

Women's Smoking Trends and Awareness of Health Risk

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National data on smoking cessation rates indicate that female smokers may have more difficulty than male smokers in quitting smoking. To test the hypothesis that awareness of risk of smoking and personal vulnerability may be not as strong in female as in male smokers, we conducted a series of telephone interviews dealing with smokers' awareness and knowledge of the recent Surgeon General's Report on Smoking and Health, and their perception of and attitudes toward personal risk. The results indicated no marked sex difference in awareness of the Surgeon General's Report, but showed that significantly more female than male smokers worried about what they heard and read about the risk of smoking. A larger percentage of female smokers attributed a greater health risk from smoking to men than to women, thus suggesting that women's feelings of personal vulnerability may be weaker than men's.

Evidence of sex differences in smoking behavior has been accumulating in recent years. One of the differences is in the cessation rate of female and male smokers. National surveys have shown that the percentage of former smokers during the past 10 years has been consistently lower in the female than in the male population (1-3, 6, 10). Also, several studies have reported results indicating that, in treatment programs, women are less successful than men in achieving and maintaining abstinence (4, 5, 7, 9, 12). Evidence that the "abstinence syndrome" may be more severe in women than in men is also reported by the 1979 Surgeon General's Report on Smoking and Health (8). The critical factors which make abstinence from smoking more difficult for women than for men, however, have yet to be identified. Research in this area is important for both its theoretical implications and its relevance to the success of treatment and educational programs.

The goal of this study was to verify whether female smokers perceive the health risks of cigarette smoking that they read and hear about as less threatening than men do, and whether they feel themselves to be less vulnerable than men to the ill consequences of smoking. Because the prevalence of smoking in women has only recently begun to approach that of men, morbidity and mortality rates do not yet reflect the long-term effects of women's smoking. Many women smokers may, therefore, be under the impression that lung cancer and other smoking-related diseases are men's diseases, and possibly feel less personally vulnerable than men do. As a result, their efforts to stop smoking may be weaker than men's.

METHOD

In January, 1979, the second Surgeon General's Report on Smoking and Health was released and widely publicized. Five weeks after its release, we conducted a

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short telephone interview on a random sample of adult smokers from the general population of cigarette smokers in the Ann Arbor area. Of the smokers who were contacted, 78% agreed to be interviewed. A total of 276 interviews was obtained.

The interview questions dealt with: (a) the respondents' awareness and knowledge of the recent Surgeon General's Report; (b) their present and past smoking behavior; (c) their worrying about what they had heard or read about the risks of smoking; and (d) their estimate of the comparative risk of heart disease and lung cancer for male and female smokers.

Of the 276 respondents, 47.8% were men and 52.2% were women. Their ages ranged from 18 to 72, with 72.8% of the entire sample 40 years or younger. Nearly half the subjects (48.2%) had received between 13 and 16 years of education, 23.6% had 12 years or less, and 28.3% more than 16 years. Twenty-eight percent of the respondents smoked 10 cigarettes or less per day, 39% between 10 and 20 cigarettes, and 33% more than 20 (one pack).

RESULTS AND DISCUSSION

Asking about the Surgeon General's Report provided a context for establishing the respondents' general level of awareness of information on smoking. Women and the more educated appeared to have a slightly higher awareness. Male and female respondents differed in some of the specific items they remembered. Cancer was mentioned more often by male (48.3%) than by female respondents (26.4%); more women than men (29 vs 7%) remembered information on smoking in relation to pregnancy, childbirth, and birth control pills.

Asked whether they worried about what they heard or read about smoking, 63.6% of the female smokers and 49.1% of the male smokers answered affirmatively. The difference is significant at the 0.05 level of confidence ($\chi^2(1) = 4.211$; $P < 0.05$). The incidence of worriers was higher among heavier smokers (one pack or more) than among lighter smokers (less than one pack), but the difference was not as large as one might expect, considering the widespread knowledge that the risk of smoking increases with the amount of cigarettes smoked. The difference was more pronounced in the female (72.4 to 55.0%) than in the male sample (53.2 to 43.2%), but in neither case did it reach statistical significance.

In both the male and female samples, the percentage of smokers who worried was higher in respondents under 40 than in those over 40, but only in the male sample was the difference (56.8 to 24.0%) significant. This unusual result can perhaps be explained as the effect of the presence of more smokers with only high school education or less in the older portion of our sample, and especially of the male sample. Smokers with less education may be less informed and therefore less inclined to worry about the consequences of smoking than smokers with higher education.

To obtain some clue to the smokers' perception of personal risk, we asked the respondents whether they believed men or women smokers had a greater chance of getting lung cancer or heart disease.² Sixty-seven (27.5%) respondents stated that they did not know or had no opinion. The distribution of the respondents who

² This question was not asked of the first 32 interviews.

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