### ORIGINAL COMMUNICATIONS

### ATTITUDES AND PRACTICES OF AFRICAN-AMERICAN WOMEN REGARDING CIGARETTE SMOKING: IMPLICATIONS FOR INTERVENTIONS

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It has been projected that beyond 1995, African-American women will have the highest prevalence of tobacco smoking. This study, therefore, was undertaken to explore the beliefs, attitudes, and practices among African Americans regarding tobacco smoking so as to design more culturally appropriate smoking cessation interventions.

Focus group discussions were conducted with 42 African-American women (31 ever smokers and 11 never smoked) exploring indepth: 1) knowledge of the health consequences of smoking, 2) attitudes about the acceptability of smoking and personal reasons for smoking, 3) smoking practices, and 4) opinions about the necessary components of smoking cessation programs.

Compared with nonsmokers, current smokers have not yet personalized the distant threat of smoking due to the very powerful immediate benefit obtained from the nicotine present in tobacco—the decrease in anxiety, tension, and depression, ie, "stress reduction." There is also a perception of powerful barriers to smoking cessation, ie, no internal mechanisms for stress modulation.

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Smoking cessation intervention programs must have culturally proficient psychoeducational components to address the cognitive and behavioral dysfunction associated with smoking. For those smokers with evidence of difficulty modulating dysphoria or tension, they also must address the possible underlying biochemical dysregulatiion. (*J Natl Med Assoc.* 1994;86:337-343.)

Key words • tobacco smoking
• African-American women • risk perception
• mood modulation

Among US ethnic/racial groups, African Americans have the highest prevalence of tobacco smoking—35% compared with 30% for non-Latino whites and 26% for Latinos. African Americans also have the highest incidence rates of tobacco-related cancers (lung, esophagus, larynx, and oral cavity). Moreover, the morbidity and mortality from cancer and cardiovascular diseases are highest among African Americans.

Stotts et al<sup>3</sup> reported that the quit rate for African-American smokers is significantly less than the quit rate for whites, ie, more African Americans continue to smoke. For African-American men, the quit rate is 36% compared with 49% for white men; for African-American women, the quit rate is 30% compared with 43% for white women. In addition to having the lowest quit rate, the decline in the rate of smoking prevalence and initiation among African-American women has shown the least rapid decline. As Stotts et al<sup>3</sup> reported:

If trends remain constant, prevalence rates for men and women will be about equal in 1995, but after that a larger proportion of women will be smokers, and black women will become the racial/sex group with the largest proportion of smokers.

Despite this worsening trend in African Americans, the Surgeon General's 1988 report<sup>1</sup> acknowledged that:

To date, relatively little research has been done to clarify smoking/quitting patterns and determinants among black Americans or to test smoking cessation interventions in black populations.

The studies that presently exist are predominantly quantitative comparisons of white and African-American smoking characteristics.<sup>3-5</sup> The significant findings from these studies can be summarized as follows:

- a higher smoking prevalence and a lower quit rate among African Americans, despite a stronger motivation to quit among African Americans than among whites.
- a higher prevalence of myths and misconceptions about the health consequences of smoking among African Americans,
- African Americans smoke fewer cigarettes, but they smoke cigarettes with higher tar and nicotine (particularly mentholated brands),
- most African Americans find smoking unacceptable,
- there is greater advertising by tobacco companies within the African-American community,
- a higher percentage of African Americans are wake-up smokers, and
- African Americans have limited access to smoking cessation resources.

In order to achieve the goal of the US Department of Health and Human Services Year 2000 Health Objectives—a smoking prevalence of no more than 15% among individuals aged 20 years and older—Resnicow et al<sup>6</sup> recommend:

The development and dissemination of culturally sensitive public health campaigns and clinical interventions for high-risk groups such as minorities, high school dropouts and low-income individuals. As part of this targeted campaign, it will first be necessary to better understand the reasons for smoking among various racial, gender, age and socioeconomic groups. . .

They further recommend "Continued development of

behavioral and pharmacologic approaches to smoking cessation, especially for heavy smokers."

Clearly, more in-depth knowledge of the beliefs, attitudes, and practices of African-American women regarding smoking are needed in order to design culturally proficient smoking cessation intervention programs. Therefore, focus group discussions were conducted among 42 African-American women. Such discussions are often used in qualitative health research to "gain insight into the dynamic relationships of attitudes, opinions, motivations, concerns and problems related to current and projected human activity."

#### METHOD Group Composition

Participants were recruited from employees at three major medical centers in the New Orleans area. Participants were allocated to groups based on their smoking history:

- Group 1—Currently smoking (with previous quit attempts lasting 3 months or greater). Twelve women were present.
- Group 2—Currently smoking (no previous quit attempts lasting 3 months or greater). Nine women were present.
- Group 3—Ex-smokers (have not smoked in the past 12 months or greater). Ten women were present.
- Group 4—Never smoked. Eleven women were present.

#### **Location of Group Meeting**

All groups were conducted in a hotel meeting room. A light afternoon fruit snack was served prior to the beginning of each group.

#### **Group Process and Format**

All groups were moderated by the author, an African-American female psychiatrist. An African-American female public health student served as assistant at all groups. Informed consent was obtained from all participants prior to the beginning of each group. Participants completed an anonymous sociode-mographic questionnaire and a Beck Inventory of Depression.<sup>8</sup> All groups followed the same format and covered similar topics based on the following discussion guide outline:

- personal health maintenance activities,
- knowledge of the health consequences of tobacco smoking,
- attitudes toward smoking,
- smoking practices, and

Characteristic	Group 1	Group 2	Group 3	Group 4
Age				
18 to 25	0	0	2	3
26 to 30	0	1	0	2
30 to 40	8	5	4	7
41 to 50	3	2	0	0
50 +	1	1	4	0
Marital Status				
Married	5	4	3	3
Divorced	4	2	3	1
Widowed	0	1	2	0
Single	2	2	2	7
Education				
Some high school	0	2	0	0
High school graduate	1	2	1	0
Some college	9	5	8	5
College degree	0	0	0	2
Postgraduate degree	2	0	0	4
Income				
<\$15 000	4	4	7	3
\$15 000 to \$34 000	8	4	1	6
>\$35 000	0	4	1	3
Years Smoking (mean)	17	16	11	
Beck Inventory of Depression (mean score)	12	14	10	6

TABLE. SOCIODEMOGRAPHIC CHARACTERISTICS

• feelings about the necessary components of any smoking cessation program.

All groups were audiotaped. Participants were reimbursed \$25 at the conclusion of each group.

### RESULTS Sociodemographics

Sociodemographic characteristics for the four groups is presented in the Table.

#### **Health-Promoting Activities**

**Group 1.** The majority of these women reported that they attempted to stay well by eating the proper foods and walking daily. A few mentioned adequate rest. One woman reported that she stayed well by regularly visiting the doctor. One woman, however, felt that it was hypocritical for smokers to engage in healthy activities.

**Group 2.** A few women reported walking and eating the proper foods. One woman stated that one way to stay healthy was to not smoke, which she obviously was not doing. This group spent little time discussing this topic and focused instead on the beneficial effects of smoking.

**Group 3.** These women reported that they engaged in varying combinations of exercise, proper nutrition, stress management, and not smoking.

**Group 4.** The responses of these women were similar to those of the women in Group 3.

### Knowledge of the Health Consequences of Cigarette Smoking

**Group 1.** These women reported being aware that cigarette smoking was linked to respiratory and heart diseases. Some women reported their own symptoms of cough, shortness of breath, and insomnia. One woman stated, "I don't think about what are the harmful effects of my cigarettes. The only thing I think about is 'Oh, this is wonderful for now'; but this *now* has turned into 20 years. I don't think about the insomnia and coughing. The only thing I think about is right now it makes me feel good." The group consensus was "You're going to die of something—get hit by a car, the ozone layer, or radiation." They therefore "would rather die happy, smoking cigarettes; for smoking makes you happy, it relaxes you, it calms you."

**Group 2.** These women stated that they were aware that cigarettes caused cancer and even could cause asthma in their children. However, they did not take the health risks seriously; one woman stated that she even doubted that these risks were real—that they were just part of scare tactics. Another woman stated that she weighed the benefits of smoking against the probable

risks, "Every time I thought of quitting I weigh the stress factor [that smoking relieves]; I think that's why I still smoke." Many women also stated that they knew several smokers who lived to be very old, so clearly smoking did not kill everyone.

**Group 3.** These women were aware of the many diseases linked to cigarette smoking—cosmetic problems with skin and teeth; cancer (lung, breast, and throat); and heart disease.

**Group 4.** As with Group 3, these women too were knowledgeable about the health hazards of smoking—cosmetic problems with skin, teeth, and aging, and cardiovascular and respiratory diseases. In addition, this group expressed many concerns about the effects of secondary smoke, particularly on children.

#### **Attitude Toward Smoking**

The only group that felt that smoking was acceptable was the current smokers who had never quit for more than 3 months. This group felt that it was okay to smoke because smoking was an individual freedom. One woman stated that it was okay for her because she needed to smoke. These women expressed resentment at the negative social pressures to quit; it made them rebellious and angry. By the end of the group, however, all of the women expressed a desire to quit. "We hope this helps you find something to help us" was one woman's closing statement. Another woman bluntly stated, "With everyone it is their choice—you try to live long without smoking, or you can just smoke and kill yourself." All the other groups felt that the health risks made smoking unacceptable.

#### Reasons for Initiating and Maintaining Smoking Behavior

**Group 1.** Peer pressure during adolescence was the reason given by most of these women for beginning to smoke. They also felt that the image of the chic and "cool" woman smoking a cigarette made it very appealing. One woman reported that she began smoking as a result of lighting cigarettes for her mother. The reason given by all of the women for continuing to smoke was that it was a crutch used to reduce stress. "It relieves the stress of the moment; takes you away from the problems; gives you a chance to think before acting." These women reported getting much pleasure and happiness from the relaxation and calming effect of smoking.

**Group 2.** The majority of women in this group also reported that they began smoking because of peer pressures during adolescence and also because of the

sophisticated and glamorous image that was portrayed of women smoking cigarettes. Some women noted that they had easy access to cigarettes during their adolescence. These women reported that they continue smoking because they use cigarettes as a crutch for handling stress, escaping worries and taking time to think—"Smoking a cigarette makes you feel that something has left your body—an immediate release." Some women also mentioned continuing to smoke because of the discomfort of withdrawal. One woman described her withdrawal ordeals as, "The most I've stopped is maybe half a day and I was as nutty as a fruitcake; I was batty nervous; I couldn't keep still—constantly eating and biting my nails. I was real agitated and I said-no, I'd rather smoke a cigarette, I'm better off." These women felt that smoking was pleasurable because it made them feel calmer.

**Group 3.** Again, the reasons these women gave for beginning to smoke were peer pressure and the positive social image of a woman smoking (sophisticated and "cool"). A woman in this group also reported beginning to smoke because of lighting cigarettes for a family member—her grandfather. As with the group of current smokers, these women continued smoking because it relaxed them and allowed them to escape problems. However, they stopped because of health concerns and the social unacceptability of smoking. They felt they were able to stop smoking because of the firm belief at the time of their decision to stop that they could indeed do so. They also found other ways to handle stress—confronting problems and talking about them with others. These women felt that when they smoked they found it pleasurable because it made them feel good—"it was like a high or rush." One of the participants who stopped smoking the day she was diagnosed with lung cancer stated nostalgically, "I would never smoke again, but I really miss it."

**Group 4.** This group had never smoked; however, they felt that others smoked primarily to relieve stress. They also felt that managing weight was another reason for continuing.

#### **Smoking Practices**

**Group 1.** These women reported liking to smoke at times when they relaxed—after work, while reading or watching a movie, with children asleep, after sex, and after meals. Seven of the 12 women present smoked within 30 minutes of awakening, and four women smoked within 1 hour; one woman smoked only in the evenings.

**Group 2.** These women all smoked within 30

minutes of awakening. Several stated that they placed cigarettes by their bed, so that it was the first thing that they did—"I grab a cigarette as soon as I sit up."

**Group 3.** A majority of these women smoked within 30 minutes of awakening. One even stated that she used to get up at nights so that she could smoke.

#### Opinions Concerning Necessary Components of Successful Smoking Cessation Programs

**Group 1.** This group felt that mechanisms to handle stress and lifestyle changes (nutrition and exercise) would be most important. In addition, they all felt that a support group was very necessary. They expressed concerns about use of medications, the fear of substituting one addiction with another. They also expressed concerns about the efficacy of medications; one woman reported that she previously tried using an antianxiety agent and continued to smoke while she took it. There was also fear of possible medication side effects. One woman stated that if medications were necessary, she preferred the oral route because smoking for her was an oral fixation. The group all agreed and felt that perhaps this was why the nicotine patches were not effective for them; several reported a preference for the gum.

**Group 2.** This group felt that mechanisms to help people get motivated and develop willpower would be important, "We don't have any willpower." They felt that the positive benefits of smoking would have to be replaced—"something to do the same thing or take the place of the cigarette." Mention also was made of the need to attend to the oral sensations of smoking. This group felt that if needed, nonaddictive medications were okay.

**Group 3.** This group felt that stress management, with a strong emphasis on motivation and being in control, would be most important. They too felt that support groups could be helpful. However, one woman mentioned that perhaps a term other than "support group" should be used; in her experience as a nurse she had noticed that African Americans did not attend many of the support groups offered. Medications were felt to be acceptable, again if nonaddictive. It also was mentioned that medications should be oral.

**Group 4.** These women who never smoked felt that exposure to the negative health consequences of smoking would be very important—"I'd take them on a tour of the hospital on the unit where they have all those patients suffering from lung cancer from smoking." They also felt that stress management, spirituality, and creativity training would be necessary, along

with a support group. Medications were felt to be okay if temporary and nonaddictive.

#### **DISCUSSION**

Analysis of the sociodemographics of the different groups of African-American women show that the group of never smokers was the most educated, had the highest socioeconomic status, and scored the lowest on the Beck depression scale. The group of current smokers who had never been able to quit for longer than 3 months had the lowest educational level and the highest score on the depression scale.

Analysis of the content of the discussions suggest that current smokers, compared with nonsmokers or ex-smokers, have not yet personalized the risk of harm from cigarette smoking. They also have minimized their appraisal of the severity of the health consequences of smoking. This minimization of the personal threat (risk + severity) of smoking occurs despite these smokers being aware of the health hazards of smoking and the general negative societal attitude toward smoking.

Why is this so? As members of a culture dominated by oppression and ongoing racism, time orientation for the majority of African-American women is the present; the future is unreliable, inconsistent, unpredictable, and intangible. In matters of health, therefore, distant threats about the future do not significantly impact decision making. Hence, it is hypothesized that for smokers, the immediate benefits that tobacco offers, ie, mood modulation, is more operant in decision making regarding tobacco use than the distant probable threat of death from lung cancer.

Indeed, all of the ever-smoked participants reported that they depended on tobacco smoking for "mood modulation"—a decrease in tension, irritability, and dysphoria. They also reported improved cognition (concentration)—"thinking time, time out." The hypothesis that mood modulation is associated with tobacco smoking is supported by the findings of several recent studies showing a positive correlation between nicotine dependence and depression: Glassman<sup>9</sup> in the ECA study reported a higher lifetime prevalence of major depression among smokers than nonsmokers (7% versus 3%); he also reported that those with a lifetime history of major depression were less likely to succeed at quitting compared with smokers without such a history. Breslau et al<sup>10</sup> also suggested that the likelihood of continued smoking among smokers with histories of major depression may be explained by the positive reinforcing effects of smoking, chiefly mood elevation and arousal. Even though this is not a

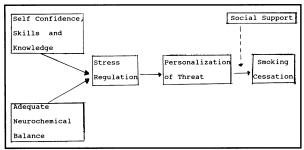


Figure. Conceptual framework for intervention.

representative sample from which statistical inferences can be drawn, it is interesting to note that the group of smokers who had never quit for longer than 3 months scored the highest on the Beck Depression Inventory—14; the never smoked scored lowest—6; the current smokers with previous quit attempts scored 11; and the ex-smokers scored 10.

The perception of barriers to the desired outcome, ie, smoking cessation, is also very powerful and acts to minimize risk perception. Current smokers believe that they are incapable of modulating their negative emotional states on their own. They depend on nicotine for this modulation. They fear that without cigarettes they would lose control. In addition, their general perception of self-efficacy is quite diminished, negatively reinforced by their many unsuccessful attempts at quitting.

Current smokers appear to use the following cognitive schema—"I cannot stop smoking because I need the tobacco to provide a vital function for me. Something that is important to my present survival certainly cannot be really bad for me. I will tell myself, therefore, that those messages of death and suffering from tobacco do not apply to me. Maybe someone else, but not me. I will be the lucky one."

A positive outcome of this study is that by the end of the group discussions, the women were much more accepting of their real risks, despite the initial denial and minimization. They therefore became more motivated to act on the desire to stop smoking. An overwhelming majority felt that they would need to seek professional help as they were convinced that they were incapable of stopping on their own.

One might hypothesize that this increased personalization of threat observed toward the end of the groups was a result of the group dynamics of universality and interpersonal learning. These dynamics seem to occur in focus groups even though they are non-insight-oriented group discussions used primarily for data collection.

The felt needs of these African-American female smokers included:

- stress mastery training,
- replacement mechanisms for mood regulation anxiety, irritability, and dysphoria,
- replacement for the oral gratification of cigarettes,
- management of nicotine withdrawal symptoms, and
- social networking with other smokers.

## IMPLICATIONS FOR CORE COMPONENTS OF SMOKING CESSATION INTERVENTION PROGRAM

The Figure, with the following guidelines, outlines a framework for smoking cessation.

- 1. Culturally proficient psychoeducational (cognitive and behavioral) training sessions, using Bandura's learning theory<sup>11</sup> concept that self-efficacy and outcome expectations influence adoption of behaviors. The following topics should be covered:
  - stress mastery, positive thinking, assertiveness,
  - wellness enhancement: fitness, nutrition, health consequences of addiction, and
  - spirituality and creativity.
- Short-term medication management is indicated to counteract mood dysregulation and nicotine withdrawal symptoms. Medication should have the following properties:
  - antianxiety/irritability,
  - mood elevating (from dysphoria to normal),
  - nonaddictive,
  - minimal side effects, and
  - oral, with a simple dosing regimen.
- 3. Encouragement of participation in social support and networks, eg, 12-step self-help groups.
- 4. Networking with worksite and other community smoking cessation programs to reinforce individual smoking cessation.

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#### Literature Cited

- 1. Treatment of tobacco dependence. In: *The Health Consequences of Smoking, Nicotine Addiction: A Report of the Surgeon General.* Washington, DC: US Government Printing Office; 1988. Publication CDC 88-8406.
- 2. Ries LA, Hankey BF, Edwards BK. *Cancer Statistics Review: 1973-1987*. Bethesda, Md: National Cancer Institute; 1990. NIH publication 90-2789.
- 3. Stotts RC, Glynn TJ, Baquet CR. Smoking cessation among blacks. *J Health Care Poor Underserved.* 1991;2:307-319.

- 4. Royce JM, Hymowitz N, Corbett K, Hartlet T, Orlandi MA. Smoking cessation factors among African Americans and whites. *Am J Public Health*. 1993;83:220-226.
- 5. Kabat GC, Morabia A, Wynder EL. Comparison of smoking habits of blacks and whites in a case-control study. *Am J Public Health*. 1991;81:1483-1486.
- 6. Resnicow K, Kabat G, Wynder E. Progress in decreasing cigarette smoking. *Important Adv Oncol.* 1991:205-213.
- 7. Folch-Lyon E, Trost JF. Conducting focus group sessions. *Stud Fam Plann*. 1981;12:443-449.
- 8. Beck A, Rush A, Shaw B, Emery G. Cognitive Therapy of Depression. New York, NY: Guilford Press; 1979.
- 9. Glassman AH, Helzer JE, Covey LS, Cotter LB, Stetner F, Tipp JE, et al. Smoking, smoking cessation and depression. *JAMA*. 1990;264:1546-1549.
- 10. Breslau N, Kilbey MM, Andreski P. Nicotine withdrawal symptoms and psychiatric disorders: findings from an epidemiologic study of young adults. *Am J Psychiatry*. 1992;149:464-460
- 11. Bandura A. *Social Learning Theory.* Englewood Cliffs, NJ: Prentice-Hall Inc; 1977.



#### Coming this summer . . .

## Maternal Factors, Birthweight, and Racial Differences in Infant Mortality: A Georgia Population-Based Study

John F. Sung, PhD, Beverly D. Taylor, MD, Daniel S. Blumenthal, MD, MPH, Keith Sikes, DVM, MPH, Virginia Davis-Floyd, MD, MPH, Gene McGrady, MD, MPH, Teresa C. Lofton, MPH, and Thomas E. Wade, MPA

Black infant mortality rates are approximately twice those of whites in Georgia and nationwide. A study was done to evaluate how maternal factors, particularly marital status, influence racial differences in infant mortality. The results of the study confirmed that teen pregnancy, low birthweight, and births to unwed black mothers were important factors contributing to the high infant mortality rate in Georgia.

# Hepatitis B Vaccine Use in Cincinnati: A Community's Response to the AAP Recommendation of Universal Hepatitis B Immunization

Robert M. Siegel, MD, Raymond C. Baker, MD, Uma R. Kotagal, MD, and William F. Balistreri

The Committee on Infectious Diseases of the American Academy of Pediatrics (AAP) recently recommended universal immunization of infants against hepatitis B virus. The authors surveyed all pediatricians and family practitioners with admitting privileges to their institution to determine the degree of approval of the AAP recommendation and the anticipated compliance with the recommendation. They discuss their results in this article

## The Use of Colony-Stimulating Factors as Bone Marrow for Systemic Anticancer Chemotherapy

Eddie Reed, MD

Colony-stimulating factors (CSFs) are proteins that play normal roles in human hemotopoietic physiology. Many of these factors have been cloned and sequenced, which has led to recombinant DNA technology that allows for production of large quantities of pharmacologically pure compounds. This article summarizes the experience of one institution in using two FDA-approved CSFs and discusses four other CSFs that are expected to become available for general use in the near future.