Factors Influencing Health Behaviors and Drug Abuse Among Low-Income Black and Latino Women

Kathy Sanders-Phillips, Ph.D.

INTRODUCTION

In the past decade, significant increases have occurred in our knowledge of factors that influence women's health decisions and behaviors, as well as barriers to healthy behaviors among women (Brown-Bryant 1985; Makuc et al. 1989; Calnan and Johnson 1985; Baum and Grunberg 1991). There is also growing awareness of factors that influence the health behaviors of ethnic minority women (Sanders-Phillips 1994*a*, 1994*b*, 1996*a*; Cope and Hall 1985; Leigh 1994). In addition, strategies that can be effective in promoting healthier behaviors among the general population of women and among ethnic minority women have been identified (Eng 1993; Levine et al. 1992; Schaefer et al. 1990; Eng et al. 1985).

Despite these findings, efforts to understand and address drug abuse among women often fail to examine drug abuse in the larger context of a woman's health decisions and health behaviors or to incorporate previous findings regarding successful health promotion interventions for women into programs developed for drug-abusing women. Both the magnitude of women's drug abuse and its repercussions for their health and that of their children indicate that drug abuse among women is a significant public health problem (Carr 1975). More than 4.4 million women currently use illicit drugs, and women constitute more than 37 percent of the illicit-drug-using population in the United States (Leshner 1995). Women who abuse drugs also engage in other risk behaviors and tend to have other health problems (Curtiss et al. 1993). Thus, women's drug use may reflect a broader spectrum of unhealthy behaviors.

Current data and approaches from the field of public health and results from previous studies of women's health behaviors should be incorporated into efforts to understand drug abuse by women and develop

effective programs of intervention. Data from this literature indicate that health behaviors occur on a continuum from healthy to unhealthy behaviors (Berkanovic 1981-1982; Weinstein 1993; McLeroy et al. 1992) and that there is consistency in personal health habits over time (Rakowski 1987). In addition, health behaviors are multiply determined, and a primary goal must be to understand how health problems are created and maintained in society (McLeroy et al. 1992). The social processes through which the health problem or behavior is produced, the potential points of intervention, and what types of interventions are successful with which populations and under what social conditions must be assessed (McLeroy et al. 1992). After these conditions are met, programs of intervention can be established.

Within this context, drug abuse can be viewed as a health behavior or, more specifically, a risk behavior that may represent an end point of a series of risk behaviors in which a women may engage. To effect change in the health outcomes of drug-abusing women, researchers must begin to identify and examine the factors that promote risk behaviors, including drug use, and, conversely, encourage healthier behaviors. Previous findings from the public health literature regarding the evolution and predictors of healthy behaviors among women may be helpful in identifying factors that promote such behaviors. Public health theory and research have identified many of the factors and mechanisms by which healthy behavior is initiated and maintained (Berkanovic 1981-1982; DiClemente et al. 1991; Weinstein 1993). It is also important to identify barriers that prevent women from making decisions to engage in healthy behaviors or that encourage them to engage in unhealthy behaviors. Information on variables that promote risk behaviors and the mechanisms by which risk behaviors are maintained is scant. Identifying and examining those factors may be critical to the study of drug abuse among women.

Placing drug abuse on the continuum of women's health decisions, health behaviors, and risk behaviors allows for examining the relationships between drug abuse and other health behaviors, identifying the barriers and correlates of each, and determining common etiologies. The extent to which drug abuse by women is related to a more general constellation of unhealthy lifestyle behaviors or whether it represents a separate category of unhealthy behaviors that may be governed by different and unrelated factors should be examined. Variables that

distinguish drug-abusing women from women who engage in other unhealthy behaviors and factors that increase the probability that a woman will go from healthy behaviors to unhealthy behaviors to drug abuse should also be identified. For example, by examining drug use in the larger context of women's health behaviors, researchers can begin to identify and understand factors that may place a woman at risk for abuse of alcohol or tobacco and, subsequently, illicit drugs.

Finally, examining drug abuse in the context of women's other health decisions and behaviors may also focus attention on the social and cultural variables that influence risk behaviors for women as a whole and for ethnic minority subgroups. Factors that are related to healthy and unhealthy behaviors and are specific to drug abuse among ethnic minority women remain largely unidentified. Identification of these factors would increase knowledge regarding ethnic differences in drug abuse, as well as social and cultural influences on women's drug abuse, and would enhance the development of intervention programs targeted to ethnic minority women. The purpose of this chapter is twofold: First, it examines factors influencing health and risk behaviors among ethnic minority women, with particular emphasis on individual, social, and cultural factors related to risk behaviors. Second, factors related to alcohol and tobacco use among women are identified on the basis of previous literature, and relationships between these factors and factors associated with the abuse of illicit drugs are discussed. Approaches to health promotion intervention, particularly with ethnic minority women, also are reviewed.

FACTORS INFLUENCING HEALTH AND RISK BEHAVIORS AMONG WOMEN

There is considerable evidence that factors related to health and risk behaviors may be gender-specific (Gottlieb and Green 1984, 1987; Rakowski 1988; Cohen et al. 1982, 1991; Baum and Grunberg 1991; Calnan and Johnson 1985). Several factors, including demographic characteristics, knowledge and attitudes regarding health and healthy behaviors, locus of control, and degree of participation in religious groups, have been associated with health behaviors among women. In general, higher education, income, and employment status; greater knowledge of health promotion behaviors; positive perceptions of health status; internal locus of control; higher levels of participation in religious groups; and more positive attitudes regarding the prevention of disease

are related to healthier behaviors among women such as eating breakfast, exercising, moderate use of alcohol and tobacco, and good sleeping habits (Gottlieb and Green 1984, 1987; Rakowski 1988; Cohen et al. 1982, 1991; Baum and Grunberg 1991).

Both psychological and social variables are also significant correlates of health and risk behaviors among women. For example, higher levels of social support, which include emotional support, information sharing, and the provision of tangible goods and services are generally associated with healthier lifestyle behaviors (Gottlieb and Green 1984; Neighbors and Jackson 1984; Shumaker and Hill 1991). Stressful life events such as marital conflict also appear to be better predictors of involvement in healthy behaviors for women than for men (Rakowski 1988; Gottlieb and Green 1984; Cohen et al. 1991). That is, fewer stressful life events are related to higher levels of healthy behavior among women, especially in low-income groups. Conversely, both lack of social support and higher levels of stressful life events are associated with risk behaviors among women. Since levels of social support and stressful life events can also be associated with age and income, each of these variables may serve as mediators in relationships between age, income, and risk behaviors among women (Gottlieb and Green 1984). Psychological status, which is related to levels of stressful life events and social support (Cohen et al. 1991; Shumaker and Hill 1991), also influences risk behaviors among women. Poorer health behaviors are more common among women with symptoms of depression (Cohen et al. 1991; Leftwich and Collins 1994). Illness behavior also differs for men and women. Women are more likely to seek treatment when ill and to recognize the need for professional help with health problems (Neighbors and Jackson 1984).

Relationships between stressful life events and risk behaviors may be intensified in low-income, ethnic minority groups. Gottlieb and Green (1984) noted that poor women reported more stressful life events than higher income women and practiced fewer health promotion behaviors, both of which were related to decreased involvement in social networks. Family and friends are primary sources of health information for low-income, ethnic minority women, and lack of family or social support for healthy behaviors deters these behaviors (Neighbors and Jackson 1984; Gombeski et al. 1982). Social and ecological factors such as community and interpersonal violence are also related to fewer health promotion behaviors and poorer perceptions of health (Sanders-Phillips 1994*a*,

1994*b*, 1996*a*; Cohen et al. 1991). Women who have had a family member murdered or have experienced domestic violence engage in fewer healthy behaviors than women not exposed to violence (Sanders-Phillips 1994*b*, 1996*a*). Psychological factors such as alienation from the larger society and powerlessness in controlling life, which are related to exposure to violence and other stressful events, are also significant correlates of poor health behaviors for black and Latino women (Cohen et al. 1982; Bullough 1972; Hibbard 1985; Seeman and Evans 1962; Seeman and Seeman 1983; Morris et al. 1966).

Perceptions of the health care system and quality of interactions with health care workers influence health and risk behaviors in these groups. Lack of trust in the health care system and the perception that it disrespects them are associated with poorer health behaviors and fewer health promotion behaviors among ethnic minorities, which may also be related to delay of treatment (Perez-Stable 1987; Webb 1984; Freimuth and Mettzger 1990; Harrison and Harrison 1971, pp. 175-199; James et al. 1984). The quality of interactions with health care providers also influences health behaviors (Sanders-Phillips 1996*a*; Makuc et al. 1989). Higher levels of fatalism regarding the ability to affect health outcomes and low levels of self-efficacy have also been noted (Farris and Glenn 1976; Balshem 1991).

These data suggest that psychological variables such as stressful life events, psychological status, social support, and quality of interactions with the health care system may significantly influence health behaviors and decisions among women. Although the mechanisms by which these factors affect health decisions and behaviors have not been fully explored, these variables may play a more critical role in determining the health decisions and behaviors of women than those of men.

Causal relationships between these variables have not been established; however, stressful life events and lack of social support may be specifically related to the initiation and maintenance of unhealthy or risky behaviors by women. Stressful life events such as exposure to violence may result in feelings of powerlessness and alienation, which, in turn, are related to perceptions of poor health status and decreased health promotion behaviors (Sanders-Phillips 1996*b*). Perceptions of the health care system and quality of interactions with health care staff members appear to influence the level of healthy behaviors and compliance with treatment. Thus, ecological variables such as a

woman's exposure to violence and the nature of her interactions with health facilities, as well as individual variables such as psychological status and perceptions of stress, must be considered in assessment of health behavior and decisions.

FACTORS RELATED TO ALCOHOL AND TOBACCO USE AMONG WOMEN

Research on factors related to alcohol and tobacco use among women provides additional evidence that men and women differ regarding relationships between risk factors and health behaviors and that factors influencing the use of alcohol and tobacco among women are similar to those influencing other unhealthy behaviors. For example, there is a well-documented relationship between stressful life events and women's use of tobacco and alcohol. Stressful life events are related to smoking initiation, smoking cessation, and alcohol use by women (Gottlieb and Green 1984). Gottlieb and Green have suggested that the relationship between stressful life events and alcohol consumption and smoking by women may be strong enough to justify sex-specific norms for smoking and drinking as coping mechanisms for stress.

Social support, as measured by church attendance and marriage status, is related to lower levels of smoking and consumption of alcohol by women. Social network influences, including the availability of substances, modeling of their use, and attitudes toward their use, are correlates of substance abuse among women (Gottlieb 1982; Ferguson et al. 1976). Women's substance use, particularly alcohol use, is also related to parental drug abuse and the quality of family relationships (Beckman 1975; Swinson 1980; Ensminger et al. 1982). Demographic characteristics such as older age and full-time employment are also related to higher alcohol consumption among women, but, unlike with men, older age of women is not related to smoking cessation (Gottlieb and Green 1984).

Mental health status is also a predictor of women's smoking and drinking behavior. A history of marital conflict and depression is associated with higher levels of drinking and smoking (Cohen et al. 1991; Lex 1991). One study found that among women with depression, the incidence of smoking was 90 percent greater and the incidence of moderate or heavy drinking 120 percent greater than among women without a history of depression (Cohen et al. 1991). There is also a

relationship among full-time employment, marital conflict, and smoking. Marital conflict is related to an increased probability of smoking only among women who are not working full time, which supports the conclusion that relationships between stress and risk behaviors may be more significant for women of lower income. Data from this study also confirm that mental health factors may be more relevant to the health behaviors of women than those of men, particularly for substance abuse (Lex 1991).

Although relationships among stressful life events, depression, smoking, and drinking also have been found for ethnic minority women, the sources of stress related to tobacco and alcohol use and factors related to depression in ethnic minority women may differ, social norms and support for smoking may vary within groups of ethnic minority women, and factors such as acculturation may significantly affect depression and smoking and drinking behaviors.

Among black women, education is negatively related to age of smoking onset, amount of smoking, and perceived difficulties in quitting (Manfredi et al. 1992). Education is positively related to plans to quit, the belief that smoking is related to lung cancer and other serious health problems, and knowledge of where to go for help. Black women with more education also are more likely to live in environments that support smoking cessation and have fewer smokers. Education and level of acculturation are also important predictors of smoking behavior among Latino women, but the nature of the relationship differs. More acculturated Latinas tend to smoke more than Latinas with lower levels of acculturation or less education (Marin et al. 1989*a*), and Mexican-American women have been found to smoke more than Mexican immigrant women (Zambrana et al. 1991). Level of acculturation has also been shown to influence attitudes, norms, and expectancies about smoking in Latino groups (Marin et al. 1989*b*). Higher acculturation and education among Latinas are also positively related to alcohol consumption, as are older age and employment; however, drinking patterns among Latino women are not related to length of residence in the United States (Black and Markides 1993; Caetano and Mora 1988). These findings support prior reports that risk behaviors such as smoking and alcohol consumption tend to increase as Latinos become more acculturated (Marcus and Crane 1985; Marcus et al. 1986); however, Zambrana and colleagues (1991) found few differences in the consumption of alcohol between Mexican-American women and recent Mexican

immigrants. Low income among Latinas also is an important predictor of alcohol consumption. Among drinkers, poor Latino women tend to consume more drinks per occasion and are more likely to be heavy drinkers than Latinas at higher income levels (Black and Markides 1993).

In a study of factors related to alcohol consumption by black women, Taylor and colleagues (1991) found that stressful life events such as exposure to violence and internalized racism accounted for a significant proportion of the variance in alcohol consumption. Internalized racism was defined as the degree to which black women internalized negative racial stereotypes from the dominant society. Higher levels of internalized racism were associated with higher consumption of alcohol. Greater participation in religious activities was related to higher alcohol consumption and depression. This finding is consistent with previous findings that increased religious involvement is associated with increased depression among blacks who are experiencing chronic economic strain (Brown et al. 1992). Religious orientation was also positively correlated with internalized racism.

Singleton and colleagues (1986) have reported that smoking by black women is related to psychosocial stress and experiences of racism. They also note that smoking by black women may be related to problems of assertion, independence, rebellion, or identification in their relationships with males. This conclusion is supported by findings that women who quit smoking are more likely to be married, have spousal support, and be employed (U.S. Department of Health and Human Services 1980). Conversely, black women, who are more likely to be single and live in environments of high stress, are less likely to quit smoking than white women (Singleton et al. 1986).

Studies of depression among black and Latino women indicate that negative life events, internalized racism, and lack of social support are significant predictors of depression. However, for black women, stressful life events have a greater effect on depression than lack of social support (Taylor et al. 1991). Although social support was inversely related to depressive symptoms, it was unrelated to alcohol consumption. Several investigators have shown that acculturative stress is related to depression among Latinos (Salgado de Snyder 1987; Golding and Burnam 1990; Williams and Berry 1991; Ring and Marquis 1991). As has been found for black women, experiences of racial discrimination contribute to

higher rates of acculturative stress and depression among Latinas (Salgado de Snyder 1987). Among Latino professional women, both marital conflict and racial discrimination are significant predictors of depression (Amaro et al. 1987).

The studies cited above document relationships among stressful life events, depression, alcohol consumption, and tobacco use in black and Latino women and suggest that experiences of racism, exposure to violence, and lack of social support may precipitate acculturative stress and depression. These findings are consistent with Ferrence's (1988) observation that women's risk behaviors, such as smoking and alcohol use, are related to social status and interactions outside the home and that experiences of racism affect health outcomes among blacks (Kreiger 1990).

These results also underscore the importance of psychological and social variables to the use and abuse of tobacco and alcohol by these groups and support previous findings that psychological and social factors are significant predictors of risk behaviors among the general population of women and among ethnic minority women. It is also clear that ethnic differences, both between ethnic minority women and nonethnic minority women and among groups of ethnic minority women, exist in the sources of stress and factors that precipitate stress and depression.

FACTORS RELATED TO ILLICIT DRUG USE AMONG WOMEN

Most previous research on factors related to drug abuse has been conducted with male populations; consequently, there are fewer available data on factors related to illicit drug abuse among women (Hser et al. 1987). It has been reported that, in general, more white women (35 percent) and black women (33 percent) than Hispanic women (25 percent) report using illicit drugs at some point in their lives. Current use of any illicit drug is slightly higher among black women (7 percent) than among white women or Hispanic women (Leigh 1994).

Patterns of drug use and factors related to drug use differ for men and women (Lex 1991). Compared with male drug abusers, women who use illicit drugs, both during pregnancy and at other points in their lives, tend to use a number of drugs concurrently, report use of somewhat

higher amounts of drugs used but less money spent on drugs, are more likely to be living with a drug-dependent partner, are more likely to show symptoms of depression and isolation, and report more family and job pressures (Carr 1975; Streissguth et al. 1991; Frank et al. 1988; Singer et al. 1992, 1993; Lex 1991). Girls also are more likely to become polydrug users or to self-medicate for depression than boys (Booth et al. 1991, pp. 21-43). In addition, women's initiation into drug use and their progression through the addiction cycle are significantly influenced by their male partners (Hser et al. 1987). This is not common among male addicts.

Compared with women who do not report use of illicit drugs, drug-using women were more likely to be single, separated, or divorced; have less than a high school education; use alcohol and tobacco in addition to illicit drugs; and have fewer sources of social support (Streissguth et al. 1991; Singer et al. 1993; Beckwith 1986). Trauma, especially exposure to violence, may be a particularly important predictor of women's illicit drug use. Pregnant victims of abuse were more likely than nonvictims to use alcohol, marijuana, and cocaine, and women who experienced maternal battering admitted more alcohol and cocaine use than nonbattered women (Singer et al. 1993). In addition to histories of childhood physical and sexual abuse, female drug abusers were more likely to be physically and sexually abused during the time of their drug use, as well as exposed to stigmatization from the public and peers (Fullilove et al. 1992).

A study of the personality characteristics of male and female cocaine and alcohol abusers showed that Minnesota Multiphasic Personality Inventory profiles could not be distinguished on the basis of whether the individual abused alcohol or cocaine, although cocaine use was associated with higher levels of depression, anxiety, and antisocial behavior (Johnson et al. 1992). Female cocaine abusers are more likely than male abusers to have an Axis I diagnosis (American Psychiatric Association 1987). Depression was the most common disorder among women, whereas only men reported antisocial personality characteristics. Differences in depression for male and female drug users persisted over time, and women showed slower recovery from depression regardless of sociodemographic characteristics (Griffin et al. 1989). These findings suggest that previous reports of higher rates of antisocial behaviors among

cocaine users may have been confounded by the combining data from male and female samples.

Women who abuse illicit drugs also experience a wide range of health problems and engage in other risk behaviors. As indicated, marijuana, alcohol, and cigarette use is almost three times higher among drug-abusing women than among non-drug-abusing women from similar racial and social class groups (Frank et al. 1988; Singer et al. 1991). Poor prenatal care is also common among drug-using pregnant women (Singer et al. 1991). Women who use cocaine during pregnancy also tend to weigh less during pregnancy and at delivery, which may be related to anorexia and poor maternal nutrition (Singer et al. 1991; Frank et al. 1988). Drug-using women are also more likely to have a high prevalence of lifestyle or behavior-related health problems such as sexually transmitted diseases, anemia, and dental disease (Curtiss et al. 1993). Significant medical illnesses such as heart disease, surgical conditions, and breast disease also have been found among drug-abusing women (Curtiss et al. 1993), and their use of drugs and possible involvement in prostitution increase the risk of HIV (human immunodeficiency virus) exposure and AIDS (acquired immunodeficiency syndrome) (Fullilove et al. 1990). Current statistics indicate that approximately 67 percent of AIDS cases among women are related to drug use (Centers for Disease Control and Prevention 1994).

Since many of the previous studies of women using illicit drugs have utilized samples from public urban hospitals predominantly serving low-income, ethnic minority populations, relatively few comparison studies of factors related to drug use among ethnic and/or economic subgroups of women have been conducted. In addition, overreporting of ethnic minority drug-abusing women to public health and/or social service agencies has also skewed and biased samples on which many previous studies are based (Chasnoff et al. 1990). Nevertheless, some studies of ethnic differences among female drug abusers have been published. Zambrana and colleagues (1991) examined ethnic differences in the use of alcohol, cigarettes, and illicit drugs among Mexican-American, Mexican immigrant, and African-American women. Consumption of alcohol was most likely to be reported by black women. Black women were also more likely to use marijuana, cocaine, PCP (phencyclidine), and heroin, as well as over-the-counter medications. Use of illicit drugs was low among both the Mexican-American and

Mexican immigrant groups; however, Mexican immigrant women were slightly more likely than Mexican-American women to report use of illicit drugs. Black women were most likely to be smokers, although approximately one-third or more of women in each group reported smoking. Mexican-American women were more likely to be smokers than were Mexican immigrant women. Women who used alcohol, illicit drugs, or cigarettes during pregnancy were older, more likely to report negative life events, less likely to be living with the baby's father, and less likely to have planned the pregnancy (Zambrana et al. 1991).

The relationship between planned pregnancy and drug use in this sample of women is particularly interesting in light of previous data indicating that planned pregnancy is highly correlated with healthier behaviors, more positive health attitudes, greater involvement in prenatal care, and higher levels of self-care practices to protect the health of the baby (Cramer 1987). Conversely, failure to plan pregnancy is associated with higher levels of depression, alienation, and powerlessness (Groat and Neal 1967), which, as previously noted, are associated with poorer health behaviors among women.

De La Rosa and colleagues (1990) reported that the prevalence of drug use differs among Hispanic subgroups and that degree of acculturation influences rates of drug use in Hispanic populations. Puerto Ricans and Mexican-Americans who were born in the United States and whose primary language was English were most vulnerable to the use of illicit drugs. Greater drug use by these groups may be related to higher rates of poverty, limited school and employment opportunities, and racial discrimination (De La Rosa et al. 1990). Drug use among younger Hispanics is associated with acculturative stress, particularly loss of identification with Hispanic culture. Historical differences between Hispanic subgroups also may be related to differences in drug use patterns (De La Rosa et al. 1990).

Several studies have documented gender and ethnic differences in the initiation, addiction, and treatment phases of narcotic drug use, and findings suggest that male-female differences in drug use behavior are more pronounced among Latinos than among other ethnic or cultural groups. Gender differences in demographic and social characteristics of narcotic users are generally consistent with those reported above; however, shorter times from initiation of drug use to addiction have been noted for Latinas, and they were more likely than other groups

to use heroin (Anglin et al. 1987*b*). Both illicit and prescription drug use may serve as forms of self-medication to cope with the stresses of acculturation among Latinas (Booth et al. 1991). Latino women who abuse drugs have also been found to display lower self-esteem and self-efficacy than black female drug users and to engage in more risk behaviors (Grella et al. 1995).

Compared with white female narcotic users, Latinas are less likely to be employed and more likely to receive welfare or disability payments. Latinas also are more likely to come from single-parent, low-income households and to report family dysfunction. These circumstances, combined with lower educational achievement and a cultural milieu that disapproves of drug use by women and of women working outside of the home, encourage greater dependence on an addicted partner or on welfare and disability payments (Anglin et al. 1988) and suggest that Latinas who use drugs are significantly influenced by cultural gender norms (Booth et al. 1991). Cultural differences in expectations regarding women and their roles may also contribute to drug-dependent Latinas becoming marginal persons, both to the larger white society and within the Latino community (Anglin et al. 1988). Anglin and associates (1987*a*) have concluded that although sex role conflicts, restricted job opportunities, and other marginal attributes may influence female addicts in general, their impact may be more severe on Latino addicts.

Response to drug treatment also differs by gender and ethnicity. In general, a perceived need for treatment is higher among female drug abusers, but women are more likely to perceive a need for treatment on the basis of crisis events rather than degree of drug dependence (Longshore et al. 1993). Black and Latino drug users are less likely to report having been in drug treatment, Latino drug users are most likely to report that they do not seek treatment because they do not need it, and blacks are more likely to hold unfavorable views of treatment (Longshore et al. 1992). Both blacks and Latinos may refuse treatment because it may be viewed as a form of oppression that is associated with racism (Longshore et al. 1993). Latino women often report pregnancy as a reason for seeking drug treatment, but they are more likely to indicate that treatment programs do not help them (Anglin et al. 1987*a*).

Finally, the importance of community-level social and environmental risk factors to patterns of drug use has been observed. Community norms regarding alcohol and other drug use and acceptance of drug use influence

perceptions of its prevalence (Fitzpatrick and Gerard 1993). In a study conducted by Lillie-Blanton and colleagues (1993), the availability of drugs, community contacts with police, premature-death rates, mechanisms for coping with life stressors, distribution of wealth, and access to social resources were related to drug use patterns. Ethnic differences in illicit drug use did not persist after differences in these factors were considered. The investigators concluded that neighborhood-level social conditions were critical determinants of individual drug use among ethnic minority groups.

These findings on factors related to drug use for women and ethnic minority subgroups are important for several reasons. First, there is consistency in the factors related to unhealthy lifestyle behaviors, alcohol and tobacco use, and illicit substance abuse among women. Psychological, ecological, and interpersonal variables are salient factors related to risk behaviors among women, and relationships between these variables and drug abuse by ethnic minority women, particularly Latinas, are pronounced. Second, drug use is associated with involvement in other unhealthy behaviors, although it is not clear whether they precede, accompany, or occur after drug addiction. Physical disability and poor health are cited as primary reasons for discontinuing drug use for some women (Longshore et al. 1993). Third, for some drug-abusing women, pregnancy is a time of greater motivation to engage in healthier behaviors, less drug use, and improved self-care practices. Fourth, for ethnic minority women, the factors related to drug use are complex; however, it appears that ethnic minority women experience and are exposed to more of the factors related to unhealthy lifestyle behaviors and alcohol, tobacco, and other drug use than other female drug users and that psychological status and functioning may be more marginal in these groups. Finally, some investigators have reported that trauma and depression are important etiologic factors in women's drug abuse (Fullilove et al. 1992). It has been suggested that female drug users experience a cycle of initiating drug use to relieve symptoms of depression or trauma, experiencing trauma in their efforts to secure drugs, and relieving the new trauma by continuing to use drugs.

STRATEGIES FOR HEALTH PROMOTION INTERVENTION FOR WOMEN

An ecological approach to health intervention that focuses on the environmental, cultural, and social correlates of health behaviors; acknowledges the individual factors that contribute to health behaviors; and utilizes social networks to effect behavior change has also been emphasized in health promotion programs developed for women. Effective health promotion programs must identify and address the social, cultural, psychological, and economic factors that influence women's health behaviors and the lifestyle and cultural practices specific to the health behaviors and communities that are targeted (Schorr 1990; Israel 1982, 1985; Thomas 1990). Cognitive approaches to health behavior change, in the absence of attention to psychological, social, and cultural determinants of health behaviors, may be ineffective in promoting behavior change. Self-efficacy is an important predictor of health behavior change by women; cooperative learning methods may be highly effective in promoting behavior change, but knowledge is a relatively poor predictor of behavior change (Hargreaves et al. 1989; Vega et al. 1988; Amezcua et al. 1990, pp. 145-146; Schaefer et al. 1990). Successful intervention should be based in the community and utilize naturally occurring social networks. Low-income, socially isolated women may profit most from health intervention programs that address their immediate needs for companionship and mutual support and provide them with methods of self-improvement (Lacey 1992). In addition, in light of relationships between exposure to violence and health behaviors among women (Sanders-Phillips 1994*b*, 1996*a*) and data that show that low-income ethnic minority women are more likely to experience traumatic events such as violence (Bell and Jenkins 1991), health promotion programs for women must acknowledge the impact of trauma and exposure to violence on risk behaviors.

Lay health advisers have been used successfully to promote behavior change among women, especially ethnic minority women, and address the social and cultural barriers to healthy behaviors (Amezcua et al. 1990, pp. 145-146; Hargreaves et al. 1989). The effectiveness of lay health advisers in overcoming the cultural and social barriers to healthy behaviors, in recruiting women to health promotion interventions, and in increasing the health promotion behaviors of women has been well documented (Salber 1979; Levine et al. 1992; Brownstein et al.

1992; Warnecke et al. 1975, 1976). The particular effectiveness of using lay health advisers who are ethnically and demographically similar to the target population and who conduct interventions in programs where there is a shared sense of identity has also been stressed (Israel 1982, 1985; Warnecke et al. 1975). The use of indigenous, lay health advisers operating in close-knit social networks may exert a greater social influence than those functioning in loose-knit programs that lack a common identity or purpose (Israel 1985; Gottlieb 1981). The use of lay health advisers in health promotion and intervention programs is also consistent with findings that women tend to turn to informal support systems and other women for health advice and information (Schaefer et al. 1990; Warnecke et al. 1976; Neighbors and Jackson 1984; Leutz 1976). For example, among low-income black women, the use of lay health advisers is related to lower levels of depression, which in turn is related to healthier behaviors (Rhodes et al. 1992; Cohen et al. 1991; Gottlieb and Green 1987; Taylor et al. 1991). Lay health advisers may provide a level of social support for women that is necessary for health behavior change to occur (Israel 1985). The social support offered by lay health advisers may reduce stress and increase coping skills (Salber 1979; Gottlieb 1981; Hirsch 1981) as well as increase self-efficacy and perceived control over health outcomes (Hibbard 1985).

An ecological approach to intervention and treatment of drug-abusing women has also been stressed. Longshore and colleagues (1993) have concluded that special efforts may be needed to engage women, particularly ethnic minority women, into treatment. This emphasis may be especially important for clients who seek treatment because of family pressure, legal coercion, or other external motivators. Engagement of clients can be facilitated by the design of intake and referral services that are culturally specific and appropriate and by the provision of staff members who are ethnically compatible with the targeted group. Staff-client interactions may improve if staff members are bilingual and trained to adopt interaction styles that are consistent with the cultural group being served. In addition, closer ties should be established between treatment providers and community caregivers such as neighborhood health clinics, school programs, and churches. Nonprofessional counselors may be recruited, and community-based resources should be utilized as adjuncts or alternatives to formal treatment.

The development of trauma treatment services may also be an integral component of drug treatment for women. Fullilove and colleagues (1992) have suggested that peer support to address experiences of trauma may be a critical element in recovery for female addicts. A focus on self-affirmation and self-efficacy in overcoming drug abuse problems also may be needed in drug treatment. In addition, given the unique influence of a male partner on drug use patterns among women, intervention programs possibly should provide treatment for or solicit the support of male partners in the treatment of women (Anglin et al. 1987a). Finally, treatment programs for female drug addicts may be needed to capitalize on the motivation of pregnant addicts to improve their health for the well-being of the baby. This may be a critical point of intervention for effecting health behavior changes among drug-abusing women.

SUMMARY AND CONCLUSIONS

Efforts to understand drug abuse by women, particularly women in ethnic minority subgroups, and to develop successful programs of intervention should be guided by previous findings regarding women's health behaviors and by knowledge of factors related to substance use by women. In addition, programs of intervention for drug-abusing women should be based on findings from previously developed health promotion programs that have been effective in modifying other health behaviors among women.

Baum and Grunberg (1991) have argued that use of cigarettes, alcohol, and illicit drugs should be viewed as coping behaviors for women. Gender-based differences in the use of these substances may be related to gender differences in perceptions of stress or in motivations to regulate mood through substance use. Thus, women may be at greater risk for coping with stress by altering behaviors that affect health (Baum and Grunberg 1991). Increased understanding of the relationships between stress and unhealthy behaviors practiced by women may be critical to understanding the development of risk behaviors among women and to the consequences of high stress for women.

The similarities in factors related to women's risk behaviors highlight the common experiences and events that may precipitate risk behaviors among women. Much of the previous research on drug abuse

among women appears to have assumed that women who use illicit drugs differ considerably from other groups of women and that the factors that influence drug use differ from factors that influence other risk behaviors. The findings presented in this chapter contradict these assumptions and support the conclusion that women's risk behaviors may have common etiologies. It is possible that the degree or nature of exposure to critical events such as violence and trauma may distinguish women who use illicit drugs from women who do not or that time of exposure to specific events (e.g., trauma, violence) may contribute to a woman's decision to use illicit drugs and encourage a transition from other risk behaviors to drug abuse. Future research will be needed to clarify the relationships between these factors and women's risk behaviors, but it appears that both the healthy and unhealthy behaviors of women may be precipitated by similar factors and that women's drug abuse may be associated with a pattern of unhealthy behaviors that is established before the onset of drug abuse. In terms of future research, gender-specific models of health behavior are needed that include rather than exclude women's drug abuse and that conceptualize drug abuse as a risk behavior that is related to other risk behaviors. In addition, future research should focus on identifying protective factors that may insulate a woman against progression along the continuum from unhealthy behaviors to drug abuse.

The increased rates of disease and disabilities among drug-abusing women also suggest that programs of intervention for drug-abusing women must provide comprehensive medical care and address other risk behaviors in which drug-abusing women engage. A more comprehensive approach to health for drug-abusing women that does not focus exclusively on drug abuse behavior but addresses the factors that promote unhealthy lifestyle behaviors, including drug abuse, may result in better overall health outcomes and changes in drug abuse behavior.

The findings presented in this chapter also reaffirm the conclusion that health behaviors, particularly for women, do not develop and occur in a vacuum. Health and risk behaviors are significantly influenced by the social and cultural environment and context in which they occur. Efforts to address more global lifestyle behaviors, as well as drug abuse, and to foster health behavior change should focus on these determinants of women's health and risk behaviors and incorporate them into program planning. Perhaps the most important contribution from the public health field to the study of drug abuse among women is the ecological

approach to health promotion. This approach not only acknowledges the importance of effecting change in individual health behaviors but also emphasizes the need to create health-promoting environments as adjuncts to behaviorally oriented health promotion programs (Stokols 1992). The approach also assumes that individual health and risk behaviors are influenced by both the physical and social environment and that efforts to promote well-being should be based on an understanding of the dynamic interplay between environmental and individual factors. Social-ecological approaches to health promotion link the communitywide, preventive strategies and epidemiologic orientation of public health with the individual therapeutic and curative strategies of medicine (Stokols 1992).

Drug abuse behaviors among women, particularly those of ethnic minority groups, must be understood and addressed in terms of both the personal characteristics that promote drug use and the ecological factors such as community characteristics that also contribute to drug use, regardless of individual characteristics (Lillie-Blanton et al. 1993). An ecological approach suggests that interventions designed to promote health behavior change and influence drug abuse behaviors may have to be implemented at the microsocial, mesosocial, and macrosocial levels (Taylor et al. 1991). At the microsystem level, the effects of life events, social support, depressive symptoms, and poor health on women's risk behaviors suggest the need for programs to enhance coping skills, improve social management skills, and encourage health promotion. At the mesosystem level, the roles of religious orientation, internalized racism, and socioeconomic status in promoting risk behaviors suggest the need for church-based support and intervention, cultural programs to replace negative racial stereotypes, and social-vocational programs to improve educational and economic status. Macrosystem approaches should include public and cultural policies that are supportive of the microsystem and mesosystem interventions (e.g., public policies supporting job development, technical training, and full employment). As McLeroy and colleagues (1992) have concluded, the goals of health education should include not only changes in health-related behaviors and health status but also changes in the capacity of individuals, networks, organizations, communities, and political structures to address health problems.

REFERENCES

Amaro, H.; Russo, N.F.; and Johnson, J. Family and work predictors of psychological well-being among Hispanic women professionals. *Psychol Women Q* 11:505-521, 1987.

American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised.* Washington, DC: American Psychiatric Association, 1987.

Amezcua, C.; McAlister, A.; Ramirez, A.; and Espinoza, R. A su salud. Health promotion in a Mexican-American border community. In: Bracht, N.F., ed. *Health Promotion at the Community Level.* Newbury Park, CA: Sage Publications, 1990.

Anglin, M.D.; Booth, M.W.; Ryan, T.M.; and Hser, Y.I. Ethnic differences in narcotics addiction. II. Chicano and Anglo addiction career patterns. *Int J Addict* 23:1011-1027, 1988.

Anglin, M.D.; Hser, Y.I.; and Booth, M.W. Sex differences in addict careers. 4. Treatment. *Am J Drug Alcohol Abuse* 13(3):253-280, 1987*a*.

Anglin, M.D.; Hser, Y.I.; and McGlothlin, W.H. Sex differences in addict careers. 2. Becoming addicted. *Am J Drug Alcohol Abuse* 13(1-2):59-71, 1987*b*.

Balshem, M. Cancer, control, and causality: Talking about cancer in a working-class community. *Am Ethnologist* 18(1):152-172, 1991.

Baum, A., and Grunberg, N. Gender, stress, and health. *Health Psychol* 10:80-85, 1991.

Beckman, L.J. Women alcoholics: A review of social and psychological studies. *J Stud Alcohol* 36:797-824, 1975.

Beckwith, J.B. Eating, drinking, and smoking and their relationship in adult women. *Psychol Rep* 59:1075-1089, 1986.

Bell, C., and Jenkins, E. Traumatic stress and children. *J Health Care Poor Underserved* 2:175-188, 1991.

Berkanovic, E. Who engages in health protective behaviors? *Int Q Community Health Educ* 2:225-237, 1981-1982.

Black, S.A., and Markides, K.S. Acculturation and alcohol consumption in Puerto Rican, Cuban-American, and Mexican-American women in the United States. *Am J Public Health* 83:890-893, 1993.

Booth, M.W.; Castro, F.G.; and Anglin, M. What do we know about Hispanic substance abuse? A review of the literature. In: Click, R., and Moor, J., eds. *Drugs in Hispanic Communities.* New Brunswick, NJ: Rutgers University Press, 1991.

Brown, D.R.; Gary, L.E.; Greene, A.D.; and Milburn, N.G. Patterns of social affiliation as predictors of depressive symptoms among urban blacks. *J Health Soc Behav* 33(3):242-253, 1992.

Brown-Bryant, R. The issue of women's health: A matter of record. *Fam Community Health* 7:53-65, 1985.

Brownstein, J.N.; Cheal, N.; Ackerman, S.P.; Bassford, T.L.; and Campos-Outcalt, D. Breast and cervical cancer screening in minority populations: A model for using lay health educators. *J Cancer Educ* 7:321-326, 1992.

Bullough, B. Poverty, ethnic identity and preventive health care. *J Health Soc Behav* 13:347-359, 1972.

Caetano, R., and Mora, E.M. Acculturation and drinking among people of Mexican descent in Mexico and the United States. *J Stud Alcohol* 49:462-471, 1988.

Calnan, M., and Johnson, B. Health, health risks and inequalities: An exploratory study of women's perceptions. *Sociol Health Illn* 7:55-75, 1985.

Carr, J.N. Drug patterns among drug-addicted mothers. *Pediatr Ann* 4:65-77, 1975.

Centers for Disease Control and Prevention. *1993 National Household Survey on Drug Abuse: NIDA National Pregnancy and Health Survey. HIV/AIDS Surveillance Rep* 6(1), June 1994.

Chasnoff, I.J.; Landress, H.J.; and Barrett, M.E. The prevalence of illicit-drug use during pregnancy and discrepancies in mandatory reporting in Pinellas County, Florida. *N Engl J Med* 322:1202-1206, 1990.

Cohen, P.; Struening, E.; Muhlin, G.; Genevie, L.; Kaplan, S.; and Peck, H. Community stressors, mediating conditions and well-being in urban neighborhoods. *J Community Psychol* 10(4):377-391, 1982.

Cohen, S.; Schwartz, J.; Bromet, E.; and Parkinson, D. Mental health, stress, and poor health behaviors in two community samples. *Prev Med* 20:306-315, 1991.

Cope, N., and Hall, H. The health status of black women in the U.S.: Implications for health psychology and behavioral medicine. *Sage: Sch J Black Women* 2:20-24, 1985.

Cramer, J.C. Social factors and infant mortality: Identifying high-risk groups and proximate causes. *Demography* 24:299-322, 1987.

Curtiss, M.A.; Lenz, K.M.; and Frei, N.R. Medical evaluation of African American women entering drug treatment. *J Addict Dis* 12:29-44, 1993.

De La Rosa, M.R.; Khalsa, J.H.; and Rouse, B.A. Hispanics and illicit drug use: A review of recent findings. *Int J Addict* 25(6):665-691, 1990.

DiClemente, C.C.; Prochaska, J.O.; Fairhurst, S.K.; Velicer, W.F.; Velasquez, M.M.; and Rossi, J.S. The process of smoking cessation: An analysis of precontemplation, contemplation, and preparation stages of change. *J Consult Clin Psychol* 59:295-304, 1991.

Eng, E. The Save our Sisters Project: A social network strategy for reaching rural black women. *Cancer* 72:1071-1077, 1993.

Eng, E.; Hatch, J.; and Callan, A. Institutionalizing social support through the church and into the community. *Health Educ Q* 12:81-92, 1985.

Ensminger, M.E.; Brown, C.H.; and Kallam, S.G. Sex differences in antecedents of substance use among adolescents. *J Soc Issues* 38:25-42, 1982.

Farris, B., and Glenn, N. Fatalism and familism among Anglos and Mexican-Americans in San Antonio. *Sociol Social Res* 60:393-402, 1976.

Ferguson, P.; Lennox, T.; and Lettieri, D., eds. *Drugs and Family/Peer Influence.* Research Issues. 4. National Institute on Drug Abuse. DHEW Pub. No. (ADM)77-186. Washington, DC: Supt. of Docs., U.S. Govt. Print. Off., 1976.

Ferrence, R.G. Sex differences in cigarette smoking in Canada, 1900-1978: A reconstructed cohort study. *Can J Public Health* 79:160-165, 1988.

Fitzpatrick, M.L., and Gerard, K. Community attitudes toward drug use: The need to assess community norms. *Int J Addict* 28:947-957, 1993.

Frank, D.A.; Zuckerman, B.S.; Amaro, H.; Aboagye, K.; Baucher, H.; Cabral, H.; Fried, L.; Hinson, R.; Kayne, H.; Levenson, S.; Parker, S.; Reece, H.; and Vinci, R. Cocaine use during pregnancy: Prevalence and correlates. *Pediatrics* 82(6):888-895, 1988.

Freimuth, V.S., and Mettzger, W. Is there a hard-to-reach audience? *Public Health Rep* 105(3):232-238, 1990.

Fullilove, M.T.; Lown, E.A.; and Fullilove, R.E. Crack 'hos and skeezers': Traumatic experiences of women crack users. *J Sex Res* 29(2):275-287, 1992.

Fullilove, R.E.; Fullilove, M.T.; Bowser, B.; and Gross, S. Crack users: The new AIDS risk group? *Cancer Detect Prev* 14:363-368, 1990.

Golding, J., and Burnam, A. Immigration, stress, and depressive symptoms in a Mexican-American community. *J Nerv Ment Dis* 178:161-171, 1990.

Gombeski, W.R., Jr.; Ramirez, A.G.; Kautz, J.A.; Farge, E.J.; Moore, T.J.; and Weaver, F.J. Communicating health information to urban Mexican Americans: Sources of health information. *Health Educ Q* 9(4):293-309, 1982.

Gottlieb, B.H. Preventive interventions involving social networks and social support. In: Gottlieb, B.H., ed. *Social Networks and Social Support.* Beverly Hills, CA: Sage Publications, 1981. 304 pp.

Gottlieb, N.H. The effects of peer and parental smoking and age on the smoking careers of college women: A sex-related phenomenon. *Soc Sci Med* 16(5):595-600, 1982.

Gottlieb, N.H., and Green, L. Life events, social network, lifestyle, and health: An analysis of the 1979 national survey of personal health practices and consequences. *Health Educ Q* 11:91-105, 1984.

Gottlieb, N.H., and Green, L. Ethnicity and lifestyle health risk: Some possible mechanisms. *Am J Health Promot* 2:37-51, 1987.

Grella, C.E.; Annon, J.J.; and Anglin, M.D. Ethnic differences in HIV-risk behaviors, self-perceptions, and treatment outcomes among women in methadone maintenance treatment. *J Psychoactive Drugs* 27(4):421-433, 1995.

Griffin, M.L.; Weiss, R.D.; Mirin, S.M.; and Lange, U. A comparison of male and female cocaine abusers. *Arch Gen Psychiatry* 34:122-126, 1989.

Groat, H., and Neal, A. Social psychological correlates of urban fertility. *Am Sociol Rev* 32:945-949, 1967.

Hargreaves, M.K.; Baquet, C.; and Gamshadzahi, A. Diet, nutritional status and cancer risk in American blacks. *Nutr Cancer* 12:1-28, 1989.

Harrison, I., and Harrison, D. The black family experience and health behavior. In: Crawford, C.O., ed. *Health and the Family: A Medical-Sociological Analysis*. New York: Macmillan Co., 1971.

Hibbard, J. Social ties and health status: An examination of moderating factors. *Health Educ Q* 12:23-34, 1985.

Hirsch, B.J. Social networks and the coping process: Creating personal communities. In: Gottlieb, B.H., ed. *Social Networks and Social Support*. Beverly Hills, CA: Sage Publications, 1981. 304 pp.

Hser, Y.I.; Anglin, M.D.; and Booth, M.W. Sex differences in addict careers. 3. Addiction. *Am J Drug Alcohol Abuse* 13:231-251, 1987.

Israel, B.A. Social networks and health status: Linking theory, roles and practice. *Patient Couns Health Educ* 4:65-77, 1982.

Israel, B.A. Social networks and social support: Implications for natural helper and community level interventions. *Health Educ Q* 12:65-80, 1985.

James, S.; Wagner, E.; Strogatz, D.; Bresford, S.; Kleinbaum, D.; Williams, C.; Vutchin, L.; and Ibraham, M. The Edgecombe County (NC) high blood pressure control program. II: Barriers to the use of medical care among hypertensives. *Am J Public Health* 74:468-472, 1984.

Johnson, R.S.; Tobin, J.W.; and Cellucci, T. Personality characteristics of cocaine and alcohol abusers: More alike than different. *Addict Behav* 17:159-166, 1992.

Kreiger, N. Racial and gender discrimination: Risk factors for high blood pressure. *Soc Sci Med* 30:1273-1281, 1990.

Lacey L. Helping low-income minority women reduce cancer risk. *Oncology* 7:22, 1992.

Leftwich, M.J.T., and Collins, F.L. Parental smoking, depressions, and child development: Persistent and unanswered questions. *J Pediatr Psychol* 19:557-570, 1994.

Leigh, W.A. *The Health Status of Women of Color: A Women's Health Report of the Women's Research and Education Institute*. Washington, DC: The Women's Research and Education Institute, 1994. 52 pp.

Leshner, A.I. Filling the gender gap in drug abuse research. *NIDA Notes* 10(1):3,7, 1995.

Leutz, W. The informal community caregiver: A link between the health care system and local residents. *Am J Orthopsychiatry* 44:678-683, 1976.

Levine, D.M.; Becker, D.M.; and Bone, L.R. Narrowing the gap in health status of minority populations: A community-academic medical center partnership. *Am J Prev Med* 8:319-323, 1992.

Lex, B.W. Some gender differences in alcohol and polysubstance users. *Health Psychol* 10:121-132, 1991.

Lillie-Blanton, M.; Anthony, J.; and Schuster, C. Probing the meaning of racial/ethnic group comparisons in crack cocaine smoking. *JAMA* 269(8):993-997, 1993.

Longshore, D.; Hsieh, S.; and Anglin, M.D. Ethnic and gender differences in drug users' perceived need for treatment. *Int J Addict* 28:539-558, 1993.

Longshore, D.; Shin-Chao, H.; Anglin, M.D.; and Annon, T.A. Ethnic patterns in drug abuse treatment utilization. *J Ment Health Adm* 19:268-277, 1992.

Makuc, D.M.; Fried, V.M.; and Kleinman, J. National trends in the use of preventive health care by women. *Am J Public Health* 79:21-26, 1989.

Manfredi, C.; Lacey, L.; Warnecke, R.; and Buis, M. Smoking-related behavior, beliefs, and social environment of young black women in subsidized public housing in Chicago. *Am J Public Health* 82:267-272, 1992.

Marcus, A.C., and Crane, L.A. Smoking behavior among US Latinos: An emerging challenge for public health. *Am J Public Health* 75(2):169-172, 1985.

Marcus, A.; Herman-Shipley, N.; Crane, L.; and Enstrom, J. Recent trends in cancer incidence among U.S. Latinos. In: *Proceedings of the 114th Annual Meeting of the American Public Health Association*. Las Vegas, NV, 1986.

Marin, G.; Marin, B.V.; Otero-Sabogal, R.; Sabogal, F.; and Perez-Stable, E.J. The role of acculturation in the attitudes, norms, and expectancies of Hispanic smokers. *J Cross-Cultural Psychol* 20:399-415, 1989*b*.

Marin, G.; Marin, B.V.; and Perez-Stable, E.J. Cigarette smoking among San Francisco Hispanics. *Am J Public Health* 79(2):196-198, 1989*a*.

McLeroy, K.R.; Steckler, A.B.; Goodman, R.M.; and Burdine, J.N. Health education research: Theory and practice—future directions. *Health Educ Res Theory Practice* 7:1-8, 1992.

Morris, N.; Hatch, M.; and Chipman, S. Alienation as a deterrent to well-child supervision. *Am J Public Health* 56:1874-1882, 1966.

Neighbors, H.W., and Jackson, J.S. The use of informal and formal help: Four patterns of illness behavior in the black community. *Am J Community Psychol* 12:629-644, 1984.

Perez-Stable, E.J. Issues in Latino health care—medical staff conference. *West J Med* 146:213-218, 1987.

Rakowski, W. The persistence of personal health practices over a one-year period. *Public Health Rep* 102:483-493, 1987.

Rakowski, W. Predictors of health practices within age-sex groups: National survey of personal health practices and consequences, 1979. *Public Health Rep* 103:376-386, 1988.

Rhodes, J.E.; Ebert, L.; and Fisher, K. Natural mentors: An overlooked resource in the social networks of young, African-American mothers. *Am J Community Psychol* 20:445-461, 1992.

Ring, J., and Marquis, P. Depression in a Latino immigrant medical population: An exploratory screening and diagnosis. *Am J Orthopsychiatry* 61:298-302, 1991.

Salber, E. The lay advisor as a community health resource. *J Health Polit Policy Law* 3:469-478, 1979.

Salgado de Snyder, V.N. Factors associated with acculturative stress and depressive symptomatology among married Mexican immigrant women. *Psychol Women Q* 11:475-488, 1987.

Sanders-Phillips, K. Correlates of healthy eating habits in low-income black women and Latinas. *Prev Med* 23(6):781-787, 1994*b*.

Sanders-Phillips, K. Health promotion behavior in low-income black and Latino women. *Women Health* 21(2-3):71-83, 1994*a*.

Sanders-Phillips, K. Correlates of health promotion behaviors in low-income black women and Latinas. *Am J Prev Med* 12(6):450-458, 1996*a*.

Sanders-Phillips, K. The ecology of urban violence: Its relationship to health promotion behaviors in black and Latino communities. *Am J Health Promot* 10:308-317, 1996*b*.

Schaefer, N.; Falciglia, G.; and Collins, R. Adult African-American females learn cooperatively. *J Nutr Educ* 22:240D, 1990.

Schorr, L.B. Successful health programs for the poor and underserved. *J Health Care Poor Underserved* 1:271-277, 1990.

Seeman, M., and Evans, J. Alienation and learning in a hospital setting. *Am Sociol Rev* 27:772-782, 1962.

Seeman, M., and Seeman, T. Health behavior and personal autonomy: A longitudinal study of the sense of control in illness. *J Health Soc Behav* 24:144-160, 1983.

Shumaker, S.A., and Hill, D.R. Gender differences in social support and physical health. *Health Psychol* 10:102-111, 1991.

Singer, L.; Arendt, R.; and Minnes, S. Neurodevelopmental effects of cocaine. *Clin Perinatol* 20:245-262, 1993.

Singer, L.; Farkas, K.; and Kleigman, R. Childhood medical and behavioral consequences of maternal cocaine use. *J Pediatr Psychol* 17:389-406, 1992.

Singer, L.T.; Song, L.; Warshawsky, L.; and Kliegman, R. Maternal gravidity predicts prematurity in cocaine-exposed infants. *Pediatr Res* 26:266A, 1991.

Singleton, E.G.; Harrell, J.P.; and Kelly, L.M. Racial differentials in the impact of maternal cigarette smoking during pregnancy on fetal development and mortality: Concerns for black psychologists. *J Black Psychol* 12:71-83, 1986.

Stokols, D. Establishing and maintaining healthy environments. *Am Psychol* 47:6-22, 1992.

Streissguth, A.P.; Grant, T.M.; Barr, H.M.; Brown, Z.A.; Martin, J.C.; Mayrock, D.E.; Ramey, S.L.; and Moore, L. Cocaine and the use of alcohol and other drugs during pregnancy. *Am J Obstet Gynecol* 164:1239-1243, 1991.

Swinson, R.P. Sex differences in the inheritance of alcoholism. In: Kalant, O.J., ed. *Alcohol and Drug Problems in Women*: *Research Advances in Alcohol and Drug Problems.* New York: Plenum Press, 1980.

Taylor, J.; Henderson, D.; and Jackson, B.B. A holistic model for understanding and predicting depressive symptoms in African-American women. *J Community Psychol* 19:306-320, 1991.

Thomas, S.B. Community health advocacy for racial and ethnic minorities in the United States: Issues and challenges for health education. *Health Educ Q* 17:13-19, 1990.

U.S. Department of Health and Human Services. *The Health Consequences of Smoking for Women.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Assistant Secretary for Health, Office on Smoking and Health, 1980.

Vega, W.A.; Sallis, J.F.; Patterson, T.L.; Rupp, J.W.; Morris, J.A.; and Nader, P.R. Predictors of dietary change in Mexican American families participating in a health behavior change program. *Am J Prev Med* 4(4):194-199, 1988.

Warnecke, R.B.; Graham, S.; Mosher, W.; Montgomery, E.; and Schotz, W.E. Contact with health guides and use of health services among blacks in Buffalo. *Public Health Rep* 90:213-222, 1975.

Warnecke, R.B.; Graham, S.; Mosher, W.; and Montgomery, E.B. Health guides as influentials in central Buffalo. *J Health Soc Behav* 17(1):22-34, 1976.

Webb, H. Community health centers: Providing care for urban blacks. *J Natl Med Assoc* 76:1063-1067, 1984.

Weinstein, N.D. Testing four competing theories of health-protective behavior. *Health Psychol* 12:324-333, 1993.

Williams, C.L., and Berry, J.W. Primary prevention of acculturative stress among refugees: Application of psychological theory and practice. *Am Psychol* 46:632-641, 1991.

Zambrana, R.E.; Hernandez, M.; Dunkel-Schetter, C.; and Scrimshaw, S.C.M. Ethnic differences in the substance use patterns of low-income pregnant women. *Fam Community Health* 13:1-11, 1991.

AUTHOR

Kathy Sanders-Phillips, Ph.D.
Associate Professor
Department of Pediatrics
School of Medicine
University of California, Los Angeles
5120 Goldleaf Circle, Suite 380
Los Angeles, CA 90056
(310) 216-7469 (Tel)
(310) 216-2773 (Fax)

Click here
to go to
next section