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ALCOHOL AND OTHER DRUG DISORDERS, COMORBIDTY AND VIOLENCE IN RURAL AFRICAN AMERICAN WOMEN

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African-American women report less alcohol and drug (AOD) use than Caucasian women. However, African-Americans disproportionately experience negative health and social consequences of AOD use. This is especially true for rural women, many of whom live in poverty and have debilitating co-morbid psychiatric disorders that go undiagnosed and treated. It is imperative that health professionals be knowledgeable about AOD use, co-morbid disorders, and how to screen for them. This manuscript is focused on examining rural African American women ($n = 142$) *with and without AOD disorders on the following variables: drugs of abuse, Axis I psychiatric disorder, and adult and childhood victimization.*

Over the past 20 years, we have learned more about alcohol and other drug (AOD) disorders in women. However, we still don't know much about AOD use and associated factors among African

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American women, especially those living in rural areas. Although African American-Caucasian comparisons are informative, they may not be as helpful for guiding treatment provided by professionals who work predominatly with African American women. For those professionals, more in depth knowledge of health and illness within the African American communities they serve might be more meaningful in guiding treatment. Therefore, this manuscript is focused on examining rural African American women ($n = 142$) with and without AOD disorders on the following variables: drugs of abuse, Axis I psychiatric disorders, and adult and childhood victimization.

LITERATURE REVIEW

According to the latest census, 90% of the African American rural population live in the rural South (National Advisory Committee on Rural Health and Human Services [NACRHHS], 2004). African Americans as a group are impoverished, being three times more likely than Caucasians to live in severe poverty (Department of Health and Human Services [DHHS], 2001). Many live in poor, segregated neighborhoods with few resources. Such disadvantaged neighborhoods are often associated with high unemployment rates, violence, and AOD abuse (DHHS, 2001). In comparison to Caucasians, African Americans have fewer assets, such as home ownership, and limited savings (DHHS, 2001; Muntaner, Eaton, Diala, Kessler, & Sorlie, 1998).

Poor mental health is more common among those of lower socioeconomic status (SES) (DHHS, 2001; Drukker, Feron, & van Os, 2004; Seeman & Crimmins, 2001; Stafford & Marmot, 2003). Hypothesized causal factors include more stressful life events, noxious environments, and fewer community resources such as transportation, recreational facilities, and health care (Seeman & Crimmins, 2001). In lower SES individuals, the negative impact of stressful events on psychological functioning is greater (Seeman & Crimmins, 2001).

Some researchers found that African Americans have higher levels of psychological distress (Fiscella & Franks, 2000; Snowden, 2003; Thompson, 2002; Vega, Kolody, Porter, & Noble, 1997). However, results from the Epidemiological Catchment Area (ELA) Study (Robins & Regier, 1991) and the National Co-morbidity Study (Kessler et al., 2002) indicated that African Americans have lower or equivalent rates of life-time psychiatric disorders. On the other hand, when gender was examined in the ECA study, African American women had higher rates of anxiety disorders than Caucasian women (Robins & Regier, 1991).

Large national samples such as the National Household Survey on Drug Abuse (NHSDA) (Substance Abuse and Mental Health Services Administration [SAMHSA], 2002) continue to show that Caucasian women use more illicit drugs and drink more than African American women. Importantly, the difference is not large, especially in the younger age groups. For example, in the age range of 12 to 17 years old, the percentages for lifetime illicit drug use were 28.5% vs. 27.5% for Caucasian and African American women, respectively (SAMHSA, 2002). There was a larger difference in the use of alcohol for this same age range with Caucasian women reporting more use: 19.7% vs. 11.2% for any alcohol use; 11.5% vs. 5.9% for binge drinking; and 2.4% vs. .5% for heavy alcohol use (SAMHSA, 2002).

An earlier manuscript reported on the differences between African Americans and Caucasians in this sample of rural women (Boyd, Phillips, & Dorsey, 2003). Similar to the national sample, Caucasian women used more illicit drugs in every category and drank more than African American women. However, focusing predominantly on the differences in AOD abuse between African American and Caucasian women may obscure the problems that AOD disorders pose for African American women. African Americans disproportionately experience negative health and social consequences of AOD use (D'Avanzo, Dunn, Murdock, & Naegle, 2000; John, Brown, & Primm, 1997; Rouse, Carter, & Rodriguez-Andrew, 1995) and have higher incidences of alcohol related illness such as cirrhosis, cancer, pulmonary disease, malnutrition, and birth defects than do Caucasians (D'Avanzo et al., 2000; Jones-Webb, 1998).

African Americans are at higher risk for toxic effects of cocaine. Cocaine use causes a massive sympathetic nervous system response, and toxicity commonly affects the cardiovascular system including myocardial infarctions, ventricular arrhythmias, and coronary ischemic syndromes (D'Avanzo et al., 2000). Because hypertension and cardiovascular diseases are common among African Americans, cocaine use exacerbates these health problems. Use of crack cocaine by pregnant women results in problems in pregnancy including fetal injury, death, growth retardation, and neurological impairment (D'Avanzo et al., 2000).

Over time, childhood and adult victimization have been linked consistently to AOD disorders in women and may be the source of other health problems (Boyd, 2003; Boyd & Mackey, 2000a, 2000b; Brown, Recupero, & Stout, 1995; Dansky, Byrne, & Brady, 1999; Dansky, Saladin, Brady, Kilpatrick, & Resnick, 1995; Epstein, Saunders, & Kilpatrick, 1997; Miller, Downs, & Testa, 1993; Rohsenow, Corbett, & Devine, 1988; Saladin, Brady, Dansky, & Kilpatrick, 1995; Teets,

1995). Violence may be a vulnerability factor for substance abuse among women, especially rural women (Boyd, 2003). Findings from the National Violence Against Women Survey (Tjaden & Thoennes, 2000) indicated that African American women experience more violence than Caucasian women (29.1% vs. 24.8%). Moreover, in the United States, femicide is the leading cause of premature death among African American women between the ages of 15 and 45 (Campbell et al., 2003).

Differences in violence between African American and Caucasian women have been reported in this sample (Boyd et al., 2003). Caucasian and African American women with lower annual incomes (less than $20,000) reported experiencing more violence in adulthood, with low income Caucasian women reporting the highest level of violence. Caucasian women also reported more childhood violence than did African American women.

Lack of health insurance, inaccessibility of mental health services, and African American attitudes toward mental illness are barriers to seeking mental health care, especially in rural areas (DHHS, 2001). There is still considerable stigma associated with mental illness in the African American community, and seeking treatment may be discouraged (DHHS, 2001). One study found that half of African Americans receive mental health services in comparison to Caucasians after adjusting for SES factors (Swartz et al., 1998). Moreover, African Americans with mental disorders are more likely to seek help from a primary care provider where their mental disorder might not be recognized (DHHS, 2001).

In summary, differences in AOD use, psychiatric disorders, and violence among African American and Caucasian women have been reported. On the other hand, little is known about the variability in AOD use, Axis I psychiatric disorders, and violence among rural African American women. Therefore, the purpose of this study is to compare African American women with and without AOD disorders and with and without comorbid psychiatric disorders on AOD use and victimization.

METHODS

Sample

The sample for this study consists of 142 African American women who were part of two studies ($N = 86$ and $N = 181$) investigating risk factors for AOD disorders in rural women. Since women were recruited continuously for a three-year period from the same agencies and there were no differences in demographics between women in the two studies, the samples were combined for data analysis. Women with AOD

disorders were voluntary participants from eight County AOD Commissions located in rural counties throughout South Carolina that offer outpatient treatment and one inpatient AOD facility that serves the entire state of South Carolina. Only women who live in rural counties and who were ready for discharge were recruited from the inpatient facility. These AOD treatment agencies serve predominantly lower SES and Caucasian clients. Women for the comparison group (non -AOD) were voluntary participants from Department of Health and Environmental Control (DHEC) county health clinics located in and serving the same rural counties as the AOD county commissions. The DHEC clinics serve predominantly lower SES and African American clients.

There is no consistent definition of rural in the United States (Rural Policy Context, n.d.). Our definition of rural is based on census data. Recruiting agencies were chosen that serve counties designated by the U.S. Census Bureau to be at least 60% rural (South Carolina State Budget and Control Board [SCB & C], 1997, 1998, 1999, 2000). Within these rural counties, women had to live outside of urbanized areas (population 2,500) unless they lived in rural portions of extended cities (U.S. Census Bureau, 2005). An exception was made for a small number of women who had lived in rural areas most of their lives and who had recently (within two years) moved into small towns, or had moved into housing in small towns as part of their aftercare program. Women between the ages of 18–52 who resided in these designated rural areas were invited to participate. To date (2005), the areas designated as rural for this study are still classified as rural (counties with less than 25,000) or very rural (counties with towns less than 10,000) (SCB & C, 2005).

Procedure

The Principal Investigator (PI) recruited AOD women from county commissions by attending outpatient groups and asking for volunteers. The PI also went to the inpatient facility on a weekly basis to explain the study and ask for volunteers. Women were given an oral and written description of the study and allowed to ask questions. Volunteers provided names, address, and phone numbers so that study personnel could call and arrange a time and place for the interview. RAs attended outpatient health clinics and recruited non-AOD women in the same manner as that used for women with AOD disorders. To maximize privacy and comfort, data collection took place in a location designated by the woman, usually her home. IRB approvals or single project assurances were obtained for each site, and informed consent was obtained prior to collecting any data.

All interviews were conducted by the PI or one of three RAs. One RA held a master's degree in psychiatric nursing, one was a BSN graduate

enrolled in a nurse practitioner program, and the other held a BS in psychology. Interviewer training was conducted by the PI and included practice using a simulated interview format. Trainees were evaluated during the simulation sessions, which were continued until interviewers were 100% consistent in coding participant responses to interview items. Retraining sessions were conducted periodically for accuracy checks. If RAs were not sure about any portion of the diagnostic interview, they wrote detailed notes so the PI could check the recorded responses. All participants were able to read and write so there were no special procedures needed in completing questionnaires.

INSTRUMENTATION

The National Institute of Mental Health (NIMH) Diagnostic Interview Schedule (DIS; Robins, Helzer, Croughan, & Ratcliff, 1981) was administered to determine the presence of alcohol, drug and other psychiatric disorders based on *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* criteria (American Psychiatric Association [APA], 1994). (*The DSM-IV-TR* had not been published at the time of data analysis. However, the *TR* is only a text revision, there are no differences in the diagnostic criteria). A software package for cleaning data and scoring the DIS was used to establish psychiatric diagnoses. The PI also checked the participant's written record with *DSM-IV* criteria. The DIS was used because it was designed to be used by laypersons, and it was anticipated that at least one research assistant would not be a graduate nurse.

Based on responses to DIS (Robins et al., 1981), the 142 African American women were assigned to diagnostic groups for comparison. Of the 142 women, 61 women met criteria for an AOD diagnosis. Of the 61 women meeting criteria for an AOD disorder, 30 women met diagnostic criteria for a comorbid psychiatric disorder. Of the 81 women who did not meet criteria for an AOD disorder, 23 met criteria for a non-AOD psychiatric disorder. Therefore women were assigned to the following four comparison groups: (1) women with an AOD disorder only ($n = 31$); (2) women with an AOD disorder *and* an Axis I comorbid psychiatric disorder ($n = 30$); (3) women with no psychiatric disorder ($n = 58$); and (4) women with no AOD disorder but with other Axis I psychiatric disorders ($n = 23$).

Other Measures

Childhood violence was measured with the Child Abuse and Trauma Scale (CAT; Sanders & Becker-Lausen, 1995). The CAT is a 38-item

self-report questionnaire measuring retrospective assessment of negative childhood experiences. The CAT contains three subscales reflecting negative home environment/neglect, sexual abuse, and punishment. Respondents indicate on a five-point Likert scale (0 = never; 4 = always) how often a negative/abusive event was experienced. Subscale scores are calculated as the mean of items on the subscale. The internal consistency of the CAT has been reported as .86 for the negative home atmosphere/neglect subscale, .76 for the sexual abuse subscale, and .63 for the punishment subscale (Sanders & Becker-Lausen, 1995). CAT scales have shown construct validity by correlating with dissociation and depression (Sanders & Becker-Lausen, 1995). Internal consistency reliabilities for the study for the sexual abuse and negative home atmosphere subscales were .81 and .93, respectively. The reliability for the punishment subscale was .57 and therefore the scale was not used in this analysis.

Adult violence was measured with the Severity of Violence Against Women Scale (SVAWS; Marshall, 1992). The SVAWS assesses 46 acts in the following subscales: symbolic violence, threats of violence (mild, moderate, severe), acts of violence (minor, moderate, and severe), and sexual violence. Respondents indicate on a four-point Likert type scale (1 = never; 4 = many times) how often an abusive act occurred in a relationship. Responses are summed for subscale and total scale scores. Internal consistency has been reported as ranging from .60 to .74 (Marshall, 1992). The internal consistency reliability for the SVAW scales for the study sample ranged from .81 to .91.

Data Analysis

Descriptive statistics were used to analyze group differences on demographic variables for the four groups of women. Analysis of variance (ANOVA) was used to analyze group differences on adult violence, and multivariate analysis of variance (MANOVA) was used to analyze group differences on the two types of childhood violence. MANOVA is the analysis of choice for testing group differences on more than one moderately correlated dependent variable (Polit, 1996; Tabachnick & Fidell, 1996). MANOVA takes the correlations among dependent variables into account when it creates the composite dependent variable, thereby reducing type I error (Polit, 1996). Pillai's criterion was chosen as the multivariate statistic to test significance of group difference since it is more conservative and more robust than the other tests of significance, especially when there are unequal sample sizes and the assumption of homogeneity of variance-covariance matrices is violated (Tabachnick & Fidell, 1996).

TABLE 1. Means and Standard Deviation for Selected Variables by Four Groups of Women

	Non-AOD ($n = 81$)				AOD($n = 61$)			
	No disorder ($n = 58$)		Axis I disorder ($n = 23$)		No Co-morbid Disorder($n = 31$)		Axis I Co morbid disorder ($n = 30$)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Age	28.7	8.2	30.7	8.4	29.7	8.3	33.7	7.8
Education*	12.4 years	1.7 years	12.6 years	1.6 years	11.8 years	1.8 years	11.5 years	1.7 years
Income**	$21,589	$18,415	$22,848	$16,818	$20,239	$11,540	$11,518	$9,502

*$p = .03$ **$p = .02$.

RESULTS

Sample Characteristics

One-hundred-forty-two African American women ranging in age from 18 to 52 (mean age = 30, *SD* = 8.3) comprise the sample. Educational level ranged from 4 years to 17 years (mean 12th grade, *SD* = 1.8) (Table 1). More women were without partners ($n = 107$, 75%) than were married. Most women were unemployed (60%); 34% worked full-time, and 6% worked part-time. Most women lived in poverty. The median income was $14, 300 (mean = $19, 258, *SD* = $15, 576, range 00–$75, 000). Only 18% of women indicated that their income met their needs very well, and 62% said that they did not have enough money for emergencies. Forty-four percent had no transportation (Table 2). There were significant differences in education ($F = 3.1$, df = 3/136, $p = .03$) and income ($F = 3.5$, df = 3/130, $p = .02$) between the group of women with AOD disorders and comorbid psychiatric disorder and the other three groups of women. Education and income were run as covariates in the violence analyses; however, the covariates were not significant and there was no interaction among covariates and diagnostic groups.

Drugs of Abuse

The most frequently abused drug for both groups of AOD women (i.e., women with and without a comorbid Axis I disorder) was cocaine, followed closely by marijuana and alcohol. There was a different pattern for other drugs of abuse for the two groups of women. The AOD group with comorbid Axis I disorders drank more alcohol during the week and significantly more during the weekend ($F = 6.97$, df = 1/55,

TABLE 2. Frequency Distribution for Selected Demographics by Four Groups of Women

	Non-AOD ($n = 81$)				AOD ($n = 61$)			
	No disorder ($n = 58$)		Axis I disorder ($n = 23$)		No comorbid disorder ($n = 31$)		Axis I Co morbid disorder ($n = 30$)	
	"n"	%	"n"	%	"n"	%	"n"	%
Marital status								
Single	32	55	11	47.8	19	61.3	16	53.3
Married	16	27.6	10	43.5	0	0	7	23.3
Formerly married	8	13.8	2	8.7	12	38.7	7	23.3
Transportation								
No	13	22.4	9	39.1	20	64.5	20	66.7
Yes	43	74.1	14	60.9	10	32.3	10	33.3
Emergency cash								
No	26	44.8	16	69.6	25	80.6	21	70
Yes	32	55.2	7	30.4	6	19.4	9	30

$p = .01$) than the group of women without comorbid disorders. Table 3 summarizes the drug use information.

Violence

Violence was clearly associated with psychiatric disorder. Ninety-three percent of the group of AOD women with comorbid disorders reported experiencing adult violence in comparison to 77% of women with AOD disorders only. Seventy percent of women with a non-AOD psychiatric disorder experienced violence in comparison to 38% of women with no disorder. To avoid multicollinearity, the total scale score for the SVAW was used in the violence analysis. There were significant differences among the four groups of women ($F = 12.5$, df $= 3/131$, $p = .000$) (Table 4). The group of AOD women with comorbid Axis I disorders reported significantly more violence than all other groups of women. The group of AOD women without comorbid disorders reported more violence than the two groups of non-AOD women. Table 5 shows differences among the four groups of women on the violence subscales. The group of AOD women with comorbid disorders reported more violence on each subscale that the other three groups of women.

There were significant group differences in childhood abuse and sexual abuse among the four groups of women (multivariate: Pillais

TABLE 3. Drugs of Abuse

	AOD without Comorbid disorder ($n = 31$)	AOD with Comorbid disorder ($n = 30$)
Cocaine		
% lifetime use	80.6	80.0
Age first use	24.4	23.9
Marijuana		
% lifetime use	80.6	63.3
Age first use	18.0	16.3
Sedatives		
% lifetime use	9.7	16.7
Age first use	18.7	18.0
Amphetamines		
% lifetime	3.2	16.7
Age first use	16.0	16.5
Opiates		
% lifetime use	25.8	16.7
Age first use	18.3	17.3
Alcohol		
% with disorder	51.6	73.3
Age first intoxication	17.8	19.9
Age first problem	18.2	19.0
# drinks during week	18.0	27.9
# drinks during weekend	13.5*	29.5

*$p = .01$.

=.42, df = 6/250, $p = .000$). The group of AOD women with comorbid disorders reported significantly more negative home atmosphere than the two groups of non-AOD women (univariate: $F = 6.9$; df = 3/131; $p = .000$), and the group of AOD women without comorbid disorders

TABLE 4. Means and Standard Deviations for Adult Violence

	Non-AOD women ($n = 81$)				AOD Women ($n = 61$)			
	No disorder ($n = 58$)		Axis I psychiatric ($n = 23$)		No Comorbid disorder ($n = 31$)		Comorbid disorder ($n = 30$)	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Total violence score	52.8	17.7	56.3	15.4	76.7	27.4	107.2	40.5

Post Hoc Test: Group 3 is different from 1 and 2. Group 4 is different from 1, 2, & 3.

TABLE 5. Means and Standard Deviations for Four Types of Violence for non-AOD and AOD Women with Sample Items

	Non-AOD Women ($n = 81$)				AOD Women ($n = 61$)			
	No disorder ($n = 58$)		Axis I psychiatric disorder ($n = 23$)		No Co morbid disorder ($n = 31$)		Comorbid disorder ($n = 30$)	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Symbolic violence: Hit or kicked a wall Drove dangerously with you in the car	4.7	1.8	5.1	1.9	6.4	3.3	9.1	3.7
Threats of violence: Made threatening gestures Threatened you with weapon	17.9	8.0	19.8	8.5	27.5	12.4	37.1	13.9
Physical Violence: Pushed or shoved you Beat you up	24.3	8.9	26.4	10.6	34.0	13.6	49.5	19.8
Sexual Violence: Demanded sex whether you wanted to or not Physically forced you to have sex	6.9	2.7	6.7	1.6	7.7	3.9	12.8	5.8

reported significantly more negative home atmosphere than the group of women without psychiatric disorder ($p = .000$). Again, the group of AOD women with comorbid disorders reported significantly more sexual abuse that the other groups of women (univariate: $F = 3.6$; df = 3/132; $p = .02$); however, that difference did not reach the $p < .01$ criteria established for this study because of multiple significance testing (Table 6).

Axis I Psychiatric Disorder

Twenty-eight percent of women without an AOD diagnosis met criteria for a non-AOD Axis I disorder. The most common disorders for non-AOD women were panic without agoraphobia and recurrent major depression. Forty-nine percent of women with AOD disorders met

TABLE 6. Means, SD, and F Statistics for One-Way Analysis of Variance for Childhood Violence

	Non-AOD women ($n = 81$)				AOD women ($n = 61$)				
	No disorder ($n = 58$)		Non-AOD psychiatric disorder ($n = 23$)		No Comorbid disorder ($n = 31$)		Comorbid disorder ($n = 30$)		
	M	SD	M	SD	M	SD	M	SD	F
Negative home atmosphere	.52	.58	.92	.77	1.4	.68	1.8	.96	17.9 $p = .000$
Sexual abuse	.11	.24	.20	.39	.25	.47	.90	.91	11.9 $p = .000$

criteria for a comorbid disorder. The most common disorders for AOD women were PTSD and major depression. These disorders were primary, that is, they developed before the AOD abuse. AOD women also met criteria for several secondary diagnoses, that is, the diagnosis came after and was most likely caused by AOD abuse. Those secondary disorders were social phobia, panic with and without agoraphobia, generalized anxiety disorder, and major depression. Table 7 summarizes the disorders for the two groups of women.

DISCUSSION

The women comprising this sample were disadvantaged in many ways. Most were living in poverty with few or no resources. The group of AOD women with comorbid disorder was the most disadvantaged. Women in that group had the lowest income of the four groups, a mere $11, 518, 77% were without partners, and 67% had no transportation. Many women lived in trailers or houses that were deteriorating.

Although lower SES has been shown to contribute to psychiatric and AOD disorders, psychiatric disorders (including AOD disorders) certainly contribute to inability to maintain relationships, hold a job, and function in other important ways, thus impacting SES. In a descriptive study of this nature, the direction of the relationship cannot be reliably determined. However, women with AOD disorders and a comorbid psychiatric disorder reported more child abuse in the form of negative home atmosphere and sexual abuse than the other groups of women. They began using AOD early in life, but for most women, their comorbid psychiatric disorder began before their AOD use began. This

TABLE 7. Axis I Disorders

	Non-AOD ($n = 81$)		AOD ($n = 61$)	
	"n"	%	"n"	%
Specific phobia (primary diagnosis)	2	2.4	3	4.9
Social phobia (primary diagnosis)	0	0	4	6.6
Social phobia (secondary to AOD)	0	0	3	4.9
Panic with agoraphobia (primary diagnosis)	1	1.2	1	1.6
Panic with agoraphobia (secondary to AOD)	0	0	1	1.6
Panic without agoraphobia (primary diagnosis)	10	12.3	9	14.6
Panic without agoraphobia (secondary to AOD)	0	0	4	6.6
GAD (primary diagnosis)	3	3.7	3	4.9
GAD (secondary to AOD)	0	0	4	6.6
PTSD (primary diagnosis)	6	7.4	15	24.6
Major depression—single episode (primary diagnosis)	5	6.2	3	4.9
Major depression—single episode (secondary to AOD)	0	0	3	4.9
Major depression—recurrent (primary diagnosis)	8	9.9	14	23.0
Bipolar I (primary diagnosis)	0	0	1	1.6
Alcohol abuse			8	13.1
Alcohol dependence	0	0	29	47.5
Drug abuse	0	0	29	47.5
Drug dependence	0	0	47	77.0

group of women also reported more adult violence in every category than the other groups of women. Often, women who have experienced violence in childhood grow up believing that this is a normal part of relationships (Boyd & Mackey, 2000a, 2000b). For these women, experiencing violence and an ensuing psychiatric disorder early in life may have contributed to a lifetime of pain and disadvantage that women have self-medicated with AOD.

The two most frequently abused drugs were marijuana and cocaine. AOD women with comorbid disorders abused cocaine more frequently than other drugs. When asked about preferring cocaine to other drugs of abuse, one woman stated that she preferred cocaine "because it obliterates everything for awhile—the other drugs just dull it." "It" referred to the abuse that she had experienced. None of the African American

women abused intravenous drugs. However, their use of cocaine can place them at risk for HIV/AIDS. Women who abuse crack cocaine are at high risk themselves and at high risk of passing HIV to others due to the sexual practices associated with procuring and using cocaine (Cohen, Navaline, & Metzger, 1994; Eldridge et al., 1997). Crack users report more sex partners, including IV drug users, less condom use, and frequent bartering of sex for cocaine (Eldridge et al., 1997). Moreover, crack users are at increased risk because crack abuse reduces immune functioning directly and indirectly through adverse life circumstances associated with its use, such as poor nutrition, inadequate medical care, and untreated sexually transmitted diseases (Eldridge et al., 1997).

The numbers of African American women experiencing violence in this sample are staggering; however, they are consistent with other larger studies finding two-thirds of women in treatment for AOD disorders have been abused (Pirard, Sharon, Kang, Angarita, & Gastfriend, 2005; Rosen, Ouimette, Sheikh, Gregg, & Moos, 2002). Violence is clearly associated with psychiatric disorders. Fewer women in the group with no psychiatric disorder experienced violence; they reported the lowest levels of violence in every category on the Severity of Violence Against Women scale and less violence in childhood. The high rate of PTSD is likely associated with the high rate of violence. Other researchers have found that patients with abuse histories entering AOD treatment have significantly worse clinical severity on several dimensions including more psychiatric co morbidity, higher rates of unemployment, and separation/divorce (Pirad et al., 2005; Rosen et al., 2002). In addition, a history of abuse has predicted worse treatment outcomes including more psychiatric hospitalizations and more psychiatric outpatient treatments (Pirad et al., 2005; Rosen et al., 2002). In one study, psychiatric problems mediated the effect of abuse history on medical, legal, and employment outcomes (Rosen et al., 2002). Mediators are variables that reflect the mechanisms through which the independent variable (abuse) is able to influence the dependent variable(s) (medical, legal, employment status) (Bennet, 2000; Shadish & Sweeney, 1991).

NURSING IMPLICATIONS

Results from this study suggest that African American women with abuse histories are struggling with severe problems including major psychiatric illnesses and poverty—and most are not receiving treatment. Several factors are likely contributing to lack of treatment. There are few mental health providers practicing in rural communities (NACRHHS, 2004). Consequently, primary care health professionals are the first, and

sometimes the only, providers of care for mental health problems. Patients with mental disorders make up approximately 25% of all primary care patients (NACRHHS, 2004). This is problematic in that 50–60% of psychiatric disorders seen in primary care clinics go undiagnosed (Shedler, Beck, & Bensen, 2000).

Often, the only alternative to primary care is the public mental health system, and African Americans are more likely than Caucasians to be hospitalized in inpatient facilities such as state mental hospitals (DHHS, 2001). Unfortunately, treatment at such hospitals remains largely custodial. Once discharged, there are limited psychosocial rehabilitation services available, and patients are often re-hospitalized (National Institute of Mental Health [NIMH], 2000).

Even if mental health care were abundant in rural areas, other factors combine to limit access to treatment for African Americans. Mistrust, fear of treatment, racism and discrimination also prevent minorities from seeking health care and contribute to disparities in health (Good, James, Good, & Becker, 2001; Stanhope, Solomon, Pernell-Arnold, Sands, & Bourjolly, 2005). All of these factors create significant barriers that discourage African American women from seeking help, admitting significance of psychiatric symptoms, and disclosing violence. As a result, they often turn to informal sources of support such as clergy, traditional healers, and family and friends (DHHS, 2001).

All of these barriers to health care may mean that African American women may only receive episodic care. Therefore, they will not have a relationship with a health care provider. Lack of a good relationship with a health care provider may further discourage acknowledgment of psychiatric symptoms such that women may deny or minimize psychiatric symptoms or the impact of psychiatric symptoms on their lives. Moreover, heath care professionals who provide episodic care may not know the signs and symptoms of psychiatric disorder.

All of these factors have implications for all nurses practicing in rural areas, not just psychiatric-mental health nurses. It is important that all nurses working in rural settings know the signs and symptoms of psychiatric disorder so that they can identify women who may need a more extensive psychiatric evaluation and possible referral for treatment. Because of the fear and stigma associated with mental disorders, it is probable that nurses will need to do some education about psychiatric disorders and their treatment before a rural woman would be comfortable with further evaluation and treatment. Emphasizing the biological basis of psychiatric disorders and comparing them to other chronic disorders such as hypertension and diabetes may help to reduce some of the fear and stigma. Since African Americans often turn to family, friends, and

clergy for support, these groups also will need education to reduce the possibility that they might discourage psychiatric treatment.

Nothing, however, will be effective if not done in a culturally competent manner. Research has shown that ethnic minorities, who are often in ethnic-discordant relationships with health professionals, rate the quality of their health care more negatively than do Caucasians (Johnson, Saha, Arbelaez, Beach, & Cooper, 2004). African Americans have reported that health care professionals look down on them and the way they live their lives, and treat them with disrespect based on how well they speak English (Johnson et al., 2004). Since it is unlikely that an African American nurse can be paired with African American patients each time, all nurses need skills to increase their ability to relate to African American women in a culturally competent manner.

There are several major issues that if explored sensitively will enhance the nurse-patient relationship and promote culturally competent care (Carillo, Green, & Betancourt, 1999; Stone, 2004). (a) Identify the patient's core cultural issues: This can be done by asking about values and preferences regarding care; (b) Explore the meaning of the symptoms/ illness to the patient; Questions such as "What do you think has caused your problem?" "How does it affect your life?"; and "What type of treatment do you think would work?" "will help to elicit such information"; (c) Explore the patient's social context; Exploring social context includes asking about four areas that impact health care and treatment recommendations: (1) life control, which is often determined by socioeconomic status (Is money a problem in your life? Are you short on food or clothing?); (2) change in environment; (3) literacy and language (Do you have trouble reading your medicine bottle? Do you think that you have trouble communicating what you want to say to the doctor?), and (4) support systems and stressors (What is causing the most difficulty in your life? How do you deal with it? Do you have friends/relatives who can help?); and finally, (d) negotiate a treatment plan that is agreeable to both sides (Carillo et al., 1999; Stone, 2004). Exploring these issues increases the likelihood that key issues that are important to the patient are heard, valued, and incorporated into the treatment plan, if feasible (Carillo et al., 1999; Stone, 2004).

Finally, it is well known that returning to an unhealthy environment creates high risk for relapse for those with any type of psychiatric disorder. However, most women in the study did not have the financial means to improve their living or other environmental conditions. Helping impoverished women connect with available social services might provide some assistance with housing, food, or other important services that might be an important step in relapse prevention.

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