likely an underestimate. This study incorporates data only for youth aged 12 to 17 years, although children younger than 12 years are also exposed to these images. Exposure of youth younger than 12 years to these images may have an even greater influence on their future tobacco use behavior than it does on older youth.

This study focuses on a single media channel: televised movie trailers. However, images of tobacco use appear to be common throughout other television programming. Future research should document the extent to which youth are exposed to images of tobacco use through other television programming, and policies to prevent youth from being exposed to televised tobacco images should ultimately include all relevant television programming.

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Author Contributions: Dr Heaton had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis. *Study concept and design:* Heaton, Watson-Stryker,

Vallone, Messeri, and Glantz. *Acquisition of data*: Watson-Stryker, Graham, and Stewart. *Analysis and interpretation of data*: Allen and Dobbins. *Drafting of the manuscript*: Healton, Watson-Stryker, and Allen. *Critical revision of the manuscript for important intellectual content*: Healton, Watson-Stryker, Allen, Messeri, Graham, Stewart, Dobbins, and Glantz. *Statistical analysis*: Messeri, Graham, and Glantz. *Administrative, technical, and material support*: Watson-Stryker, Allen, Stewart, and Dobbins. *Study supervision*: Allen and Vallone.

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