A B S T R A C T

Objectives. The purpose of this study was to examine print media coverage of cigars during the period 1987 to 1997.

Methods. A content analysis of 790 cigar-focused newspaper and magazine articles was conducted.

Results. Cigar-focused articles increased substantially over the study period, paralleling increased cigar consumption. Articles focused on cigar business (39%) and events (19%). Only 4% of articles focused on health effects. Sixty-two percent portrayed cigars favorably. The tobacco industry was mentioned in 54% of articles and portrayed positively in 78%. Forty-two percent of the individuals quoted or described in articles were affiliated with the tobacco industry; only 5% were government/public health figures.

Conclusions. Print coverage of cigars failed to communicate health risk messages and contributed to positive images of cigars. (*Am J Public Health*. 2001; 91:288–291)

The Cigar Revival and the Popular Press: A Content Analysis, 1987–1997

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During the latter half of the 1990s, cigar sales and consumption increased by more than 50%.¹ In comparison with nonsmokers, cigar smokers are at increased risk for cancer, heart disease, and pulmonary disease and exhibit higher all-cause mortality.^{2,3} Passive cigar smoke may also be a health risk.⁴

The cigar use trend appeared as gains were being made in instituting tobacco control policies and reducing adult cigarette smoking.^{5–7} Because the media both reflect and shape social trends, it is important to understand how they cover issues involving health risks. We conducted a content analysis of cigarfocused articles published in newspapers and magazines from 1987 through 1997.

Methods

Sample Selection

We searched Lexis/Nexis newspaper and magazine databases for cigar-related articles published in the 5 largest US newspapers according to circulation (New York Times, USA Today, Washington Post, Los Angeles Times, Wall Street Journal), the 8 largest California newspapers (excluding the Los Angeles Times) (Daily News of Los Angeles, Fresno Bee, Investors' Business Daily, Orange County Register, Press Enterprise, Sacramento Bee, San Francisco Chronicle, San Diego–Union Tribune), and all magazines published from Jan-

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uary 1, 1987, through December 31, 1997. Because the *Los Angeles Times* has the fourth largest circulation in the United States, we categorized it as a national newspaper.⁸ The *San Jose Mercury News* was unavailable for the search. We excluded cigar "lifestyle" magazines, such as *Cigar Aficionado*, because their content is strikingly different from that of other magazines.

We oversampled California newspapers, because, although California is a leader in tobacco control, cigar smoking was the only type of tobacco use to increase in California during the study period.⁹ Thirty-four percent (167/ 488) of articles included in our sample appeared in California newspapers. We found no differences between California and other US newspapers on most variables; therefore, we combined them for analysis. Significant differences are noted.

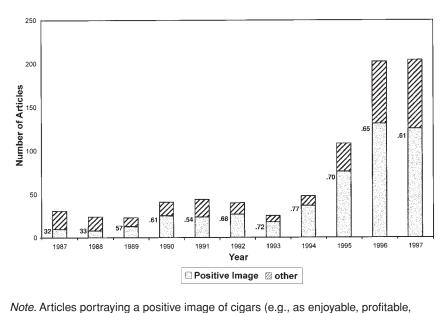
We searched for articles with the word *cigar* in the headline, lead, or graphics or captions, excluding proper names, and identified 3161 newspaper and 1859 magazine articles. Two coders independently sorted these articles to identify cigar-focused articles (primary topic of cigars, cigar accessories, or cigar events). The final sample included 790 articles (newspapers: n=488; magazines: n=302).

Content Analysis

We developed a 45-item, semistructured content analysis instrument based on earlier work¹⁰ to examine 2 variables: article content and how the message was delivered. In regard to article content, we assessed (1) primary focus (e.g., cigar business, events, trends); (2) image of cigars portrayed (positive image: enjoyable, profitable, relaxing; negative image: harmful, unpleasant), rated on a 7-point Likert-type scale (1=very negative, 7=very positive); (3) health risks (whether risks were mentioned, types of health effects mentioned, whether or how cigars were compared with cigarettes): and (4) tobacco industry portrayal (positive: profitable; negative: harmful; neutral: neither). In terms of message delivery, we assessed (1) placement (section, page number, article length), (2) type of magazine (per Ulrich's typology¹¹), and (3) individuals quoted or described in the article. Celebrities and public figures were coded separately. We recorded name, sex, smoking status, occupation, affiliation, and position regarding cigars for each noncelebrity, and we recorded name and attitude toward cigars for each celebrity.

Coding

The coding instrument was pilot tested on 15 newspaper and 6 magazine articles. Two coders reviewed articles. Intercoder reliabili-



Note. Articles portraying a positive image of cigars (e.g., as enjoyable, profitable, fashionable, or relaxing) were rated 6 or 7 on a 7-point Likert-type scale. Proportions portraying a positive image are shown within bars.

FIGURE 1—Number of cigar-focused articles, 1987–1997 (n=790), and proportions of cigar-focused articles portraying a positive image of cigars.

ties on a 20% sample¹² ranged from 63% to 100% agreement per item. Coders showed a high level of agreement, usually above 85%, in identifying factual information (e.g., magazine type). Greater variability was seen for more subjective variables (e.g., cigar image [73%]). Discrepancies were adjudicated by Ruth Malone and Lisa Bero.

Data Analysis

Data were entered into Microsoft Access and analyzed with Stata (release 5.0)¹³ and SAS (version 6.12).¹⁴ The χ^2 statistic was used to assess differences between California and other US newspapers.

Results

Figure 1 presents data on number of cigar-focused articles and proportion of articles portraying a positive image of cigars. As can be seen, the number of cigar-focused articles increased substantially between 1993 and 1996.

Article Content

Articles focusing on the cigar business represented the largest category (39%; 305/790); 19% (n=147/790) focused on cigar events. Only 4% (35/790) of articles focused on health effects (Table 1).

TABLE 1—Primary Focus of Cigar-Related Newspaper and Magazine Articles: United States, 1987–1997

Primary Focus	Articles (N=790) No. (%)
Cigar business	305 (39)
Cigar events	147 (19)
Cigar trend	74 (9)
Health effects of cigars	35 (4)
Cigar accessories	32 (4)
Cigars and crime (smuggling/burglary)	31 (4)
Cigar people	29 (4)
Cigars and the media	26 (3)
Cigar use by women	20 (3)
Other	91 (12)

TABLE 2—Mentions of Health Effects in Cigar-Related Newspaper and Magazine Articles: United States, 1987–1997

Health Effects	No. of Mention
Negative	
General	87
Oral or mouth cancer	46
Throat cancer	35
Lung cancer	28
General cancer	26
Heart disease	19
Reproductive health risks	8
Emphysema	6
Secondhand smoke risks	7
Pulmonary disease	9
Addiction	2
Dental problems	3
Positive	
General	3
Stress relief	3
Less risky than cigarettes	3

Note. After coding each type of health effect mentioned, we categorized the effect as negative (i.e., detrimental to health) or positive (good for health).

Overall, most articles (62%; 493/790) portrayed cigars positively (rating of 6 or 7 on the Likert-type scale). From 1987 to 1994 there was an increase in the proportion of articles portraying cigars positively (Figure 1). The proportion of articles portraying cigars positively decreased slightly between 1995 and 1997, but the overall number of positive articles continued to increase through 1996.

Although few articles focused on health effects, 21% (169/790) mentioned them (Table 2). When health effects were mentioned, they were often embedded in articles portraying cigars positively (50%; 85/169), thus minimizing their impact. Only 24% (41/169) of articles mentioning health effects portrayed cigars negatively (rating of 1 or 2 on the Likert-type scale).

Passive smoke was mentioned in 12% (94/ 790) of articles, but its health effects were not described. Mentions of passive smoke appeared in discussions of ventilation systems. Fifty-nine percent (55/94) of articles in which passive smoke was mentioned portrayed cigars positively, while only 22% (21/94) portrayed cigars negatively.

Cigars were compared with cigarettes in 14% (108/790) of articles. Cigars were described as being less harmful to health, as being more socially acceptable, or as containing fewer chemicals than cigarettes.

The tobacco industry was mentioned in 54% of articles (n=427). In 78% of these articles (n=165), the industry was portrayed positively.

Message Delivery

Cigar-focused newspaper articles were most likely to appear on Fridays and Sundays.

California newspapers were more likely to feature articles on front pages than were other US newspapers (P < .001). Articles were more likely to appear in feature sections of California newspapers and most likely to appear in business or local news sections in other US newspapers (P < .001). The most common magazine classifications were business and economics (26%; 80/303) and general interest (15%; 44/303). In terms of length, articles were almost evenly split between short and long.

Individuals (excluding celebrities and public figures) were quoted or described in 79% (621/790) of articles. The individuals described were mostly men (77%; n=1776), and 42% (n=973) were affiliated with the tobacco industry. Only 5% (n=111) were associated with public health or government. Affiliation was unspecified for 27% (n=625).

Smoking status was unspecified for 70% (n=1612) of individuals described in articles. Of those whose smoking status was specified, 26% (n=607) were cigar smokers, and 3% (n=74) were identified as nonsmokers or cigarette/ pipe smokers. Of all individuals, 80% (n=1842) were portrayed as having favorable attitudes toward cigars.

Celebrities and public figures were quoted or described in 42% (n=331) of articles. Most (87%; n=979) were portrayed as having favorable attitudes toward cigars.

Discussion

Mass media influence social behavior by awarding recognition to particular issues and behaviors.^{7,15–18} Good health reporting is a

shared responsibility of journalists and health professionals.¹⁹

Although health advocates have effectively increased awareness of the risks of cigarettes, this study suggests that they have been less effective in challenging industry portrayals of cigars. Overall, print media portrayed cigars favorably, linked cigars with popular celebrities, failed to provide health information, and generally framed cigar use as a trendy habit or lucrative business rather than as a health risk. The perspectives of individuals affiliated with the tobacco industry were far better represented in the articles than were the views of public health advocates.

Public health advocates, if they are to be effective with regard to media coverage, 20,21 must react quickly to unexpected trends with stories that are significant, interesting, and new.²² Our analysis suggests that this was not the case with cigars. Public health advocates should develop coordinated, consistent media advocacy strategies for all types of tobacco²³ and should be prepared to more effectively and promptly address future tobacco use trends.

Contributors

L. Wenger collected and analyzed the data and wrote the majority of the paper. R. Malone and L. Bero planned and initiated the study, supervised data collection and analysis, and were involved in the writing and editing of the final draft.

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References

- Tobacco Situation and Outlook Report. Washington, DC: US Dept of Agriculture, Commodity Economics Division, Economic Research Service; 1997.
- 2. Shanks TG, Burns DM. Disease consequences of cigar smoking. In: Shopland DR, ed. *Cigars:*

Health Effects and Trends. Bethesda, Md: National Cancer Institute; 1998:105–158.

- Iribarren C, Tekawa IS, Sidney S, Friedman GD. Effect of cigar smoking on the risk of cardiovascular disease, chronic obstructive pulmonary disease, and cancer in men. *N Engl J Med.* 1999; 340:1773–1780.
- Repace JL, Ott WR, Klepeis NE. Indoor air pollution from cigar smoke. In: Shopland DR, ed. *Cigars: Health Effects and Trends*. Bethesda, Md: National Cancer Institute; 1998:161–179.
- Blum A. Paid counter-advertising: proven strategy to combat tobacco use and promotion. *Am J Prev Med.* 1994;10(suppl 3):8–10.
- Dorfman L, Wallack L. Advertising health: the case for counter-ads. *Public Health Rep.* 1993; 106:716–726.
- Siegel M. Mass media antismoking campaigns: a powerful tool for health promotion. *Ann Intern Med.* 1998;129:128–132.
- Lazrich RS. Market Share Reporter: An Annual Compilation of Reported Market Share Data on Companies, Products and Services. Detroit, Mich: Gale; 1997.
- 9. Pierce JP, Gilpin EA, Emery SL, et al. Tobacco control in California: who's winning the war?

An evaluation of the Tobacco Control Program, 1989–1996. La Jolla, Calif: University of California, San Diego; 1998. Available at: http://ssdc. ucsd.edu/tobacco/reports. Accessed September 19, 2000.

- Kennedy GE, Bero LA. Print media coverage of research on passive smoking. *Tob Control.* 1999;8:254–260.
- Ulrich CF. Ulrich's TM International Periodicals Directory. 36th ed. Vol 1–5. New York, NY: RR Bowker; 1998.
- Lacy S, Riffe D. Sampling error and selecting intercoder reliability samples for nominal content categories. *Journalism Mass Commun.* 1996;73:963–973.
- Stata Statistical Software: Release 5.0. College Station, Tex: Stata Corp; 1997.
- SAS for Windows. Cary, NC: SAS Institute Inc; 1996.
- Lazarsfeld PF, Merton RK. Mass Communication, Popular Taste and Organized Social Action. Urbana, Ill: University of Illinois Press; 1975.
- 16. Jordon DL. Newspaper effects on policy preferences. *Public Opinion Q.* 1993;57:191–204.

- Page BI, Shapiro RY. *The Rational Public: Fifty* Years of Trends in Americans' Policy Preferences. Chicago, Ill: University of Chicago Press; 1992.
- Olien C, Thichenor P, Donohoe G. Media coverage and social movements. In: Salmon CT, ed. *Information Campaigns: Balancing Social Values and Social Change*. Newbury Park, Calif: Sage Publications; 1989.
- Shuchman M, Wilkes MS. Medical scientists and health news reporting: a case of miscommunication. *Ann Intern Med.* 1997;126:976–982.
- Wallack LM. Media Advocacy and Public Health: Power for Prevention. Newbury Park, Calif: Sage Publications; 1993.
- Wallack L, Dorfman L. Media advocacy: a strategy for advancing policy and promoting health. *Health Educ Q.* 1996;23:293–317.
- Erickson AC, McKenna JW, Romano RM. Past lessons and new uses of the mass media in reducing tobacco consumption. *Public Health Rep.* 1990;105:239–244.
- Menashe CL, Siegel M. The power of the frame: an analysis of newspaper coverage of tobacco issues—United States, 1985–1996. *J Health Commun.* 1998;3:307–325.