

RESEARCH PAPER

New tobacco products: do smokers like them?

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Background: There is little information about smokers who tried potentially reduced exposure products (PREPs) (Eclipse[®], Omni[®], Advance Lights[®], Accord[®], or Ariva[®]), why they tried them, if they liked these products, and if they will continue to use them.

Objectives: The objectives of this qualitative study were to understand: (1) how smokers who tried PREPs learned about them, (2) reasons for first trying PREPs, (3) which PREP(s) they tried, (4) what they thought of the product at first trial, (5) reasons for continuing or discontinuing use, and (6) whether they would recommend PREPs to others.

Design: In October 2002, 16 focus group sessions were conducted with current cigarette smokers aged 30–50 years: eight groups in Chattanooga, Tennessee, and eight in Dallas, Texas. Specific focus groups were composed of white men, white women, African American men, African American women, Hispanic men, or Hispanic women.

Results: The majority of the participants learned about PREPs through advertising or promotion, family, friends, and co-workers; major reasons given for first trying PREPs were that the products were free or inexpensive, they wanted to stop smoking, they believed the product claims of fewer health risks, or they were curious; most of them tried Eclipse[®] probably because the focus groups were conducted in the same cities where Eclipse[®] was introduced; most participants did not like PREPs; most discontinued the use of PREPs, some who continued to use them did so infrequently and also kept smoking their regular brands of cigarettes; and most would not recommend PREPs, although a few might recommend them to specific groups (for example, new smokers, the young, women, curious or health conscious people).

Conclusions: Although most established smokers did not like the PREPs they tried and will not recommend them to anyone, a minority of established smokers believe that there may be a market for these products.

New tobacco products (for example, Eclipse[®], Omni[®], Advance Lights[®], Accord[®], and Ariva[®])* have been introduced in the past few years, some with direct or implied claims that their health risks are less than those of traditional cigarettes.¹ These potentially reduced exposure products (PREPs) have been on the market too short a time for assessment of the validity of this claim. Meanwhile, smokers who might otherwise stop smoking may continue to smoke, using these new products and thereby continuing to be at higher risk for smoking related diseases than if they stopped smoking.²

An unfortunate lesson was learned in the case of “light” cigarettes that were introduced into the market in the early 1970s. They were marketed as having less tar than regular cigarettes and so were thought to be less hazardous. However, research on the topography of smoking and on health effects associated with light cigarettes showed that they were not safer than regular cigarette brands.¹ Smokers compensated by inhaling more smoke, inhaling more deeply, or smoking more cigarettes per day, resulting in greater exposure to toxins than was expected.³

The possibility of using PREPs to reduce the deleterious health effects of tobacco products has been discussed in the scientific literature.^{1 3–13} Health professionals in tobacco control have debated whether PREPs can reduce exposure to toxins, individual risk, and population risk.^{1 3–13}

Because of lack of data on the prevalence of PREP users, concerns about the response of smokers to these new

products and the implicit claims of reduced health risks, the Office on Smoking and Health, Centers for Disease Control and Prevention, conducted focus groups with adult, established smokers. The purposes were to understand: (1) how they learned about the PREP, (2) reasons for first trying PREPs, (3) which PREP(s) they tried, (4) what they thought of the product at first trial, (5) reasons for continuing or discontinuing use, and (6) whether they would recommend PREPs to others.

METHODS

Because of the exploratory and formative nature of this research, focus groups were chosen as an appropriate investigative technique.¹⁴ Focus groups are used to generate an in-depth understanding of issues and to reveal promising directions for new areas of research.^{15 16}

In October 2002, 16 focus group sessions were conducted with current cigarette smokers aged 30–50 years (although two Hispanic women were older than 50 years): eight sessions in Chattanooga, Tennessee, and eight in Dallas, Texas. Because Chattanooga and Dallas were test markets for Eclipse[®], conducting the focus groups in these two cities was likely to provide sufficient numbers of PREP triers and users.

Each of the groups included a mixture of persons who had tried or currently used PREPs (for example, Eclipse[®], Omni[®], Advance Lights[®], Accord[®], or Ariva[®]). In each focus group: (1) no more than 50% of participants had tried or used only one specific product (for example, Eclipse[®]); (2) at least 25% had children 6 years old or younger living in the home or present in the home several days a week—having children in the home may be one reason why smokers tried PREPs to reduce secondhand smoke exposure.

* The use of trade names is for informational purposes only and in no way implies endorsement by the US Government, the US Department of Health and Human Services, or the US Centers for Disease Control and Prevention.

Table 1 Age distribution, by sex and race or ethnicity, Chattanooga, Tennessee, and Dallas, Texas, 2002

Age	Male			Female			Total
	White	African American	Hispanic	White	African American	Hispanic	
30-34	0	3	4	7	5	5	30
35-39	11	3	7	7	6	5	39
40-44	6	7	3	9	4	0	29
45-50	13	4	2	15	2	4	40
Over 50	0	0	0	0	0	2	2
Total	36	17	16	38	17	16	140

Recruitment

In both cities, staff from professional focus group facilities recruited participants. In Chattanooga, recruitment was conducted by phone with use of the facility database; in Dallas, recruitment was conducted by using a database, email, and phone contact. In Dallas, the groups were Hispanic (16 men and 16 women) and non-Hispanic white (18 men and 18 women); in Chattanooga, the focus groups were non-Hispanic African American (17 men and 17 women) and non-Hispanic white (18 men and 18 women). For simplicity, we refer to non-Hispanic whites as whites, and non-Hispanic blacks as African Americans. For each racial or ethnic group and sex combination, two focus group sessions were conducted, resulting in eight groups for each city.¹⁴⁻¹⁷ For both cities, the eligibility criteria for participants in a group were having smoked at least 100 cigarettes in their lifetime, having smoked one or more cigarettes in the past 30 days, and having ever used Eclipse[®], Omni[®], Advance Lights[®], Accord[®], or Ariva[®].

In Chattanooga, 293 persons were considered for participation. Of these persons, 236 (80.5%) were ineligible to participate and 57 (19.5%) were eligible and agreed to participate. Reasons for non-participation in or ineligibility included not having smoked 100 cigarettes in their lifetime ($n = 67$); not having smoked in the past 30 days ($n = 21$); no use of PREP ($n = 7$); not being African American or white ($n = 22$); lack of interest in participating ($n = 84$); and non-availability for the session ($n = 35$). In Dallas, 96 persons were considered for participation; 83 (86.5%) were eligible and agreed to participate. The only reason given for non-participation by 13 of the 96 persons (13.5%) was inconvenience of the time and date. Details regarding participants' age distribution and smoking pattern (some days or every day smoking) are provided in tables 1 and 2.

Sessions

All groups were conducted by trained female moderators who were similar to the participants with regard to age and race or ethnicity. The facilities were equipped with one way mirrors, observer viewing rooms, a waiting area, and videotape and audiotape equipment.

Six to nine adults participated in each group session, which lasted approximately two hours. Before the discussion, the moderator read aloud a consent form covering issues of confidentiality and use of the information, and asked each person to sign the informed consent. The same discussion guide was used for all groups. This study was approved by the Center for Disease Control and Prevention's institutional review board.

Analysis

Two persons trained to take notes on the focus group discussions recorded participant interaction and the intensity of discussion, including non-verbal behaviours. The detailed field notes were used to conduct a note based content analysis of the focus group data. The two note takers independently identified, labelled, and categorised data from the field notes to identify general themes and primary patterns. Patterns or themes that were clearly and frequently expressed in each group, as well as those that were more subtle or less often voiced, were examined along with non-verbal evidence of support by group members. The analysis of field notes served as the basis for a summary of general themes and patterns from the focus groups and to structure review of the transcribed audiotapes from the focus groups. Quotes that are representative of the ideas frequently expressed by the group are presented (table 3).

Using the note based analysis and two debriefing sessions, an analysis table was prepared. The table was divided into segments for sex, and race or ethnicity to examine similarities and differences in themes specific to the two areas. Although the level of agreement among the team members was high, differences in interpretation did occur. In these instances, team members reached agreement after discussion and re-examination of the field notes.

RESULTS

The results for these focus groups, consisting of 140 adult established smokers, are presented here according to the six objectives of the study.

Table 2 Some and every day smoking, by sex and race or ethnicity, Chattanooga and Dallas, 2002

	Male			Female			Total
	White	African American	Hispanic	White	African American	Hispanic	
Some days	7	4	6	2	6	8	33
Every day	29	13	10	36	9	8	105
Missing	0	0	0	0	2	0	2
Total	36	17	16	38	17	16	140

Table 3 Representative quotes of PREP ever triers, Chattanooga and Dallas, 2002**How did they learn about the PREP?**

"If I remember correctly when they [Eclipse[®]] first came out (to Chattanooga), when they were trying to break into the market, they had really extensive surveys and giveaways, and most of the malls around here had some sort of a booth set up where they were giving them away and if you participated in the study you got a couple of free cartons. So they were really floating around for quite some time there." (white man)

"My friend had a pack [Eclipse[®]], so I was bumming cigarettes from my friend and that's the only kind they had." (African American woman)

"[My mother] went to [a] research [study] to try the cigarettes [Eclipse[®]], and they gave her a carton and she didn't like them. She gave them to me." (Hispanic woman)

Why did they first try the PREP?

"The price was right. They were free!" (All racial and sex groups)

"At the grocery store I saw them [Eclipse[®]]. I was trying to cut back on my smoking habit and I figured I would give it a go...[what first attracted me was] that they were smokeless and lower in tar and [I thought I could] sort of wean off Marlboro." (white male)

"I smoke [PREPs] now because I am trying to quit." (white female)

"They said they [Ariva[®]] were for people on long plane flights to ease cravings. So, I was thinking like him that I wanted to quit...and I was thinking that I could just get hooked on those for a while and wean myself off of those." (white male)

"I used to work in a convenience store, and [Eclipse[®]] was a new product for the store and they just looked different to me and then I read that they were supposed to help you quit, and I was like, 'okay.'" (Hispanic female)

"Health was the main reason (I use Eclipse[®])...but (also) the fact that I got a lot more information as to the benefits of the cigarette." (Hispanic man)

"I feel like they say smoking gives you cancer, smoking gives you this and does that, so at least you'd be smoking a more healthier cigarette [Eclipse[®]] to me." (African American woman)

"It was something new, something different." (white man)

"Just curious." (African American man)

What did they think of PREPs at first trial?

"The product [Eclipse[®]] is not satisfying. That's what everyone is really saying. It just doesn't satisfy the craving of a cigarette smoker..." (African American man)

"[Advance Lights[®] tasted] horrible. It tasted like they had some kind of dirty something mixed up in there." (African American man)

"It was cool that it [Eclipse[®]] didn't drop ashes. I mean only the top would get red." (African American man)

"It is light, real smooth." (African American man)

"I enjoyed that part of it. My hands didn't smell." (Hispanic woman)

Why did they continue or discontinue PREP use?

"I gave a couple of packs away at work and nobody else liked them either; so I ended up throwing about seven packs away. They just didn't do anything for me." (white man)

"I have tried Omni[®]. The only reason I tried it was that I ran out of cigarettes, and I think they were really cheap in the market, in the store, and whoever I was bumming off of...but I will never buy them if I've got the money." (African American man)

"Advance Lights[®] [will make] you want a cigarette, it will make you want a cigarette." (African-American woman)

"I have smoked [Eclipse[®]] more than once. I work in a lot of convention centers and hotels where smoking is forbidden. And a lot of times, I'll have those, especially in the convention centers, because you can get satisfaction from it without leaving to go outside." (white man)

"Yeah. I still have the original pack at home. There are only five of them [Ariva[®]] missing. I bought them at least three months ago. (I use them) mostly when my kids are in the car (with me) or if it is cold outside, so I don't have to have the windows cracked." (white man)

Will you recommend PREPs to others?

"I didn't like it [Eclipse[®]], so, I wouldn't recommend it." (Hispanic man)

"I wouldn't recommend it [Eclipse[®]] to someone who wanted to quit smoking. That's not the way to quit smoking." (white man)

"If somebody wanted to stop smoking, somebody wanted to stop smelling like smoke, and you could still get some type of satisfaction, yeah, I [would recommend PREPs]." (Hispanic woman)

"I think the only people that are going to smoke this kind of cigarettes are the people that are starting [to smoke cigarettes]." (Hispanic man)

"Somebody that's into health, healthy stuff, and running and all of that" (Hispanic man)

How did they learn about the PREP?**Advertising and promotion**

Most participants in all racial and ethnic groups and both men and women reported learning about a PREP through advertising or a promotion. Many received free samples or discount coupons (for example, buy one and get one free) in the mail, others were invited to participate in a study of one of these PREPs (Eclipse[®]), and a few got free samples when visiting a club.

It is important to note that most participants in the focus groups (126 out of 140) tried Eclipse[®] (table 4). There were differences in marketing of Eclipse in Chattanooga (n = 57) and Dallas (n = 83). Chattanooga was the first test marketing. Much of the marketing emphasis in Chattanooga was on getting smokers to try the product by giving away free cartons. Because of information gained from the Chattanooga test market, Eclipse[®] was redesigned. In Chattanooga, smokers did complain about getting the product lit and keeping it lit. To overcome this problem in subsequent test markets, RJ Reynolds drilled a hole in the filter tip to reduce the draw resistance and allow for circulation. This product modification on Eclipse[®] increased the tar yield and reduced the claim of secondhand smoke reduction from 90% reduced to 80% reduced. Thus, the Eclipse[®] product tried in Dallas was not exactly the same tried in Chattanooga.

Family, friends, or co-workers

Some participants from each of the racial and ethnic and sex groups reported first learning about PREPs from family

members, friends, or co-workers. Specifically, they said they were around spouses, parents, siblings, cousins, friends, or co-workers who had a PREP and either asked to try a PREP or were given one. A few first learned about PREPs when they asked for a cigarette from a stranger who was smoking a PREP.

Why did they first try the PREP?

The most common reasons for trying PREPs were the price, help to stop smoking cigarettes, product claims of reduced health risks, smell, or ashes, and curiosity or wanting to try something new or different.

Price

For all racial and ethnic groups and both men and women the main reason for first trying a PREP was that "the price was right". Most participants said they were given a free sample or discount coupons to try the new product.

Help stop smoking

In each focus group, some participants reported trying a PREP in an effort to stop smoking. Again, no racial or ethnic or sex differences were observed. These participants said that product claims on PREPs suggested that the products could eventually help them to stop smoking by lessening the craving for regular cigarettes. A few participants in various focus groups reported trying the products in an effort to

Table 4 PREPs ever tried, by sex and race or ethnicity, Chattanooga and Dallas, 2002

Product name	Male			Female			Total
	White	African American	Hispanic	White	African American	Hispanic	
Eclipse	33	15	15	37	15	11	126
Omni	10	4	5	8	0	1	28
Advance Lights	9	4	7	8	9	6	43
Accord	3	0	4	1	2	4	14
Ariva	6	1	4	3	1	2	17
Other*	4	3	1	4	3	3	20

*Other products were listed such as: Broncos, Kools, Fame, Sports, Salem, Eves, Doral, and Marlboro.

reduce the number of regular cigarettes they smoked as a way to stop smoking.

Product claims

White, African American, and Hispanic women, more often than their male counterparts, cited product claims of reduced health risks as the reason for trying a PREP. Some men and women reported trying PREPs because they thought the products had reduced levels of tar and other cancer causing chemicals, so the health risks were reduced from smoking. These participants commented that they wanted to reduce the health risks from tobacco for themselves and others, particularly children. Claims about lack of smell, smoke, and ashes were given as reasons for trying Eclipse®.

Curiosity or something new

Some participants from all racial and ethnic groups and both men and women cited curiosity or wanting to try something new or different once in a while as a reason for trying a PREP.

What product did they try?

Eclipse® was tried by almost all participants, probably because the discussions were in two cities where Eclipse® was first introduced and heavily marketed (table 4). In each focus group, after Eclipse®, the other products most participants tried were Advance Lights®, Omni®, Ariva®, or Accord®, in that order. Across groups, the number of participants who tried more than one product was insufficient for comparisons among products.

What did they think of PREPs at first trial?

Negative reaction

The majority of participants in all racial and ethnic groups and both men and women, except for African American women in one of the focus groups, had mostly negative initial reactions to PREPs, and even in this one focus group negative statements were made. Participants described the PREP(s) as not satisfying the need or craving for traditional cigarettes, not being as strong as traditional cigarette brands, having little or no taste or a “nasty” taste, feeling like smoking “air”, not having a cigarette smell, and being difficult to light or keep lit.

Positive reaction

Even though the vast majority of Hispanics (men and women) had negative reactions to PREPs, they were more likely to endorse positive statements than were whites and African Americans. Also, in one focus group of African American women, about half the participants mentioned that when they first tried a PREP they liked it. Members of this group had been smoking regular cigarettes for about five years (median); the members of the other focus groups had been smoking for 15–30 years. Those who liked the PREP described it as a clean, pleasant, smooth, light, smokeless (no

sidestream) cigarette with no ashes that left no smell on their clothes or hair.

Why did they continue or discontinue PREP use?

Discontinued use

Because the majority of participants had negative initial reactions to PREPs, they did not continue to use them; except for the focus group of African American women noted, no differences by racial or ethnic or sex group were obvious in discussions of discontinuing use of the products. Again, reasons given for discontinued use were that the PREPs were “nasty”, that they were terrible, had no “buzz”, did not satisfy the craving for a cigarette, were not substitutes for regular cigarettes, were too mild, and were missing nicotine. Participants also mentioned that it was difficult to keep Eclipse® cigarettes lit. Some participants mentioned that PREPs made them want to smoke regular cigarettes. Overall, most participants reported that after having tried a PREP they soon resumed smoking their regular brand of cigarettes.

Continued use

Across groups, few participants indicated that they continued using the products. The most common reasons given by those who decided to continue use were that they liked the product because it was clean, pleasant, smooth, light, smokeless, cigarette with no ashes, and left no smell in clothes or hair. Another reason was that they believed the products’ claims. Hispanic women and African American women in one focus group were more likely to mention that they used PREPs once in a while than were participants in other racial or sex groups. However, almost all of those who continued to use PREPs, mostly infrequently, also continued smoking their regular brand of cigarettes.

Will you recommend PREPs to others?

No

Although no racial or ethnic difference was observed, men were less likely than women to report that they would recommend a PREP. Some participants would not recommend PREPs to anyone. Others would not recommend PREPs to established smokers because they are “too weak” and unsatisfying for an established smoker. A few others said they would not recommend them because they are not the appropriate way to try to stop smoking.

Yes

In most groups, particularly the groups of Hispanic women and one group of African American women, some participants commented that they would recommend a product to specific groups of people, mainly to young or new smokers who have not developed a brand preference and most likely would use the products, “curious” people, health conscious people, and to those who do not want to expose others to their cigarette smoke. Men were more likely than women to recommend PREPs to women, and Hispanic men were more likely than

other men to recommend PREPs. In all groups, few persons would recommend the products for cessation of smoking or to reduce health risks.

DISCUSSION

Some common themes emerged from the focus group discussion. The majority of the participants agreed that: (1) they learned about PREPs through advertising or promotion, family, friends, and co-workers; (2) the major reasons given for first trying PREPs were that the products were free or inexpensive, they wanted to stop smoking, they believed the product claims of fewer health risks, or they were curious; (3) most participants tried Eclipse[®], probably because it was introduced in Chattanooga and Dallas; (4) most participants did not like PREPs, but more men than women disliked them; (5) most discontinued the use of PREPs, some who continued to use them did so infrequently and also kept smoking their regular brands of cigarettes; (6) most would not recommend PREPs, but some would recommend them to specific groups.

These results merit further comment. Not surprisingly, when these new products were tested in certain markets or locations, most smokers found out about them through heavy marketing and promotion. However, when smokers tried PREPs, the majority did not like them for various reasons. Many of them just tried them once or twice because the PREPs were free or inexpensive, they were curious about these new products, or they were out of cigarettes and would smoke anything that has tobacco. What is worrisome is that, even though health claims have not been proved,^{18–24} some smokers were using these PREPs either to stop smoking regular cigarettes or to reduce health risks associated with smoking traditional cigarettes. Also, some believed that there may be a market for these types of products. New smokers, the young, women, and curious or health conscious people were mentioned as possible groups that may like these products for various reasons. Caution must be exercised in generalising the results of focus group discussions to the general population, however; it is interesting to note that African American female smokers who had been smoking for about five years were more positive about PREPs than those who had been smoking far longer (15–30 years). As participants in the focus groups suggested, there may be a market for these products among the young new smokers.

If results from these focus groups are not limited only to the smokers who participated and if they represent a preference of smokers in general, these PREPs (Eclipse[®], Omni[®], Advance Lights[®], Accord[®], and Ariva[®]) may not become popular among established smokers in the USA. However, as other PREPs are introduced in the market, one or more may catch on if cigarette makers are able to reproduce what smokers of cigarettes like in their regular brands. Factors such as taste, smell, or a buzz or “hit” that smokers of traditional cigarettes get from their brands may be needed for PREPs to become popular among established smokers. So far, several PREPs have been removed from the market, presumably because of low sales. These include Premier (RJ Reynolds), Omni (Vector), Advance (Brown & Williamson), and Next (Phillip Morris).

Shiffman and colleagues recently raised the concern that the claims that PREPs reduce risk may deter smokers from smoking cessation and may encourage a return to smoking by those who have stopped.² Our finding is consistent with this concern. Some participants used the previously mentioned PREPs as a step to stop smoking, and almost all resumed smoking their regular brands of cigarettes. Some of these participants who used PREPs as a method to stop smoking said these products were so bad that they craved for

What this paper adds

Health professionals in tobacco control have debated whether potentially reduced exposure products (PREPs) can reduce exposure to toxins, individual risk, and population risk. However, there is little information on whether smokers who have tried specific PREPs like these products and continue using them alone or in combination with regular cigarettes.

This paper adds new information about why those who tried PREPs did try it, why most of them discontinued using them, and their opinions about who may like these PREPs. Our focus group results suggest that some established smokers believe that there may be a market for these products among young new smokers, women, and health conscious and curious people. Some participants used PREPs as a step to stop smoking, and almost all resumed smoking their regular brands of cigarettes. Those participants who used PREPs as a method to stop smoking said these products were so bad that they craved for regular cigarettes even more than before, and that some of them smoked even more cigarettes per day than before. This finding supports the statement of Shiffman and colleagues of a potential risk that some smokers who otherwise may have stopped smoking will continue to smoke cigarettes and possibly even more than before.

regular cigarettes even more than before and that some of them smoked even more cigarettes per day than before.

The claims by some cigarette or tobacco makers of PREPs that their products are the next best thing to quitting may have not been realised,¹⁸ as evidenced by the fact that the percentage market share for these brands is too small to be listed separately within the 2004 Maxwell report.²⁵ This raises some interesting concerns for harm reduction as it is being pursued today. What if smokers will not like anything but the traditional type of cigarettes? If smokers are unwilling to stick with a less toxic product, what does this imply for current strategies to offer smokers options for less hazardous products, and why are cigarette companies investing in these products if smokers do not like them and will not buy them? Hickman *et al*¹⁸ state that the tobacco industry may not be very invested in these new and less harmful products. This suggests that there may be other motivations or incentives for the tobacco industry to develop and market PREPs—that is, a public relations campaign by the tobacco industry to improve its image among the general population and keep smokers smoking.²⁶

This study and the methodology used have several limitations. Among them, the results presented in this article were not broken down by specific tobacco products. Opinions or response about a specific PREP may vary by product. Of all the PREPs ever tried, those who tried Eclipse[®] seemed to have a more positive opinion about the product than others who tried other PREPs. In addition, we do not know if the participants in our focus groups truly represent the views of all established smokers aged 30–50 years who have tried these PREPs.

In 2003, there were about 45 million adult cigarette smokers in the USA.²⁷ The prevalence of trying and continuing to use PREPs is not known, but from a public health perspective, it is important to know the potential for continuing use of these products. In the focus groups, most of the smokers who continued using PREPs indicated that they only used them occasionally and continued smoking their regular cigarette brands. The health risks for combined use are not known. Another unknown is the number of people

who would use PREPs instead of stopping smoking, or who would go back to regular cigarettes after using PREPs. In addition, we do not know how many adolescents and young adults may graduate to regular cigarettes after using PREPs. We also do not know if PREPs reduce exposure to toxins or reduce risk of disease. If these products promote experimentation and youth tobacco use or decrease cessation attempts, they could increase the disease burden in the population.

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The Lighter Side



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