

Impact of Promotion of the Great American Smokeout and Availability of Over-the-Counter Nicotine Medications, 1996

The 1996 Great American Smokeout (GASO), sponsored by the American Cancer Society (ACS), was held on November 21 and included a national promotional campaign in collaboration with a distributor of over-the-counter (OTC) nicotine medications. The 1996 GASO was the first to use a national promotion that included paid advertising of the GASO through television, magazines, and newspapers; direct-to-consumer promotions; and educational activities about GASO in retail stores that sell OTC nicotine medications.* To estimate the impact of this promotional partnership between ACS and a distributor of OTC nicotine medications on smoking-cessation

*Standard promotion of the GASO is organized and promoted by ACS volunteers and staff and consists of local activities in malls, businesses, restaurants, hospitals, colleges, and military bases.

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activity, the collaborators[†] analyzed data from three sources. This report summarizes the findings, which suggest that the promotional campaign, combined with OTC availability of nicotine medications, encouraged smoking-cessation activity.

The 1996 GASO promotion encouraged quitting in general and did not promote any specific brand of nicotine medications; the focus of the promotion was on quitting on the day of the GASO, November 21. In addition, brand-specific nicotine medication advertising largely did not change during the 1996 promotion. To estimate the number of persons exposed to television promotions of the GASO, A.C. Nielsen's National TV Index Service assessed the number of times viewers in the study sample were exposed to an advertisement (1); such exposures are known as impressions.

To estimate awareness of and participation in the GASO, including efforts to quit smoking on the day of the GASO, ACS commissioned Lieberman Research, Inc., to conduct random-digit-dialed telephone surveys in 1995 and 1996. In 1995, a survey of 5504 adults aged ≥ 21 years, including 1366 smokers, was conducted from November 17 through November 26. The nationally representative sample comprised ≥ 100 interviews in each of 48 states; the District of Columbia; Long Island, New York; and the cities of Philadelphia, Pennsylvania, and New York, New York. Data were weighted to produce national estimates. In 1996, a nationwide survey of 983 adults aged ≥ 21 years was conducted from November 22 through November 26. Smokers were oversampled ($n=379$), and the data were weighted to produce nationally representative estimates (2). Respondents in the 1995 and 1996 surveys were asked, "On the day of the Great American Smokeout, which of these things did you do: not smoke cigarettes at all; cut down the number of cigarettes you usually smoke; or smoke as much as usual?"

Retail sales of OTC nicotine medications (i.e., Nicorette[®] nicotine chewing gum, NicoDerm[®] CQ[™] nicotine patches, and Nicotrol[®] nicotine patches)[§] in 1996 were estimated by A.C. Nielsen's InFact Service, which tallies purchases entered at the cash registers of food, drug, and mass merchandisers by electronic Universal Product Code (UPC) scanner. Data were collected from a nationally representative sample of 10,000 outlets located primarily in the top 50 major markets. Purchases from retail outlets without scanner technology were estimated by a sample of those stores. The sample was then weighted to estimate total unit purchases from all outlets. The resulting figures underestimate actual sales (by comparison with factory shipments); therefore, this analysis assumes a 5% underestimation of sales. Projected sales of all three OTC nicotine medications were adjusted to account for underestimation. The baseline period was defined as the 4-week period ending November 2, and the GASO promotion period was the 4-week period ending November 30.

The National TV Index Service reported that the paid advertising specifically for the GASO reached 122.1 million adults aged ≥ 18 years an average of 2.9 times during the 3 weeks before and the week of the GASO, representing a total of approximately 354 million television impressions nationally. Assuming equal distribution of these impressions among smokers and nonsmokers, an estimated 30.5 million smokers (64% of all U.S. smokers) (2) were exposed to GASO promotions.

[†]SmithKline Beecham Consumer Healthcare; Smoking Research Group, University of Pittsburgh; Pinney Associates; ACS; and CDC.

[§]Use of trade names and commercial sources is for identification only and does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

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Responses to the 1995 and 1996 Lieberman surveys were compared to determine whether GASO-related smoking-reduction and smoking-cessation rates changed from 1995 to 1996. During this period, the percentage of respondents who initiated any action during the GASO (either reducing or quitting smoking) increased from 18% in 1995 to 26% in 1996) (Table 1). The percentage who reported quitting remained the same (5% in 1995 versus 6% in 1996); however, the percentage who reported reducing their smoking during the GASO increased significantly, from 13% in 1995 to 20% in 1996. In 1996, reports of smoking behavior were examined at the time of the interview (1–5 days following the GASO): 6% of respondents reported quitting smoking, while 15% reduced their smoking.

Smoking-cessation activity involving the use of nicotine medications was estimated using retail sales of such products as reported by InFact. During the 4-week GASO promotional period, sales of nicotine medications increased by 11% (136,000 units), compared with sales during the baseline period. The proportion of units purchased by new users or by repeat purchasers cannot be determined precisely; however, the smallest package of OTC nicotine medication provides approximately 7 days of therapy; therefore, in this analysis, only the increase in sales during the week ending November 23 was assumed to be due to new purchasers and thus new quit attempts.[¶] Compared with weekly average sales during the entire 4-week baseline period (306,400 units), sales during the week ending November 23 increased 30% (92,600 units), representing a total of 399,000 units. Thus, the enhanced promotional activities and the GASO promotion were associated with an estimated 92,600 attempts at quitting smoking using nicotine medications.

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Editorial Note: Based on nationally representative data for 1965–1994, the prevalence of cigarette smoking in the United States appears to have reached a plateau of approximately 25% (2,3). Reducing the initiation of smoking among youth is a priority reflected in the Food and Drug Administration's final tobacco rule, as well as in ongoing public education and awareness efforts such as the GASO. In addition, encouraging cessation is a priority; reducing adult smoking produces substantial

[¶]No evidence suggests the promotion increased repeat purchases.

TABLE 1. Percentage of respondents who participated in the Great American Smokeout, by selected characteristics and year — United States, 1995 and 1996*

Characteristic	1995	1996	Odds ratio	(95% CI) [†]	Chi square	Df [‡]	p value
Quit smoking	5%	6%	1.2	(0.7–2.0)	0.7	1	<0.41
Reduced smoking	13%	20%	1.7	(1.2–2.3)	11.8	1	<0.001
Any participation[¶]	18%	26%	1.6	(1.2–2.1)	11.7	1	<0.001

*In 1995, a survey of 5504 adults aged ≥21 years was conducted, and in 1996, a survey of 983 adults aged ≥21 years was conducted. Data for each year were weighted to produce national estimates for the respective year.

[†]Confidence interval

[‡]Degrees of freedom.

[¶]Either attempts to reduce or quit smoking.

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short-term and long-term benefits in health improvements and cost savings (4). Since 1977, ACS has sponsored the annual GASO to encourage smokers to stop smoking for at least 24 hours. Evaluation of mass media campaigns and previous GASO efforts suggests that public promotions can increase smoking-cessation activity (5,6).

The findings in this report suggest that the GASO promotional campaign and OTC availability of nicotine medications encouraged smoking-cessation activity. These findings illustrate the substantial impact of an intensive event-related campaign in promoting smoking-cessation activity. In comparison, data from another source on the use of nicotine medications in 1995 indicated only a 2% monthly increase in nicotine medication prescriptions for November over the annual average; however, there was no promotional campaign nor OTC availability of the products (7). OTC availability of the nicotine patch and nicotine gum appears to remove a possible barrier to their use (i.e., obtaining a prescription) and allows more direct promotion of these products and smoking cessation to the general public.

A recent analysis conducted in a setting that simulated OTC availability of three currently available OTC nicotine medications found a continuous (biochemically validated) quit rate of 8% at 12 months using data pooled across studies (8). Using the single-week comparison as the most valid indicator of initial quitting attempts (rather than repurchase) and assuming that any product purchased was used for a quit attempt, the increase in nicotine medication use attributable to the 1996 GASO promotion produced an estimated 7400 additional former smokers.

The findings in this report are subject to at least three limitations. First, because no record was maintained of nonrespondents for the Lieberman surveys, response rates could not be calculated. As a result, the level of response bias cannot be determined. Second, the sampling methods of the 1995 and 1996 surveys were different; however, data from both surveys were weighted to produce nationally representative data and, therefore, were considered comparable. Third, the estimate of the impact of the promotional campaign on smoking cessation may not be precise because all purchasers of nicotine medications were assumed to be the user of the product and because retail sales data comprise both new and repeat purchases.

The findings in this report suggest that promoting smoking cessation can increase quit attempts. Smokers interested in quitting smoking should be strongly encouraged to do so and should optimize their chances for quitting by using effective treatments as outlined by the Agency for Health Care Policy and Research (9). Marketing and promotion efforts designed to promote attempts to quit, along with OTC availability of nicotine medications, are a useful part of a national strategy to decrease the prevalence of smoking.

References

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