Smoking Cessation, Obesity and Weight Concerns in Black Women: A Call to Action for Culturally Competent Interventions

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Financial support: This manuscript was supported in part by an NIH-National Cancer Institute Career Development Award (5K01CA098753) and an NIH-National Center on Minority Health and Health Disparities Research Scholar Award (L60MD000577) to Dr. Sánchez-Johnsen.

Approximately 20.8% of black women and 23.1% of white women smoke, and significantly more blacks (37.4%) than whites (22.4%) are obese. Although the average amount of weight gain after quitting smoking is 6–8 lbs for women, blacks tend to gain substantially more weight. This large increase in postcessation weight gain in blacks may further augment the health risks that blacks face in conjunction with obesity. Interventions that promote smoking cessation, while simultaneously reducing weight concerns or weight gain has been proposed as a strategy to help weight-concerned women quit smoking. However, these studies have included primarily white samples and no studies have examined the feasibility or effectiveness of smoking-cessation and weight-control interventions for black women smokers. This review describes the literature on smoking, obesity/weight control and weight concerns in smokers, with a particular attention to black women smokers. A call to action to develop comprehensive and culturally competent smoking-cessation and obesity/weight-control interventions for black women is emphasized due to their high rates of smoking, obesity and postcessation weight gain.

Key words: smoking ■ obesity ■ weight concerns ■ blacks ■ postcessation weight gain

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Smoking and Obesity in Black Women

Cigarette smoking and obesity [body mass index (BMI) ≥30 kg/m^2] are both significant health liabilities that are associated with an increased risk of cancers, hypertension, ischemic heart disease and diabetes.[1-3] Tobacco use (particularly cigarette smoking) is also the single, most preventable cause of death in the United States,[1] and in women, cigarette smoking is strongly associated with cancer of the lung, larynx, oral cavity, esophagus and kidney.[4] Cigarette smokers are twice as likely as nonsmokers to develop diabetes,[5] and cigarette smoking plays a critical role in the development of premature, coronary heart disease.[2] Despite these documented heath risks, approximately 20.8% of black women and 23.1% of white women smoke,[6] and significantly more blacks (37.4%) than whites (22.4%) are obese.[7,8]

Black women are at increased risk for developing illnesses related to smoking and obesity. Not only do blacks have the highest incidence rates for all cancers combined, but they also have the highest overall cancer mortality rate compared to other ethnic groups.[9] Among black women, lung cancer accounts for the largest number of cancer deaths (39.9%) followed by breast cancer (35.4%).[10] Blacks also have higher rates of mortality and morbidity from obesity-related diseases than white women.[11,12] Moreover, although the average amount of weight gain after quitting smoking is about 6–8 lbs for women,[13] blacks tend to gain substantially more weight. For example, in one study, black women gained an average of 27 lbs.[14] This large increase in weight gain among blacks may further augment the health risks that they face in addition to obesity.

Smoking and Weight Concerns

Although the health risks associated with smoking and obesity are well-documented, many women continue to smoke because of their concerns about gaining weight when they quit smoking.[15-19] Numerous studies illustrate that weight concerns appear to be related to smoking cessation,[15,16,20] initiation,[21,22] maintenance[18]

and relapse.[19] Smokers concerned about postcessation weight gain are also more likely to report severe withdrawal symptoms[23] and drop-out of treatment[19] than those not concerned about weight gain.

Although there is compelling evidence to support the association between heightened weight concerns and less success at smoking cessation, several studies have found that a low level of weight concern and a high level of weight gain predicted abstinence;[24-26,28] or failed to find a relationship between weight concerns and smoking cessation;[26,27] or found that greater weight concerns predicted success at smoking cessation.[28] Discrepant findings may result from differences in the measurement of weight concerns[20,29] (e.g., measures of general weight concerns or body image versus concern specific to postcessation weight gain); differences in the time that smoking cessation was assessed;[21,30,31] or differences in the samples studied[26] (e.g., women with high versus low weight concerns). Nevertheless, two independent reviews of this literature concluded that a majority of research indicates that smoking may be related to a belief that smoking controls weight[32] and that weight concerns are important to assess and address among smokers.[20]

Rationale

The purpose of this paper is two-fold: 1) to describe the literature on smoking, obesity/weight control and weight concerns in smokers, with a particular attention to black women smokers; and 2) to issue a call to action to develop comprehensive and culturally competent smoking cessation and obesity-/weight- control interventions for black women, due to their high rates of smoking, obesity and postcessation weight gain. Models and guidelines for conducting culturally competent interventions are based on the notion that culture and ethnicity affect cognitions, attitudes and behaviors. Much in the same way that gender-specific interventions have been developed for women and men, culturally competent interventions take into account the important role of cultural values, norms, attitudes and behaviors that are unique to different ethnic groups.

The search engines Pubmed and Psychlit were used to identify relevant research and to review articles in English. These search engines were selected because of their emphasis on health issues. The key words used in the literature searches were: smoking and obesity; smoking and weight; blacks or African Americans and smoking; blacks or African Americans and weight concerns; blacks or African Americans and diet or weight loss or physical activity.

Weight Concerns among Black Smokers

The majority of studies on smoking and weight concerns have used white samples[30] and only a few studies have examined whether ethnic minorities use smoking as a weight-control strategy.[33-35] The lack of research on weight concerns among black smokers may be due to the assumption that blacks place less emphasis on being slim.[36] For example, in their literature review, Flynn and Fitzgibbon[36] note that blacks report more favorable body image attitudes and less strict criteria for perceiving overweight or obesity than whites. However, other research indicates that women of color may report disordered eating behaviors.[37]

Although there is a paucity of research on weight concerns in ethnic minority women smokers, the available data indicate that weight concerns and eating pathology may be equally prevalent in black and white women smokers in treatment.[34,38] In two independent samples of African-American and white women smokers (from a national, random-digit-dialing survey and from candidates for enrollment in local studies), Pomerleau and colleagues[33] also concluded that weight concerns may motivate black smokers as much as white smokers and that blacks were more likely than whites to not be willing to gain any postcessation weight. Recent research also suggests that black women who smoke and those with a higher BMI smoke more cigarettes per day than black male smokers and those with a lower BMI.[39] Weight concerns among black women smokers may also be related to differences in the degree to which they identified with black culture versus other cultures. For example, in a pilot study of black women smokers, those who more strongly identified with white culture reported greater weight concerns than blacks who identify with black culture.[40] Together, these results suggest that ethnic differences in weight concerns need to be considered in designing smoking-cessation interventions for those who report that weight concerns are a barrier to quitting or remaining abstinent. These results also suggest that one's ethnic identity may also be an important variable to consider when designing smoking-cessation interventions. For example, although black women who identify with white culture may have greater weight concerns than those who identify with black culture, future research is needed to identify whether the specific domain of weight concerns (i.e., body shape concerns versus wanting to be thin) may differ between women in these ethnic groups and whether tailored interventions are needed for different subgroups of black women smokers.

Relationship between Smoking and Weight

When designing smoking-cessation interventions, the relation between smoking and body weight should also be considered. Cross-sectional and longitudinal studies of smoking and body weight have

demonstrated that smokers weigh less than nonsmokers by an average of 7.57 lbs (range 2.36–14.99).[41] White women heavy smokers also weigh less than white women nonsmokers, while black women heavy smokers weigh more than black women nonsmokers.[41] Although several studies have illustrated the large effects of smoking on body weight,[42,43] recent research did not confirm that decreases in smoking prevalence rates leads to increases in obesity rates in the United States.[42]

A consistent finding is that approximately 80-85% of those who quit smoking will gain weight.[13,44,45] Women tend to gain more weight than males (8- versus 6 lbs),[13] and black women gain more weight (average 27 lbs) than white women.[14] While approximately 13.4% of women gain >28 lbs,[13] the odds of a ≥28.6 lb weight gain are three times higher for blacks than whites.[13] Because of the high prevalence of obesity in blacks, a concern is that obese black smokers will be placed at an additional health risk if they gain even more weight when they quit smoking.

Smoking-Cessation and Weight-Control Interventions

Although several types of smoking-cessation interventions have been developed to reduce postcessation weight gain, these interventions were not specifically designed for black smokers. In this section, interventions that address smoking cessation and either weight control, diet, weight concerns or physical activity in the general population of smokers will be reviewed. Next, smoking-cessation interventions that have been designed for black smokers will be reviewed. Finally, interventions that address diet, weight loss and physical activity for black women will be reviewed.

Pharmacotherapy for Smoking Cessation and Weight Control

Two antidepressant medications [bupropion hydrochloride[46] (FDA-approved for smoking cessation) and fluoxetine hydrochloride[47]] and one appetite suppressant (fenfluramine hydrochloride[48,49]) have reduced postcessation weight gain, but the benefits disappear after treatment ends. Therefore, medication may help to delay, but not prevent, weight gain.[50,51]

Nicotine replacement therapy (NRT) has also been used for smoking cessation. All of the commercially available forms of NRT (nicotine gum, transdermal patch, the nicotine spray, nicotine inhaler, lozenge and nicotine sublingual tablets) help to increase rates of smoking cessation by 150–200%.[52] The Agency for Health Care Policy and Research[53] specifically recommended the use of the transdermal nicotine patch or nicotine gum as a smoking-cessation aid.[53,54] However, although the patch helps to reduce negative moods and cravings for cigarettes, it does not appear to reduce postcessation weight gain or hunger.[55] Moreover, although the nicotine gum appears to initially reduce postcessation weight gain, the benefits disappear once use of the gum is terminated.[56] There is also no consistent evidence that supports the use of other NRT products for controlling weight in the long-term.[50] Therefore, although NRT is an effective adjunctive therapy for smoking cessation,[52] neither NRT nor medication have been helpful in preventing postcessation weight gain. These results point to the need to explore other adjunctive treatments for weight management in women attempting to quit smoking.

Smoking-Cessation and Dietary Weight-Control Interventions

Several clinical trials have evaluated the efficacy of adding a behavioral weight-control intervention to smoking-cessation counseling.[57,58] The rationale is that by reducing weight gain after quitting, concerns about postcessation weight gain should decrease, and therefore, cessation rates would improve.[57,58] Dietary interventions aim to prevent postcessation weight gain by improving the nutritional quality of food intake and reducing snacking.[57,58] Pirie and colleagues[59] provided a weight-control intervention that was integrated within a smoking-cessation intervention and offered it to women who expressed concerned about postcessation weight gain. Results revealed that women with heightened weight concerns had higher rates of abstinence at one year when given the weight control versus standard treatment (23% versus 15%, respectively). In another study, however, adding a weight-control adjunct to smoking-cessation treatment was associated with slightly poorer one-year outcome, compared with results for standard counseling.[60] The negative result of adding a weight-control adjunct may have been because the weight-control intervention was offered to all participants, even those not concerned about weight and only after they had successfully quit.[58,60] These results point to the importance of targeting weight-control interventions to those concerned about postcessation weight gain.[61]

Critics of smoking-cessation and weight-control treatments argue that the introduction of any treatment related to weight may create a behavioral burden on those trying to quit smoking.[58,60] They argue that the effort involved in following dietary instructions may interfere with smoking cessation. Therefore, they recommend that the best approach for treating weight-concerned smokers is to avoid directly addressing weight issues during smoking-cessation treatment so that participants can devote their energy to smoking cessation.[58] It is important to

keep in mind that promoting only smoking cessation and minimizing the importance of weight gain may be deleterious for some women, particularly to those blacks who are already overweight, and for health reasons, may benefit from interventions that address both smoking *and* weight control. However, no studies have addressed both smoking cessation and weight control in black women smokers.

Smoking-Cessation and Weight-Concerns Interventions

To date, there has only been one study that has examined the effectiveness of a smoking-cessation treatment that specifically targets weight concerns.[58] The rationale for cognitive-behavioral treatment (CBT) of weight concerns is that weight-concerned smokers hold maladaptive beliefs about the importance of shape and weight that leads them to engage in unhealthy weight-control behaviors.[57,58] In the only study to directly address weight concerns among smokers, Perkins and colleagues[58] randomly assigned 219 weight-concerned women to one of three treatments accompanying group smoking-cessation counseling: 1) CBT to reduce weight concerns, 2) behavioral weight control, or 3) standard counseling. Results revealed that CBT for weight concerns improved smoking-cessation outcome in weight-concerned women more than standard counseling or behavioral weight control. Moreover, weight gain in the CBT group was less than weight gain in the standard group, but did not differ from the behavioral weight-control group. At six- and 12-month follow-up, weight gain was less in the CBT group versus the standard group, while weight gain in the behavioral weight-control group was no longer different from that in the standard group. These results provide initial support for the effectiveness of CBT for weight concerns in reducing postcessation weight gain.[58] However, a major limitation of this study was that it included primarily white women, and the effectiveness of a weight-concerns component with black women smokers is unknown. It is also unknown if participants would achieve better success if they received both the CBT and the behavioral weight-control intervention. Given that prior studies have achieved initial success with smoking-cessation and behavioral weight-control interventions, it is plausible that a combined intervention would yield even stronger results.

Smoking-Cessation and Physical-Activity Interventions

The effectiveness of physical activity in promoting smoking cessation and reducing weight gain has also been examined. The rationale for physical-activity interventions is that exercise increases energy expenditure, which may help to offset the increase in caloric intake[62] and decrease in metabolic rate[41] that often occurs with smoking cessation.[63,64] Exercise may also have additional benefits for smoking cessation, such as reducing the fear of weight gain due to the increase in energy expenditure.[57] The weight-control benefits of exercise may also be more salient for black smokers, who have a significantly lower baseline resting energy expenditure, a factor which has been hypothesized to contribute to their greater postcessation weight gain.[65] Despite the numerous benefits of exercise as an aid for smoking cessation and weight control, few programs have included an exercise component. Moreover, there have been a number of limitations to these studies, such as: a lack of increase in exercise capacity,[66] brief programs,[67] no formal cessation treatment,[68] lack of control for contact time,[67,69] and small samples of ethnic minority women.[63,64]

Two frequently cited smoking-cessation and physical-activity interventions are the Commit to Quit trial[63] and an intervention that was conducted on military training recruits.[70] In the Commit to Quit trial, 281 sedentary women smokers were randomized to either a cognitive-behavioral smoking-cessation treatment with vigorous exercise or to the same smoking-cessation program with equal staff contact time.[63] Results revealed that vigorous exercise improved exercise capacity, delayed weight gain following smoking-cessation and improved short- and long-term cessation rates. These results are consistent with the findings of other studies which found that physical activity can help to reduce postcessation weight gain.[70,71] For example, Talcott and colleagues[70] examined smoking cessation and weight control in 332 female and male basic military training recruits (86 of whom were smokers) who participated in a six-week training camp. The basic training experience involved an aggressive, multicomponent, naturalistic "intervention" in which subjects were prohibited from smoking; restricted their caloric intake by eating a homogeneous diet; and increased their caloric expenditure through physical activity. Results revealed that there were no significant changes in weight for smokers who quit.[70] These results demonstrate that reducing caloric intake and increasing physical activity can help to prevent postcessation weight gain.

Importance of Smoking-Cessation and Weight-Control Interventions for Black Women

One of the primary limitations of prior research on smoking cessation and weight control is the use of primarily Caucasian smokers, and it is unknown whether black smokers benefit from similar interven-

tions. The need to develop innovative and culturally competent smoking-cessation and weight-control interventions for black women is important due to the health effects of smoking and obesity[72] because they gain substantially more weight when they quit smoking,[14] and because they appear to have concerns about weight that may affect their success at quitting smoking.[35] Although previous interventions have not been specifically designed to help black women quit smoking and prevent weight gain, there have been a few studies on smoking-cessation interventions for blacks and on dietary, weight loss and physical-activity interventions for black nonsmokers.

Smoking-Cessation Interventions for Blacks

Five of the most frequently cited smoking-cessation interventions for blacks are the Pathways to Freedom: Winning the Fight Against Tobacco program;[73] the church-based Heart, Body and Soul program;[74] the culturally sensitive intervention called Kick It at Swope[75] (a smoking-cessation intervention that specifically targeted inner-city blacks[76]); and a smoking-cessation intervention that tested the effectiveness of Bupropion as a smoking-cessation aid for African Americans.[77]

In one study, the effectiveness of a culturally tailored intervention among 1,422 black smokers who called four regional National Cancer Institute Cancer Information Service (CIS) offices in response to a radio-based media campaign in 14 communities was tested.[78] Callers were randomly assigned to receive either the standard CIS quit-smoking counseling and guide (Clearing the Air) or culturally sensitive counseling and a guide (Pathways to Freedom) that combined standard smoking-cessation information with reference to ethnicity, spirituality, community support and income. The Pathways program is the only intervention that has established effectiveness with black smokers through research sponsored by the American Cancer Society and the National Cancer Institute.[78] Results revealed that the tailored guide was rated as more appropriate for family members and included more appealing photographs. At six-month follow-up, there were more quit attempts and greater use of prequitting strategies among those in the Pathways program versus those in the standard program, but there was no difference in self-reported abstinence rates. A 12-month follow-up of 445 participants revealed a higher quit rate among those in the culturally sensitive group.

The Heart, Body and Soul program was a church-based smoking-cessation intervention that incorporated standard smoking-cessation treatment and black religious imagery and prayers.[74] Twenty-two churches were randomly assigned to either a culturally sensitive intervention or a self-help intervention. Results revealed that the intensive culturally sensitive intervention group made more positive progress along the stages of change continuum, versus the minimal self-help group. Within the culturally sensitive intervention group, Baptists were three times more likely to make progress than any other denomination. Overall, the culturally sensitive intervention group was more likely than the self-help intervention group to influence smoking cessation in urban blacks.[74]

Ahluwalia and colleagues conducted a series of studies with black smokers. In the Kick it at Swope[75,79] project, Harris, Ahluwalia and colleagues incorporated eight steps to increase the cultural sensitivity of a clinical trial testing the efficacy of Bupropion for smoking cessation among blacks. These strategies led to successful recruitment and retention of black smokers, and the participants reported that the program components were culturally appropriate.[75,79] In the only study to test the efficacy of NRT in inner-city blacks, Ahluwalia and colleagues found that the nicotine patch significantly improved short-term cessation rates.[76] In another study,[77] 600 black smokers were randomly assigned to receive 150 mg of Bupropion SR or placebo. Brief motivational counseling was provided in-person (at baseline, quit day, weeks 1 and 3, end of treatment) and by telephone (day 3 and weeks 5 and 7). Using an intent-to-treat analysis, Ahluwalia and colleagues,[77] reported that Bupropion SR produced higher smoking-cessation quit rates than placebo in blacks at the end of seven weeks and at 26 weeks. After controlling for continuous abstinence, in the short-term, those taking Bupropion SR gained less weight than those taking placebo. However, there was no difference in weight gained between those taking Bupropion versus placebo at week 26.[77] Together, the results of all of these studies with black smokers can be used to guide the development of culturally competent smoking-cessation and weight-control interventions by incorporating the elements that have established feasibility or effectiveness for blacks.

Dietary and Weight-Loss Interventions for Blacks

Research on dietary patterns and weight-loss interventions indicate that blacks may benefit from treatments that target dietary changes and weight loss. Although none of these studies have been specifically conducted on black *smokers*, results indicate that blacks in general consume more calories per day and fat than Latinos[80] and fewer fruits[81] than Caucasians[82,83] and may also be less likely than nonminorities to follow the national dietary guidelines of five fruits and

vegetables per day.[84] In order to promote healthy eating in minorities, several large-scale studies have been developed. Results from the Dietary Approaches to Stop Hypertension study revealed that blacks (60% of the sample) showed significant declines in blood pressure following the adoption of a low-fat, high fiber diet.[85,86] The Women's Health Trial Feasibility Study in Minority Populations[87] recruited 614 black women (28% of the total sample), and at six months, the intervention group reduced their daily fat intake by 12.24%, a change that was maintained at the 12- and 18-month follow-ups. In the church-based Eat for Life trial,[88] Resnicow and colleagues reported significant increases in fruit and vegetable intake among members of black churches using motivational interviewing. These results highlight the potential for comprehensive and culturally proficient interventions that specifically target dietary changes in blacks.

The feasibility and effectiveness of culturally relevant weight-loss interventions for blacks have also been examined.[89-94] For example, two frequently cited weight-loss programs for blacks are the Black American Lifestyle Intervention (BALI)[90] and Sisters Together: Move More, Eat Better program.[91] The BALI program was a nonrandomized pilot study of 67 women that included black group leaders, ethnic foods, meal-replacement shakes and a "culturally based lifestyle education program".[90] Results revealed that participants exhibited a 3.5% mean weight loss at the end of the 10-week program.[90] This amount is higher than what has been reported in other weight-loss interventions with minorities.[92-94] In the national media-based program, Sisters Together,[91] three culturally relevant brochures that encouraged black women to maintain a healthy weight by increasing their physical activity and eating healthier were disseminated. Although data on the effectiveness of this program is not available, the feasibility was established by the high level of participation in the pilot program.[91] Finally, SisterTalk[89] was a weight-control program designed specifically for black women and delivered via cable television to 373 black women in Boston. The SisterTalk program evaluated the effectiveness of adding telephone-based interactive and/or social support components as enhancements to the cable-TV weight-control program.[89] Results of the effectiveness of this study have not been published to date.

Physical-Activity Interventions for Blacks

Previous studies examining exercise and sedentary activity among blacks reveal that they consistently report lower levels of physical activity than whites.[95-99] In addition, more than one-third of black adults (33.8%) report no leisure-time physical activity, and black women (25.9%) are less likely than men (39.9%) to be physically active.[100] Objective measures of physical fitness also confirm ethnic disparities in physical activity.[98]

Several studies have identified the following barriers to physical activity among blacks: lack of child care; no exercise partners; competing responsibilities; lack of space at home; no exercise facilities at work; low levels of understanding, motivation and self-esteem; fatigue; and unsafe neighborhoods.[96,101,102] Individuals with less education, lower socioeconomic status and obesity are also less likely to exercise than more educated, higher-socioeconomic status and normal-weight individuals.[96,103] Therefore, exercise interventions for blacks must address these barriers.

DISCUSSION

In summary, although no previous studies have specifically addressed smoking cessation, obesity and weight concerns in black smokers, results from smoking-cessation interventions with black smokers and dietary, weight-loss and physical-activity interventions with blacks in general indicate that culture and ethnicity affect smoking, eating patterns and physical activity. Therefore, culturally competent smoking-cessation and obesity interventions should build upon these findings and incorporate the elements that have established feasibility or effectiveness for blacks, while simultaneously addressing cultural, social and environmental barriers to behavioral change.

Several promising interventions have been developed to promote smoking cessation and reduce weight gain in women. However, a major limitation of previous interventions is their lack of attention to both the differences and similarities between black and white women, which may affect success at smoking cessation and weight control. An additional limitation of prior studies is that they have targeted either weight concerns and/or behavioral weight control and/or physical activity, and no studies have integrated all three components.

It is recommended that future studies address the limitations of previous studies by testing their feasibility and acceptability and estimating the effectiveness of culturally competent and comprehensive smoking-cessation, obesity/weight-control and weight-concerns intervention for black women smokers. Such studies could incorporate the state-of-the-art treatments that have demonstrated their efficacy for smoking and weight control (e.g., CBT for weight concerns, behavioral weight control and physical activity) and should utilize some form of NRT, such as the transdermal nicotine patch, or medications such as Bupropion, both of which have established effectiveness with blacks.[76] It is also recommended that future studies incorporate elements of previous

investigations that have established feasibility or effectiveness for black smokers and blacks in general (e.g., the Kick it at Swope program;[75] the Pathways smoking-cessation program;[73] the BALI program[90] incorporating spirituality and community support; incorporating body image ideals and the meaning of weight; and motivational interviewing).

Finally, several conceptual frameworks that incorporate models for conducting culturally competent research[75,104-109] may be useful in the development of combined smoking-cessation and obesity-/weight-control interventions for blacks. Ahluwalia and colleagues' guidelines for the development of a cultural sensitive smoking-cessation intervention for blacks[75] and Resnicow and colleagues' guidelines for cultural tailoring of health interventions[105,106] emphasize the important role of culture and ethnicity at each stage of the proposal development, implementation and interpretation.

Three additional general guidelines can serve as a foundation for assessment and intervention development: the Guidelines for Conducting Research with Persons of African Descent,[104] developed by the Association of Black Psychologists (ABPSY); the American Psychological Association's (APA) Guidelines for Culturally Proficient Education, Research, Training, Clinical Practice and Organizational Change for Psychologists;[107] and Sánchez-Johnsen and Cuellar's guidelines for conducting culturally competent assessments and evaluations.[108] Both the ABPSY and the APA guidelines emphasize the role of being aware of one's feelings about various ethnic groups, as well as developing certain knowledge and skills needed to work effectively with diverse ethnic groups. To date, no studies have been published using these three guidelines in the development of smoking-cessation or obesity interventions, although they are currently being used in the development of two research studies (Sánchez-Johnsen, 2005, personal communication).

Finally, because competent assessments form the foundation of culturally competent interventions, it is recommended that combined smoking-cessation, obesity and weight-concerns interventions for black smokers begin with a thorough culturally competent evaluation. In their conceptual model, Sánchez-Johnsen and Cuellar[108] recommended using the APA guidelines[107] as a foundation for conducting culturally competent assessments and evaluations, but also urged researchers and clinicians to address six specific issues when conducting assessments (cultural relevancy; acculturation/ethnic identity; language proficiency/bilingualism; translation/interpretation; selection of instruments; and use of norms for diverse ethnic groups). For example, culturally appropriate instruments to assess weight issues, such as body image, in black smokers are needed. Recently, Pulvers and colleagues[110] developed a culturally relevant body image instrument for urban blacks that may be used in future cessation assessments and interventions. In conclusion, a call to action is issued to researchers, clinicians and educators to develop culturally competent smoking-cessation, obesity/weight-control and weight-concerns interventions for black women smokers, due to their high rates of smoking, obesity and postcessation weight gain.

ACKNOWLEDGEMENTS

The author gratefully acknowledges the technical assistance of Adela Mearig, BA.

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