Adolescent use of cigarette vending machines

To the Editor—Public health officials have focused attention on the nature and extent of youth access to tobacco products in the United States.1 Studies have clearly shown that minors can purchase cigarettes unfettered.2 While model legislation calls for comprehensive measures to thwart youth access to tobacco,3 many communities have initially focused on regulating cigarette vending machines.

Tobacco control advocates, as well as the tobacco industry and retailers, recognize that a small percentage of youth tobacco sales is through vending machines. However, vending machines should be cause for concern because of their ubiquitous nature.

A highly publicised mail intercept survey commissioned by the National Automatic Merchandising Association (NAMA) found that teenagers (13–17 years old) generally used over-the-counter sources for purchasing cigarettes.4 Older than the NAMA results, one sees that the younger the youth, the more likely they will be to use a cigarette vending machine. The survey showed that 13 year old smokers were 11 times more likely to use a vending machine than 17 year olds.

In the spring of 1993, more than 60000 students in grades seven, nine, and 12 (12–18 years old) participated in the Pennsylvania tobacco survey for students, which was conducted for the Pennsylvania Department of Health.5 Using a 121 item self-completed questionnaire, administered in a classroom setting, this research aimed to collect baseline data about youth behaviour patterns and attitudes about cigarettes and smokeless tobacco. These students came from a stratified random sample of 371 public and non-public schools. Care was given to the proportional representation of the geographic, ethnic, gender, economic, and grade composition of the state. A total of 60778 students was surveyed, including a random sample of 55563 students and an over-sampling of 5215 students in various target areas. After excluding the oversampled respondents and unusable questionnaires, the population on which our results are based is 54741 students.

Our study one sees the finding that the younger the adolescent, the more likely they will use a cigarette vending machine rather than over-the-counter sources (that is, convenience stores, gas stations, supermarkets).5 Seventh graders (12 to 13 year olds) were 2.2 times more likely to “purchase” vending machines as the easiest place to buy cigarettes than ninth graders (95% CI = 2.1 to 2.3). Seventh graders were 6.6 times more likely to “purchase” vending machines as the easiest place to buy cigarettes than 12th graders (95% CI = 6.3 to 7.0).

When students were asked on a multiple response question where they actually bought cigarettes, the younger students were more likely to cite vending machines as a source. Seventh graders were 1.5 times more likely to buy cigarette products in vending machines than ninth graders (95% CI = 1.4 to 1.7). Seventh graders were 2.6 times more likely to buy cigarettes from a vending machine than 12th graders (95% CI = 2.3 to 2.8). A Pearson’s Z-test with one degree of freedom found each of these comparisons to be highly significant (p < 0.001).

While the overall volume of cigarette sales to minors is significant in the state, it is not as large as from over-the-counter sales, the younger, experimental smoker is at greater risk of purchasing from a cigarette vending machine. Tobacco control groups should be aware of this risk to such a vulnerable target audience and should adjust their educational programmes and policies accordingly.

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Son of Premier

To the Editor—In 1988, the RJ Reynolds Tobacco Company (RJR) introduced a unique cigarette product called Premier.1 This product was unique because, unlike conventional cigarettes, Premier heated rather than burned tobacco, thereby significantly reducing tar yields. In October 1988, RJR began test marketing Premier in two American cities (Phoenix, Arizona, and St Louis, Missouri). However, it did not sell well in these cities and was removed from the market in February 1989.

The concept of a smokeless tobacco product, however, did not die with Premier. On 27 November 1994, a New York Times article revealed that RJR was testing a second generation of smokeless tobacco called Eclipse.² Like Premier, Eclipse heats rather than burns tobacco, but is designed somewhat differently.³ RJR has been conducting consumer tests of Eclipse in eight different American cities, including Buffalo, New York.⁴

One week after the New York Times story on Eclipse, we undertook an informal mail intercept survey to determine consumer awareness of and interest in trying "smokeless cigarette". We were curious to see how smokers perceived this product, and were interested to see if non-smokers might be induced to try smoking Eclipse. For this purpose, respondents were recruited by asking individuals at three shopping malls in Buffalo to participate in a 5 minute interview on cigarette smoking. Overall, interviews were completed with a sample of 94 persons, including 26 smokers, 28 former smokers, and 40 individuals who had never smoked. Only two individuals who were approached to be interviewed refused participation in the survey. We are not sure to what extent persons would know about the Eclipse cigarette, interviewers were given a diagram of Eclipse to show to respondents. To help respondents understand the differences between Eclipse and a conventional cigarette, the diagram also listed several claims made about the product in the New York Times article (that is, reduce tar levels by 90%, eliminate 95% of secondhand smoke, produce less smoke than a regular cigarette).³

Sixty percent of respondents stated that they had heard about the Eclipse cigarette. However, after showing respondents the diagram of Eclipse, it was apparent that most people were unfamiliar with the unique features of the product and how it differed from a conventional cigarette.

None of the new smokers and former smokers we interviewed expressed interest in trying Eclipse. However, 85% of the smokers stated that they would be interested in trying the product. Respondents who expressed interest in smoking Eclipse were asked to describe benefits they believed to be associated with the product. The most frequently mentioned benefits were less side-stream smoke and tar. All respondents were asked to describe potential problems associated with the Eclipse cigarette. The most often mentioned problems were addiction and disposal of the device.

The vast majority of respondents answered affirmatively to a question about whether Eclipse should be subject to government testing for safety. However, when asked whether Eclipse should be sold alongside regular cigarettes on a 70% tax, most of those who said the product should be available like cigarettes. Anecdotal comments received from respondents to our survey gave us the impression that both smokers and non-smokers are sceptical about claims being made about the safety of Eclipse in relation to conventional cigarettes.

A recent study showed that about 70% of adult smokers in the United States want to stop smoking. However, it is important for doctors to let patients know that stopping smoking do so out of concern for their health.