

Interventions for Prevention and Treatment Breakout Session

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Overview

Although many in the tobacco control community assume that the most effective interventions are those that are personalized in some manner (targeted or tailored), it is not yet known whether women and men respond differently to prevention and treatment interventions or would benefit from different intervention strategies. Some clinical studies have found gender differences in treatment outcomes, suggesting that women have greater difficulty in quitting smoking than men. However, other clinical and population-level studies have not supported these findings. The majority of studies have not been designed to adequately address the issue of sex or gender differences in the methods used or preferred by men and women or in the outcomes they achieve. The nature of the differences, whether they are determined or mediated by genetic or biological factors, cultural or learning influences, or access to care and support during cessation, is not understood. Although researchers have not yet collected the data needed to resolve this issue, a combination of meta-analysis with new research could address the question.

Smoking is clearly a women's health issue in that it has a unique impact on women. Prevention and intervention efforts aimed at the requirements of women are needed.

Partnering in the area of prevention and treatment should focus on finding available funds and increasing awareness among various organizations that tobacco control is part of their charge. Using models of well-organized health activist groups, such as those focused on breast cancer and HIV/AIDS, might yield strategies to funnel funds toward tobacco control research. While most grassroots organizations focused on eliminating specific diseases have attracted large

numbers of those affected by these diseases, this has not occurred among smokers. Establishing such a “community” among smokers might be difficult because of the blame and stigma associated with smokers who develop cancer and other comorbidities, as well as their socioeconomic characteristics. Indeed, the tobacco industry has used this very strategy to promote “smokers’ rights” organizations. Working with family members of those suffering or dying from tobacco-caused diseases might be more a promising approach.

Recommendations

Research

*1. Continue to evaluate whether gender differences exist in prevention and treatment efficacy.

The 1980 Surgeon General's Report suggested that women have more difficulty than men in quitting smoking (1). While some studies have supported this finding (e.g., 2-5), others have not (e.g., 6-8). Methodological limitations—including *post hoc* analysis, lack of statistical power to identify sex differences, and reliance on convenience samples that may not be representative of the general population—have complicated these analyses. Therefore, studies specifically designed with adequate statistical power to test for sex differences must be conducted to address this issue.

- Explore the mediating or moderating factors that may produce sex differences. Even more important than establishing sex differences in outcomes is understanding why they occur; this involves examining which physiological, psychological, and behavioral factors

* Recommendations with an asterisk are those identified by the breakout groups as their top three recommendations.

mediate or moderate sex differences. A number of factors may underlie sex differences, including demographics, addiction (nicotine dependence and withdrawal), mood (depression), cognitive factors (expectations, weight concerns), social factors (coping styles, social support), and pharmacological factors (differential responses to agents such as nicotine replacement therapy and bupropion). These issues have not been systematically addressed. Although most studies examining gender differences have used *post hoc* analysis, studies need to be designed with adequate power, and they must stratify for sex to properly examine these differences.

Women may also respond differentially to treatment. For instance, Ossip-Klein et al. (9) found differences between older men and women in response to telephone quit-line use and support, with women showing greater benefit. Lerman and colleagues (10) examined the interaction among sex, genotype, and treatment and found that bupropion attenuated the effect of genotype among female smokers. Women also may have health benefits that differ from men's. In the Lung Health Study, Connett and colleagues (11) found that among persons at risk for chronic obstructive pulmonary disease, women who quit smoking showed greater improvement than men in lung function.

- *Explore factors unique to women that may influence prevention and treatment.* In addition to identifying any sex differences in factors that influence both sexes, a number of factors unique to women may influence smoking behavior and treatment efficacy. These factors, such as menstrual cycle, pregnancy, and menopause, may influence women's motivation and ability to quit smoking. While some factors, such as pregnancy, have been recognized as windows of opportunity for increasing quit rates, others—such as the impact of menopause or the role of hormone replacement therapy (HRT)—have not been well explored. Such factors may play a direct role, or they may influence other factors that act as mediators. For example, one study found that women taking HRT experienced an increase in depressive symptoms in the second week of smoking cessation (12). Another study found that women quitting during the luteal phase reported greater depressive symptoms and increases in withdrawal than women quitting during the follicular phase of their cycle (13).

By targeting these events, we can capitalize on a window of opportunity. However, a better understanding of how

interventions can be targeted to these events and whether current interventions can be used or would be more efficacious if tailored requires additional research.

Disparities

Research on sex differences is anticipated to have a significant impact. Differences exist in sex role socialization, norms, and cultural influences for women and girls in different income and racial or ethnic groups. These differences need to be taken into account in developing motivation and treatment strategies. In addition, literacy levels need to be taken into account. While most research examining gender differences has been conducted through clinic-based intervention trials, future research should include all modes of intervention and prevention work, including community-based interventions, self-help-focused interventions, and clinical trials. By conducting research on sex differences across all types of interventions and all settings, we can help ensure that results are generalizable to all women.

Partners

All research funding organizations and agencies willing to support primary and secondary analyses can serve as partners in this research endeavor. Collaborations with appropriate research networks and other investigators conducting sex research are suggested.

Impact

Identifying whether gender differences exist and understanding the factors that contribute to how gender affects smoking initiation, maintenance, and cessation will permit better targeting and tailoring of prevention and intervention efforts. Current interventions targeted to women would benefit from a more comprehensive understanding of differences in the trajectories of tobacco initiation and cessation and the mechanisms of addiction and effective treatment.

***2. Understand if—and how—gender, context, and culture affect prevention and treatment.**

Little attention has been paid to the role of gender, context, and culture in prevention and treatment. Many ethnic differences in tobacco use have been established, and race, ethnicity, and culture may all play a role in initiation, maintenance, and cessation of tobacco use. For example, in the United States, blacks start smoking at a later age, smoke fewer cigarettes per day, and are more likely to smoke menthol cigarettes than whites, and Hispanic women smoke at significantly lower rates than Hispanic men. Evidence is accumulating that suggests that biological and cultural factors

combine to create these differences. Understanding how these cultural differences affect smoking behavior and addiction will help us reduce disparities and understand social and contextual factors that could be used to aid in prevention and treatment for all women.

To do this, we must first address these questions:

- *Do specific protective factors emerge from the interaction of race, ethnicity, culture, and gender?* Social and cultural norms may play a significant role in smoking initiation. For example, parental pressure may contribute to the delay in smoking initiation among black teens (14, 15). Cultural factors may also explain the gender difference in smoking rates in the Hispanic community. A better understanding of these factors would inform prevention and intervention efforts.

Is social pressure the key factor in creating these differences, or do biological differences interact with social factors? As cultures become more “westernized” and accepting of smoking among women (e.g., in China and India), will we see increasing smoking rates among women worldwide? We need to learn how to capitalize on protective factors while fostering independence, education, and professional development. For example, in developing nations with traditionally low tobacco use prevalence among women (e.g., China, Korea, Malaysia), smoking is not considered “feminine” or part of women’s approved social behavior. What is greatly needed in such cultures is a way to reframe refraining from smoking as liberated, socially responsible, and protective of the health of women and their families. If this is accomplished, as the status of women becomes more equal to that of men in terms of education, professional opportunity, and human rights, smoking will not be seen as synonymous with freedom and liberated social roles.

- *Are we excluding individuals from prevention or treatment because their patterns of use differ from those of the majority populations?* Are blacks, for example, being excluded or benefiting less than whites from prevention and treatment interventions aimed at young children? School-based and mass-media campaigns that target children and young teens and are aimed at prevention might exclude populations that initiate smoking at older ages. More research is needed to ensure that prevention campaigns reach all appropriate audiences.

Treatment efforts might also unintentionally exclude populations that differ in use patterns from the majority. For example, treatment studies typically involve nicotine

replacement products. These studies often require that participants smoke a minimum number of cigarettes per day (such as 10 or more). These studies may inadvertently exclude minority or low socioeconomic status (SES) populations (with limited financial resources) that typically smoke smaller numbers of cigarettes per day or use other forms of tobacco (such as chewing tobacco).

- *Do existing interventions address important cultural and racial differences?* Ethnicity may be correlated with specific concerns about quitting smoking. For example, although weight gain has been found to be a predictor of smoking initiation and a barrier to cessation (e.g., 16-18), this finding has not been replicated in several populations, including lower SES groups (19) and minority groups (20). Are some populations less concerned about gaining weight, or are they in fact gaining less weight following cessation? While concerns about weight gain appear to be less prominent among black female smokers, obesity is an important health concern that needs to be addressed in this population (21).
- *What is the impact of religious injunctions on smoking initiation among women?* Some religions specifically prohibit the use of tobacco—usually through an injunction against the use of substances that harm the body, but sometimes directly as well. For example, a *fatwa* (religious proclamation) against smoking has been issued by Islamic leaders. Although the Islamic ruling on tobacco smoking is not as well defined as the ruling on alcohol, general guidelines found in the Q’uran and in the words of Muhammed clearly indicate that smoking is forbidden (*haram*) or considered “strongly abominable.” However, in many Islamic countries, such as Malaysia and Indonesia, smoking remains high among men and very low among women largely because of social custom.

In the Church of Jesus Christ of Latter-Day Saints (Mormons), *The Word of Wisdom* (a guiding revelation of faith) proposes that believers abstain from tobacco and other harmful substances such as tea, coffee, and whiskey (strong drink or alcoholic beverages). This commandment is primarily spiritual, even though it is directed at promoting greater health. Interestingly, David O. MacKay, Past President of the Church of Jesus Christ of Latter-Day Saints, specifically commented in 1949 on the history of marketing cigarettes to women in the 1920s and 1930s: “I just ask you ... to recall the methods employed by certain tobacco interests to induce

young women to smoke cigarettes.” He mentioned the early campaign promoting smoking as a means of avoiding weight gain, as well as the gradual transition in advertisements from portraying men smoking and women accompanying them (but not smoking), to women smoking overtly. To this day, Utah has the lowest smoking prevalence rates in the nation: 14 percent of men and 11 percent of women (13 percent overall) (22).

Interventions delivered through African-American churches have also been reported (23, 24), but not in terms of differential success between men and women (although women go to church more often and are less likely to be smokers).

Disparities

This recommendation directly addresses the issue of population disparities. To reduce disparities, we must first understand their causes. Understanding the interactions among gender, race and ethnicity, and culture as they affect smoking initiation, maintenance, and cessation will aid prevention and treatment efforts.

Partners

Partners should include research-funding organizations and agencies willing to support primary and secondary analyses, appropriate research networks, investigators conducting sex research, community-based organizations, and government entities at all levels.

Impact

Within 5 years, prevention strategies and treatment efficacy will be enhanced in specific subgroups, reach will increase, and disparities will be reduced.

Translation

3. Understand critical intervention periods in the continuum from experimentation to addiction and cessation.

- *Experimentation to addiction.* Experimentation and initial exposure to smoking are occurring at increasingly younger ages. In 2002, 13 percent of middle school students and 28 percent of high school students reported current use of tobacco products (25). However, time of initiation differs by ethnicity, with black girls initiating smoking later than white girls. Watson and colleagues found that the mean age of smoking initiation was 20 for blacks and 16 for whites (26). About one-half to one-third of teens who experiment with smoking will become

regular smokers, and 75 percent of teen daily smokers will smoke as adults.

Moreover, the time from experimentation to addiction is very brief. Nicotine dependency does not necessarily take years to develop and is seen in adolescents (27). Ninety percent of adults who smoke began smoking before the age of 18 (28).

Some studies are finding that girls are smoking at higher rates than boys. For example, O’Loughlin et al. (29, study conducted in Montreal) found that 35 percent of females and 29 percent of males were ever smokers ($p = 0.03$) and, among the “ever smokers,” 69 percent of females and 46 percent of males had smoked in the past 3 months ($p < 0.000$). This gender difference may lead to a shift in smoking prevalence such that women may eventually smoke at higher rates than men.

Factors that contribute to experimentation and regular tobacco use are not well understood, but research examining these issues is increasing. Gender needs to be included as an important variable to consider. Gender issues and the interaction of gender, culture, and ethnicity must be taken into account when exploring the continuum from experimentation to addiction. For example, susceptibility to nicotine as well as social role models (movies, popular figures), peer influence, and weight and gender issues should all be examined.

- *Cessation.* Cessation interventions are needed for adolescent smokers, and research suggests that adolescents are interested in quitting. Over one-third of adolescent smokers in one study reported that they were considering quitting within the next 6 months, and 65 percent had made a quit attempt in the past year (30). However, as with prevention efforts, intervention efforts must take into account gender and cultural differences for this age group. Although the effectiveness of adult cessation programs is well recognized, and clinical guidelines have established a standard of care for this population, little is known regarding adolescent cessation; this gap needs to be filled to provide effective interventions (31). As we learn more about the unique needs of the adolescent population, we must study possible gender differences and interactions among gender, social, cultural, and biological factors.

4. Identify the interpersonal, familial, social and cultural contexts for tobacco use by women and priority populations of women.

Social contextual factors, such as spousal and household smoking, social networks, social ties, and discrimination, may all influence tobacco use by women. Interest in cessation and vulnerability to relapse may also be influenced by these factors. Over 90 percent of those who quit smoking do so with no formal assistance (32) and depend on their families and communities for help in achieving and maintaining cessation. Family, social, and cultural factors may be especially important for minority and underserved women who have limited access to care and may depend on existing social networks for support.

Some issues have been singled out for further study:

- *Role of spousal and household smoking.* Spousal and household smoking are important factors in cessation and relapse, and this is especially clear in pregnant women. Pregnancy significantly increases interest in cessation among women who are aware of health concerns related to the fetus. Others in the household, however, may not have the same increased motivation. Spousal support for quitting, in terms of both supportive behaviors and the spouse's own change in smoking behavior, has been identified as an influential type of support for pregnant women (33). Haug, Aaro, and Fugelli (34) found that when pregnant women were encouraged by their partners to stop smoking and perceived that their partners were willing to reduce their own cigarette use, their rate of smoking cessation, negative attitudes toward smoking, and determination to stop smoking were significantly higher. Because smoking relapse often occurs when other smokers are present (35), spouses and partners who continue to smoke may increase the risk of relapse. In pregnant women, socializing or living with a smoker was found to be a significant predictor of smoking relapse (36-38).
- *Role of maternal smoking.* Women influence the smoking behavior of other family members, especially their children. The impact of mothers on smoking initiation appears to be stronger than the impact of fathers (39). Interestingly, maternal smoking has been found to affect the likelihood that their daughters will smoke to a greater extent than that their sons will do so (40).
- *Role of social support and social networks.* Social support for quitting smoking appears to play an important role in cessation and the maintenance of abstinence. The

ratio of positive to negative support may be the most important factor in predicting abstinence (41, 42). Ginsberg, Hall, and Rosinski's (43) Partner Support Smoking Treatment Program showed that failure to quit smoking was predicted by smokers' negative behavior (prosmoking statements, interruptions of the partner, and criticism or rejection of help), and successful cessation was predicted by partners' reinforcement.

Social support may be more important for women than men because rates of depression and negative affect are higher in women. Zelman et al. (44) found supportive counseling to be more effective than coping skills training for smokers with negative affectivity above the median.

Application

*5. Increase access to, demand for, and appeal and use of effective tobacco dependence treatments, especially among women in underserved and priority populations.

Compelling evidence indicates that applying evidence-based treatments to tobacco use and dependence (both counseling and pharmacotherapy) substantially increases success rates among smokers trying to quit. Quit rates for smokers using proven treatments—those recommended in the U.S. Public Health Service clinical practice guidelines (45)—are two to three times higher than those achieved by smokers quitting on their own without formal treatments (46). This has been demonstrated not only for overall populations of men and women smokers, but for pregnant women specifically (47). Similarly, studies of unaided quit attempts suggest that women are more likely to relapse when they quit without assistance (48).

Unfortunately, recent studies indicate that less than 25 percent of quitters currently make use of proven treatments or treatment aids (49) and that while most primary care providers now advise their patients to quit, less than half of providers who do so go on to offer needed treatment (50).

Women with little education are far more likely to smoke than those with more education (51). Access to and use of effective interventions are lowest among men and women with the least education and lowest incomes in the United States, including those in low-income and racial or ethnic minority populations (46). The Surgeon General's recent report on tobacco use among U.S. racial and ethnic minorities concluded that minority smokers were less likely to participate in smoking cessation groups and receive cessation

advice from health care providers due to such barriers as cost, lack of health insurance coverage for proven treatment services, and reduced access to health care services generally, as well as barriers related to transportation (52).

Tobacco control policies and counter-advertising campaigns can substantially increase quitting motivation and quitters' demand for and use of proven treatments. The CDC's *Guide to Community Preventive Services* (53) showed that smoking bans and restrictions, increases in the cost of tobacco products, reduction in smokers' out-of-pocket costs for cessation services, and pro-cessation counter-advertising campaigns significantly increase population quit rates and the use of available quitting services—especially telephone quit lines to which access barriers are minimal. The Surgeon General's report *Women and Smoking* notes that women are more likely than men to state that their smoking patterns are influenced by worksite smoking policies (54). A recent study found that increased cigarette excise taxes had a disproportionate influence on quitting patterns among pregnant smokers (55). The use of targeted messages and media to reach smokers in cessation campaigns aimed at underserved populations, such as African-American smokers, have been found effective for both men and women (56). To generate higher rates of demand and use, the Subcommittee on Cessation of the Interagency Committee on Smoking and Health recently recommended significant tax increases coupled with the creation of a nationwide tobacco cessation quit line; a multifaceted, paid national media campaign to promote quitting; public and private insurance coverage for tobacco-dependence treatment; and increases in the Federal excise tax on cigarettes by \$2.00 per pack as part of an unprecedented national initiative to help smokers quit. The Subcommittee projected that 5 million smokers would quit in the first year alone as a result of its recommendations, which would prevent 3 million premature deaths (46).

Goal areas include:

- *Demand.* The developers of cessation campaigns and messages designed to boost treatment demand and use among women smokers should seek to increase awareness of the need for and benefits of treatment, highlighting the unique health, mood, and cosmetic benefits accrued by women who quit. For example, women fear breast cancer more than lung cancer (57), yet more women die annually from lung cancer. Similarly, most women underestimate their risk for smoking-related cardiovascular disease (57). The role of smoking in health concerns that are unique to women

(such as cervical cancer, reconstructive procedures for breast cancer, oral contraception, hormone replacement therapy, menstrual cycle, infertility issues) are also not widely known or understood. Thus, smoking risks and quitting benefits related to reproductive health (e.g., fertility, pregnancy, fetal and child health outcomes) and children's exposure to environmental tobacco smoke should be highlighted. Cessation messages and campaigns aimed at woman smokers should also address common misconceptions about the effects of quitting on long-term health.

- *Access.* Increasing demand for treatment must be followed by increasing access to care. It is critical to broaden the help offered to women through the health care system by ensuring that every woman receives evidence-based smoking assessment and cessation counseling during routine health care with primary care, obstetrics and gynecology, pregnancy and prenatal care, and pediatric care providers (e.g., the action plan developed by the National Partnership to Help Pregnant Smokers Quit) (58). Cost barriers must be removed, and newer treatments that use such technology as targeted mailings, the Internet, and telephone quit lines may expand access for many. However, interventions that depend on access to Web-based resources, and even telephones, may not reach the most underserved low-income and priority populations.

Disparities

This recommendation directly addresses the issue of health disparities and will have a significant impact by increasing the number of women with access to treatment.

Partners

Partners include traditional and alternative health care systems and providers, community-based organizations, health services payers, media and marketing companies, pharmaceutical companies, patient advocacy groups, faith-based groups, and schools.

Impact

In 5 years, smoking prevalence will change; quit attempts will increase; demand for treatment will increase; awareness of the consequences of smoking will grow; and norms governing smoking will change markedly.

References

1. U.S. Department of Health and Human Services. *The Health Consequences of Smoking for Women: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Health, Office on Smoking and Health; 1980.
2. Bjornson W, Rand C, Connett JE, et al. Gender differences in smoking cessation after 3 years in the Lung Health Study. *American Journal of Public Health*. 1995;85:223-30.
3. Fiore MC, Novotny TE, Pierce JP, et al. Methods used to quit smoking in the United States: Do cessation programs help? *Journal of the American Medical Association*. 1990;263:2760-5.
4. Wetter D, Smith SS, Kenford SL, et al. Smoking outcome expectancies: Factor structure, predictive validity, and discriminant validity. *Journal of Abnormal Psychology*. 1994;103:801-11.
5. Wetter DW, Kenford SL, Smith S., Fiore MC, Jorenby DE, Baker TB. Gender differences in smoking cessation. *Journal of Consulting and Clinical Psychology*. 1999;67:555-62.
6. Hughes JR, Gust SW, Keenan RM, Fenwick JW, Healey ML. Nicotine vs. placebo gum in general medical practice. *Journal of the American Medical Association*. 1989;261:1300-5.
7. Killen JD, Fortmann SP, Varady A, Kraemer HC. Do men outperform women in smoking cessation trials? Maybe, but not by much. *Experimental & Clinical Psychopharmacology*. 2002;10:295-301.
8. Sachs DP, Sawe U, Leischow SJ. Effectiveness of a 16-hour transdermal nicotine patch in a medical practice setting, without intensive group counseling. *Archives of Internal Medicine*. 1993;153:1881-90.
9. Ossip-Klein DJ, Carosella AM, Kruch DA. Self-help interventions for older smokers. *Tobacco Control*. 1997;6:188-93.
10. Lerman C, Shields PG, Wiley P, et al. Pharmacogenetic investigation of smoking cessation treatment. *Pharmacogenetics*. 2002;12:627-34.
11. Connett JE, Murray RP, Buist AS, et al. Changes in smoking status affect women more than men: Results of the Lung Health Study. *American Journal of Epidemiology*. 2003;157:973-9.
12. Allen SS, Hatsukami DK, Christianson D. Nicotine withdrawal and depressive symptomatology during short-term smoking abstinence: A comparison of postmenopausal women using and not using hormone replacement therapy. *Nicotine & Tobacco Research*. 2003;5:49-59.
13. Perkins KA, Levine M, Marcus M, et al. Tobacco withdrawal in women and menstrual cycle phase. *Journal of Consulting and Clinical Psychology*. 2000;68:176-80.
14. Taylor WC, Ayars CL, Gladney AP, et al. Beliefs about smoking among adolescents—gender and ethnic differences. *Journal of Child and Adolescent Substance Abuse*. 1999;8:37-54.
15. Mermelstein R. Explanations of ethnic and gender differences in youth smoking: A multi-site, qualitative investigation. *Nicotine & Tobacco Research*. 1999;1:S91-8.
16. Klesges RC, Meyers AW, Klesges LM, LaVasque ME. Smoking, body weight, and their effects on smoking behavior: A comprehensive review of the literature. *Psychological Bulletin*. 1989;106:204-30.
17. Gritz ER, Klesges RC, Meyers AW. The smoking and body weight relationship: Implications for intervention and post-cessation weight control. *Annals of Behavioral Medicine*. 1989;11:144-53.
18. Weekley CK, Klesges RC, Reylea G. Smoking as a weight-control strategy and its relationship to smoking status. *Addictive Behavior*. 1992;17:259-71.
19. Glasgow RE, Strycker LA, Eakin EG, Boles SM, Whitlock EP. Concern about weight gain associated with quitting smoking: Prevalence and association with outcome in a sample of young female smokers. *Journal of Consulting and Clinical Psychology*. 1999;67:1009-11.
20. Gritz ER, Brooks L, Nielsen I. Gender differences in smoking cessation: Where? When? Who? Why? In: *Proceedings of the 9th World Conference on Smoking and Health*; October 10-14, 1994. Paris, France. New York and London: Plenum Press; 1995:411-7.
21. Pollack KI, Namenek Brouwer RJ, Lyna P, Taiwo B, McBride CM. Weight and smoking cessation among low-income African Americans. *American Journal of Preventive Medicine*. 2003;25:136-9.

22. Centers for Disease Control and Prevention. State-specific prevalence of current cigarette smoking among adults—United States, 2002. *Morbidity and Mortality Weekly Report*. 2004;52:1277-80.
23. Schorling JB, Roach J, Siegel M, Guterbock TM, Stewart HL. A trial of church-based smoking cessation interventions for rural African Americans. *Preventive Medicine*. 1997;26:92-101.
24. Voorhees CC, Stillman FA, Swank RT, et al. Heart, body, and soul: Impact of church-based smoking cessation interventions on readiness to quit. *Preventive Medicine*. 1996;25:277-85.
25. Centers for Disease Control and Prevention. Tobacco use among middle and high school students—United States, 2002. *Morbidity and Mortality Weekly Report*. 2003;52:7-9.
26. Watson JM, Scarinci IC, Klesges RC, et al. Relationship among smoking status, ethnicity, socioeconomic indicators, and lifestyle variables in a biracial sample of women. *Preventive Medicine*. 2003;37:138-47.
27. DiFranza JR, Rigotti NA, McNeill AD, Ockene JK, et al. Initial symptoms of nicotine dependence in adolescents. *Tobacco Control*. 2000;9:313-9.
28. Gilpin E, Lee L, Evans N, Pierce J. Smoking initiation rates in adults and minors: US 1944-1988. *American Journal of Epidemiology*. 1994;140:535-43.
29. O'Loughlin J, DiFranza J, Tyndale RF, et al. Nicotine-dependency symptoms are associated with smoking frequency in adolescents. *American Journal of Preventive Medicine*. 2003;25:210-25.
30. Gritz ER, Prokhorov AV, Hudmon KS, et al. Cigarette smoking in a multiethnic population of youth: Methods and baseline findings. *Preventive Medicine*. 1998;27:365-84.
31. Curry S. Youth tobacco cessation: Filling the gap between what we do and what we know. *American Journal of Health Behavior*. 2003;27:S99-102.
32. Fiore MC, Kenford SL, Jorenby DE, Wetter D, Smith SS, Baker TB. Two studies of the clinical effectiveness of the nicotine patch with different counseling treatments. *Chest*. 1994;105:524-33.
33. Havassy BE, Hall SM, Wasserman DA. Social support and relapse: Commonalities among alcoholics, opiate users, and cigarette smokers. *Addictive Behaviors*. 1991;16:235-46.
34. Haug K, Aaro LE, Fugelli P. Smoking habits in early pregnancy and attitudes towards smoking cessation among pregnant women and their partners. *Family Practice*. 1992;9:494-9.
35. Shiffman S. A cluster-analytic classification of smoking relapse episodes. *Addictive Behaviors*. 1986;11:295-307.
36. McBride CM, Pirie PL. Postpartum smoking relapse. *Addictive Behavior*. 1990;15:165-8.
37. McBride CM, Pirie PL, Curry SJ. Postpartum relapse to smoking: A prospective study. *Health Education Research*. 1992;7:381-90.
38. Severson HH, Andrews JA, Lichtenstein E, Wall M, Zoref L. Predictors of smoking during and after pregnancy: A survey of mothers of newborns. *Preventive Medicine*. 1995;24:23-8.
39. Rohde P, Lewinsohn PM, Brown RA, Gau JM, Kahler CW. Psychiatric disorders, familial factors and cigarette smoking: Associations with smoking initiation. *Nicotine & Tobacco Research*. 2003;5:85-98.
40. Lloyd-Richardson EE, Papandonatos G, Kazura A, Stanton C, Niaura R. Differentiating stages of smoking intensity among adolescents: Stage-specific psychological and social influences. *Journal of Consulting and Clinical Psychology*. 2002;70:998-1009.
41. Cohen S, Lichtenstein E. Partner behaviors that support quitting smoking. *Journal of Consulting and Clinical Psychology*. 1990;58:304-9.
42. Mermelstein R, Lichtenstein E, McIntyre K. Partner support and relapse in smoking cessation programs. *Journal of Consulting and Clinical Psychology*. 1983;51:465-6.
43. Ginsberg D, Hall SM, Rosinski M. Partner interaction and smoking cessation: A pilot study. *Addictive Behaviors*. 1995;16:195-202.
44. Zelman DC, Brandon TH, Jorenby DE, Baker TB. Measures of affect and nicotine dependence predict differential response to smoking cessation. *Journal of Consulting and Clinical Psychology*. 1992;60:943-52.
45. Fiore MC. Treating tobacco use and dependence: An introduction to the U.S. Public Health Service Clinical Practice Guideline. *Respiratory Care*. 2000;45:1196-9.

46. Fiore MC, Croyle RT, Curry SJ, et al. Preventing 3 million premature deaths and helping 5 million smokers quit: A national action plan for tobacco cessation. *American Journal of Public Health*. 2004;94:205-10.
47. Orleans CT, Barker DC, Kaufman NJ, Marx JF. Helping pregnant smokers quit: Meeting the challenge in the next decade. *Tobacco Control*. 2000;9 Suppl 3:III6-11.
48. Ward KD, Klesges RC, Zbikowski SM, Bliss RE, Garvey AJ. Gender differences in the outcome of an unaided smoking cessation attempt. *Addictive Behaviors*. 1997;22:521-33.
49. Gilpin EA, Emery SL, Farkas AJ, et al. *The California Tobacco Control Program: A decade of progress, 1989-1999*. La Jolla, CA: University of California at San Diego; 2001.
50. Orleans CT, Alper J. Closing the gap between what we know and what we do about treating tobacco dependence. In: S. Isaacs and J. Knickman, eds. *To Improve Health and Health Care, Volume VI: The Robert Wood Johnson Foundation Anthology*. San Francisco, CA: Jossey Bass; 2002: 125-49.
51. Centers for Disease Control and Prevention. Cigarette smoking among adults—United States, 2001. *Morbidity and Mortality Weekly Report*. 2003;52:953-6.
52. U.S. Department of Health and Human Services. *Tobacco Use Among U.S. Racial/Ethnic Minority Groups—African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanics: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 1998.
53. Centers for Disease Control and Prevention. The guide to community preventive services: Tobacco use and prevention reviews, recommendations and expert commentary. *American Journal of Preventive Medicine*. 2001;20(2 Suppl);16-66.
54. U.S. Department of Health and Human Services. *Women and Smoking: A Report of the Surgeon General*. Rockville: MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
55. Ringel JS, Evans WN. Cigarette taxes and smoking during pregnancy. *American Journal of Public Health*. 2001;91:1851-6.
56. Boyd NR, Sutton C, Orleans CT, et al. Quit Today! A targeted communications campaign to increase use of the Cancer Information Service as a quit smoking resource among African American smokers. *Preventive Medicine*. 1998;27:S50-60.
57. Gritz ER, Healton CG, Haviland M, Allen JA. Conspiracy of silence: The impact on adult knowledge of cancer risks from smoking. Paper presented at: Annual Meeting of the Society for Research on Nicotine and Tobacco; February 19, 2004; Scottsdale, AZ.
58. Robert Wood Johnson Foundation. *The National Partnership to Help Pregnant Smokers Quit: Action Plan*. Princeton, NJ: Robert Wood Johnson Foundation; 2002.