

## CANCER COVERAGE AND TOBACCO ADVERTISING IN AFRICAN-AMERICAN WOMEN'S POPULAR MAGAZINES

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**ABSTRACT:** Mass circulating magazines offer an opportunity to inform large segments of the population about preventive health behaviors relevant for cancer control. We collected information about the number and type of cancer articles from January 1987 through December 1994 in *Jet*, *Ebony* and *Essence* magazines. These magazines each have a principal readership of African-American women and a paid circulation of 1,000,000 or more annually. Cancer articles were counted if the content was gender neutral or specifically targeted for women. There were 84 articles on cancer including 6 on lung cancer and 3 on other tobacco-related cancers. Nine additional references to lung cancer were mentioned under the general cancer category, but lung cancer was not the primary focus of the articles. There were 24 articles on breast cancer and 9 on cervical cancer over the 8 year period. Most of the articles (>70%) were short fillers of less than one page in length. A prevention focus was included in 42.2%, 75.0%, and 71.0% of the cancer articles in *Jet*, *Ebony*, and *Essence* respectively. Of the 649 health articles, 116 were on cardiovascular disease. In contrast, there were 1,477 tobacco advertisements over the 8 years. The number of cancer articles was not significantly associated with the number of tobacco advertisements. Because tobacco-related cancers are entirely preventable and contribute to the significant cancer burden, the lack of coverage of tobacco-related cancers is a missed opportunity for health promotion among African-American females.

### INTRODUCTION

Communication through the mass media is an important component of many health promotion programs designed to change health risk

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The authors gratefully acknowledge the thoughtful comments of Don Shopland and Drs. Tom Glynn, Marc Manley, and John Pierce. The authors also thank J. Axelrod of SMRB and the librarians of the Rockville, Maryland public library.

behaviors.<sup>1</sup> Mass media offer the opportunity to inform and shape individual decisions about health promoting behaviors and treatment alternatives.<sup>2,3</sup> Studies show that for American women popular magazines are an important vehicle for acquiring health information in general<sup>3</sup> and cancer knowledge in particular.<sup>4</sup> Among adult women respondents to the cancer supplement for the 1987 National Health Interview Survey, magazines were cited as the third ranked information source about cancer prevention.<sup>5</sup> Use of popular magazines for cancer information support the observation that women read popular magazines for the deliberate purpose of acquiring information rather than reading largely from habit.<sup>6</sup>

Despite the potential for health education through the popular media, previous studies have documented minimal coverage of tobacco-related diseases including cancer.<sup>7-9</sup> The lack of information on tobacco-related cancers in mass circulating magazines that target women readers has been linked to high levels of tobacco advertising. Cancer information in women's magazines has typically emphasized those cancers that are uniquely female or defined by reproductive function.<sup>10</sup> Content analysis of 203 articles drawn from women's magazines from the 1970s found high coverage themes included dieting and mental health whereas low coverage themes included cancer.<sup>8</sup> Analysis of women's magazines from 1983-1987 confirmed the absence of coverage of tobacco-related cancers in health articles.<sup>7</sup>

Studies of popular magazines in relation to the reporting of tobacco-related cancers in women have not usually included magazines with a predominant readership comprising African-American women. Health messages and models in 'traditional' women's magazines may have limited impact for African-American women.<sup>11</sup> Cancer coverage in the popular media is particularly important given the high cancer mortality among older African-American women, accounting for 15,948 deaths at 65 years and older, and 8,442 deaths at 45-65 years in 1993.<sup>12</sup> Moreover, in 1992 lung cancer became the leading cause of cancer mortality among African-American women, age 55-74 years, accounting for 2,984 deaths.<sup>13</sup>

The purpose of this study was to examine all articles between January 1987 and December 1994 on cancers in general and tobacco-related cancers in particular appearing in popular magazines whose principal readership is adult African-American women and to relate this coverage to the number of tobacco advertisements in these magazines.

## METHODS

Magazines with a primary target market of African-American women and an annual circulation for the first half of 1995 of approximately

TABLE 1

## Magazine Demographic Data, 1994-1995\*

	<i>JET</i>	<i>ESSENCE</i>	<i>EBONY</i>
Paid Subscription*:	964 291	1 985 558	1 000 442
Total Readership:	9 836 000	8 284 000	13 538 000
% Women	54.8	68.4	59.6
Median Age: Adults	36.5	35.4	38.5
Median Age: Women	37.3	37.1	38.8
Median Household Income (\$): Adults	\$29 410	\$29 939	\$26 918
Median Household Income (\$): Women	\$23 816	\$27 752	\$21 973

Source: Simmons Market Research Bureau, Inc.

\*Paid circulation for the first half of 1995.

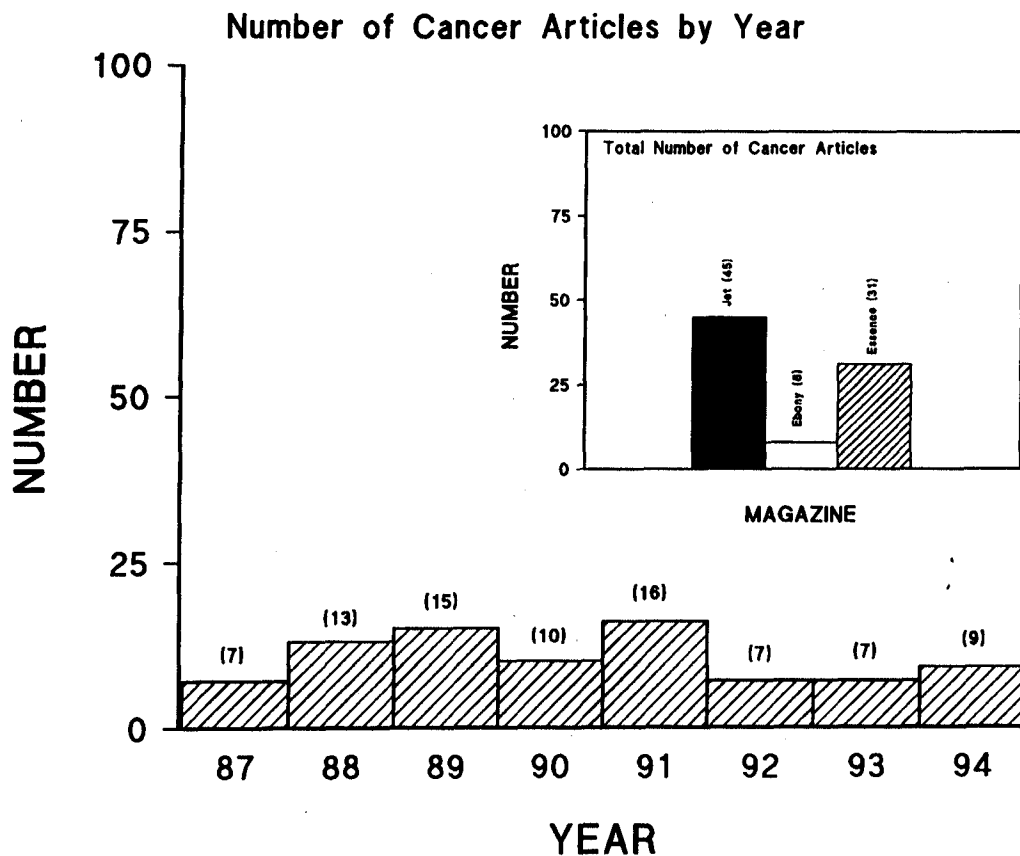
1,000,000 (or greater) were identified through the Publishers Information Bureau. The magazines which met these criteria were *Jet*, *Ebony*, and *Essence* (Table 1). Copies of each issue of *Ebony* (96 issues), *Essence* (96 issues) and *Jet* (404 issues, 1 missing) covering the period January 1987 through December 1994 were located. Magazines were examined for tobacco advertisements and articles on cancer, cardiovascular disease, and general health. Articles were counted if the content was gender neutral or specifically targeted for women. Each cancer article was identified as a feature (> 1 page) or filler (< 1 page); these were also coded if having a primary focus on cancer prevention. Other articles on acute or chronic diseases were included in the study unless they discussed stress management, psychological disorders, exercise and dieting (unless linked to specific disease prevention), pregnancy and fertility, pediatric concerns, cosmetic treatments, injuries or drug/medication usage. SPSS<sup>14</sup> was used for regression and correlation analyses.

## RESULTS

From January 1987 through December 1994, 84 magazine articles were published on cancer in *Jet*, *Ebony* and *Essence*. The annual number of articles on cancer in the popular magazines is shown in Figure 1. Although the number of articles on cancer did not vary significantly by year (< 20 articles per year), the number of cancer articles differed significantly by

FIGURE 1

Number of cancer articles from January 1987 through December 1994 in mass circulating magazines with female African-American readership. Number in parentheses is the actual cancer articles for each year. *Inset:* Total number of cancer articles appearing in the African-American magazines for the same time period. Number in parentheses is the actual cancer articles for each magazine.

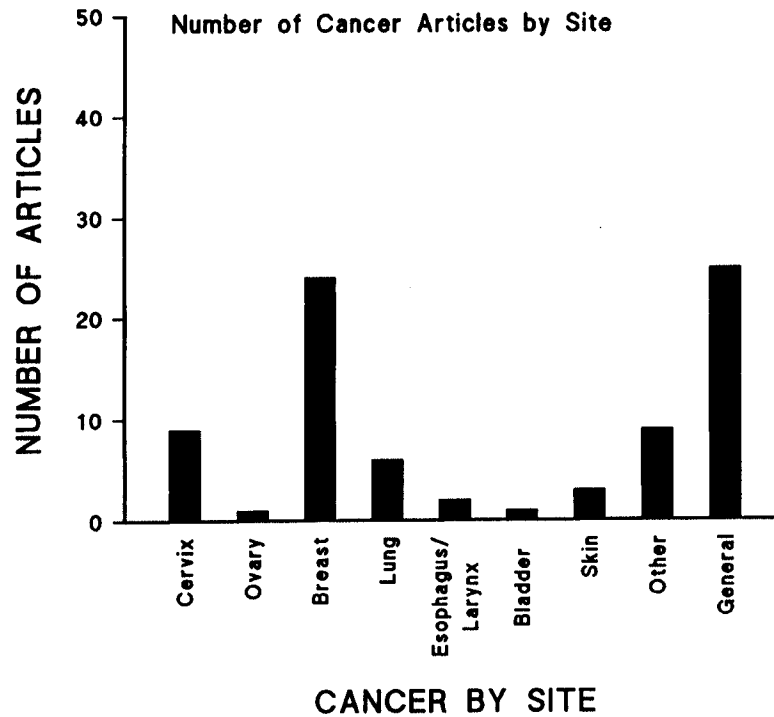


magazine ( $P < .01$ ) with more articles in *Jet* ( $n = 45$ ) compared with *Ebony* ( $n = 8$ ).

Figure 2 shows the number of articles on specific cancers in these magazines. There were 6 articles on cancer of the lung or bronchus, 1 on bladder cancer, 2 on throat cancer (9/84 or 10.7% of cancer articles) and no articles on other cancers with a strong association to tobacco use. There were considerably more articles on "traditional" women's cancers

**FIGURE 2**

Number of cancer articles, by cancer site, from January 1987 through December 1994. 'Other' cancer includes all other site-specific cancers discussed in the articles (e.g., stomach, leukemia/lymphoma, brain, sarcoma). 'General' cancer includes all articles of a general nature and articles which mention multiple cancers but do not focus on any specific cancer.



including breast (n = 24 or 28.6% of cancer articles) and cervical (n = 9 or 10.7% of cancer articles). There were many cancer articles of a general nature (n = 25) including topics on poverty and cancer, gene therapy for cancer, stress and cancer, and anti-cancer foods. Nine additional references to lung cancer were mentioned in general cancer articles, but lung cancer was not the primary focus of these articles. Most of cancer articles were short filler articles in *Jet* (n = 38 or 84.4%), *Ebony* (n = 7 or 87.5%) and *Essence* (n = 23 or 74.2%). A prevention focus was included in 42.2% (19/45) of the cancer articles in *Jet*, 75.0% (6/8) in *Ebony*, and 71.0% (22/31) of the cancer articles in *Essence*.

There were a total of 649 general health articles. These covered

topics such as sexually transmitted diseases (STDs), HIV/AIDS, diabetes mellitus, lupus and sickle cell anemia. Eighteen percent of the health articles (116 articles) were specifically focused on cardiovascular disease. The percent of magazine health articles focusing on cancer was 12.3% (45/367) for *Jet*, 5.7% (8/141) for *Ebony*, and 22.0% (31/141) for *Essence*, with 12.9% (84/649) of all health articles across all years focusing on cancer. The percent of health articles discussing cancer was significantly associated with magazine ( $P < .001$ ), with *Ebony* having far fewer cancer articles as a percent of total health coverage than the other magazines.

From 1987–1994 there were a total of 1,477 tobacco advertisements in the three magazines. The number of tobacco ads per year declined from 280 in 1987 to 122 in 1994 and varied significantly by magazine ( $P <$

FIGURE 3

Number of tobacco advertisements in African-American women's popular magazines from January 1987 through December 1994.

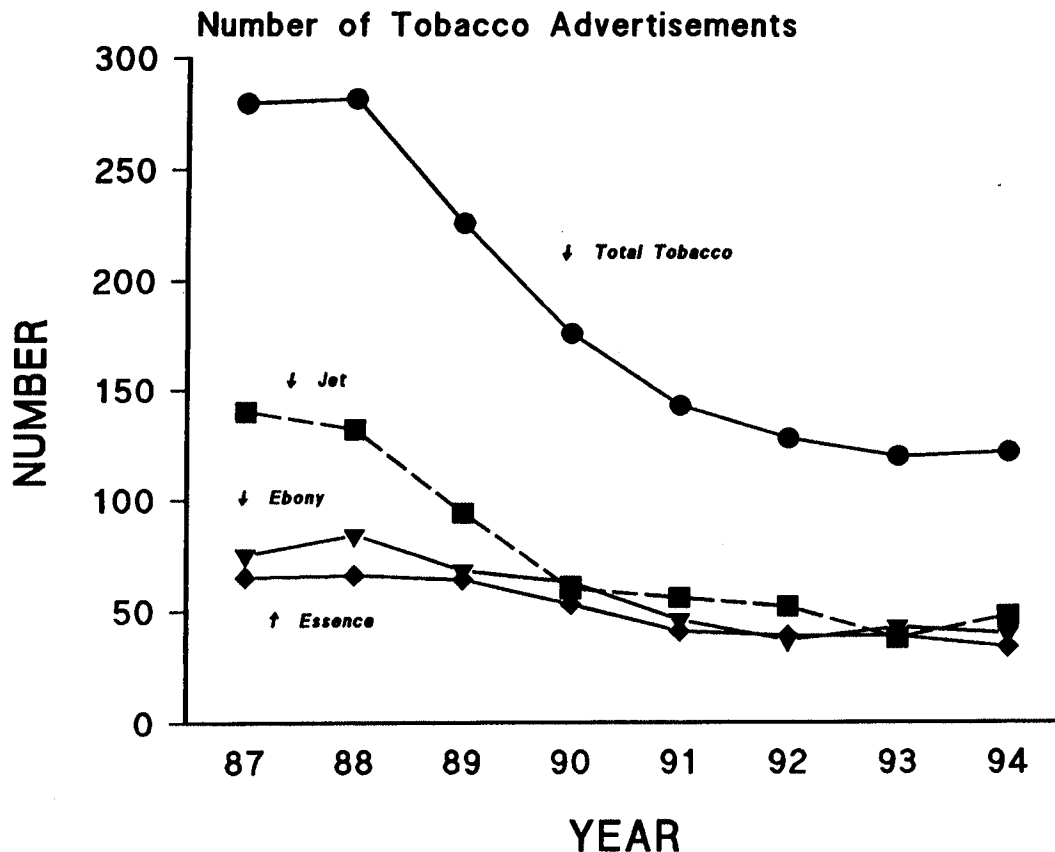


TABLE 2

## Density of Tobacco Advertisements and Cancer Articles in African-American Women's Magazines\*

	1987	1988	1989	1990	1991	1992	1993	1994
pages/tobacco advertisement	29	25	31	39	47	53	56	55
pages/cancer article	1 161	542	470	682	417	968	954	748
total pages	8 124	7 044	7 034	6 816	6 664	6 773	6 680	6 728

\*Data for *Jet*, *Essence* and *Ebony* were combined in the table.

.001), with the greatest number present in *Jet* ( $n=620$ ) and the fewest in *Essence* ( $n=401$ ) (Figure 3). The total number of cancer articles was not significantly explained by the number of tobacco advertisements.

Table 2 shows that the average number of pages a reader would have to scan until she reached a tobacco advertisement increased from 29 in 1987 to 55 in 1994. This table also shows that over the same time period the number of pages she would have to read before reaching a cancer article went from 1,161 in 1987, to a low of 417 in 1991, and then back up to 748 in 1994.

## DISCUSSION

The research reported here addressed the amount of coverage given to tobacco-related cancers by magazines with a significant readership among adult African-American women. Analysis of the number of cancer articles showed that there were only 84 articles over 8 years despite the fact that cancer mortality rates among African-American women have increased by 16% in the past 30 years.<sup>13</sup> For younger African-American women (25-44 years), cancer deaths rank second to death from HIV/AIDS; for older African-American women (45-64 years), cancer ranks number one as cause of death.<sup>12</sup>

Although in 1992 lung cancer surpassed breast cancer as the leading cancer killer of African-American women,<sup>15</sup> none of the three magazines surveyed published an article on lung cancer after 1992. Of those articles that focused on lung cancer, tobacco was rarely discussed as the major contributing cause. The content of the lung cancer articles ranged

from the risks of radon exposure to vitamin E as a chemopreventive agent. The three articles which discussed other tobacco-related cancers were done in the context of a prominent female African-American singer who developed and died from throat cancer. Smoking was not mentioned in relation to throat cancer in these articles.

Similar to cancer coverage in mass circulating magazines read by white American females of the same age,<sup>16</sup> coverage of breast and cervical cancers suggests a noteworthy attention to women's health issues by the African-American magazines. However, this focus tends to down play the occurrence of almost entirely preventable lung cancer deaths among African-American women.<sup>9</sup>

Previous studies have correlated tobacco advertising with magazine coverage of smoking related health hazards.<sup>17-22</sup> Moreover, targeting of tobacco ads in women's and youth's magazines,<sup>23</sup> and tobacco promotion strategies targeted at women<sup>24-26</sup> and minorities<sup>27</sup> have been described. Although we did not find an association between number of tobacco ads and number of cancer articles, this was not unexpected: inclusion of all cancers may have biased a tobacco-related cancer association to the null. Nevertheless, the data from this study show that the coverage of tobacco-related cancers is virtually absent in magazines that focus on female African-Americans. We found a large number of tobacco ads (nearly 1,500) over the 8 years surveyed and only 9 articles on cancers which have tobacco use as the major risk factor.

The decrease seen in the number of tobacco advertisements over the 8 years surveyed is noteworthy. This decrease may indicate that the publishers of these magazines are actively accepting less tobacco advertising in their magazines. Although this may be occurring, data from the Federal Trade Commission<sup>28</sup> indicate that another trend was also taking place during these 8 years. These data indicate that the tobacco industry was decreasing its expenditures on advertising in magazines. For example, in 1987 12.3% of all tobacco advertising and promotional expenditures were spent on magazine advertisements. This had declined to 3.9% in 1993 (the last year for which statistics were available). In actual dollar amounts 317.8 million dollars were spent on magazine advertisements in 1987 and 235.2 million dollars were spent in 1993 (these numbers have not been adjusted for inflation). Thus, although the decrease in the density of tobacco advertising in magazines aimed at African-American women is encouraging, unfortunately this has not been accompanied by a corresponding increase in the coverage of cancer.

In summary, this study demonstrates the lack of coverage of tobacco-related cancers in popular magazines marketed to female African-

Americans. Because tobacco-related cancers are entirely preventable and contribute to the significant cancer burden within this population, this is a missed opportunity for health promotion. It is dismaying that editorial boards of magazines with a large female African-American audience and sections on health/medicine do not give a higher priority to tobacco-related cancers.

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