



# A Comparison of Black and White Women Entering Alcoholism Treatment\*

HORTENSIA AMARO, Ph.D.,† LINDA J. BECKMAN, Ph.D.† AND VICKIE M. MAYS, Ph.D.†

School of Public Health, Boston University School of Medicine, 83 E. Newton Street, Boston, Massachusetts 02118

**ABSTRACT.** Similarities and differences between Black and White women in the early stages of alcoholism treatment were investigated. Characteristics relevant to treatment and to the risk of early treatment discontinuance were examined including health-related attitudes and beliefs, personality characteristics, alcoholism history, and social and situational factors. Data were obtained through interviews with 25 Black and 67 White women who had recently entered an alcoholism treatment facility. Black women had a significantly lower income and were on average 5 years

younger than White women. After controlling for income and age, discriminant function coefficients indicated that ethnic differences also existed in women's perceptions about the role of health professionals in the maintenance of health, consequences of drinking, social isolation, self-esteem, access to alcoholism insurance, contact with important others and degree of opposition to treatment from others. Implications of the results for treatment continuance and service delivery are discussed. (*J. Stud. Alcohol* 48: 220-228, 1987)

**I**N THE LAST DECADE, a growing body of information has brought attention to the treatment of female alcoholics. However, as noted by other authors (Dawkins, 1980; Gaines, 1976; Harper, 1978; Leland, 1984; Lopez-Lee, 1979), these studies have been almost exclusively limited to White samples and have contributed little empirical data on Black female alcoholics. ("White" refers to non-Hispanic Caucasian women of European heritage and "Black" refers to non-Hispanic women of African heritage born in the United States.) The need for more information on Black female alcoholics is evidenced by the ethnic differences in the epidemiology of alcohol abuse and social norms about alcohol use.

Epidemiological studies indicate that both the prevalence and consequences of alcohol abuse are higher and more severe among Black than among White women (Bailey et al., 1965; Caetano, 1984; Cahalan, 1970; Cahalan and Cisin, 1968; Clark and Midanik, 1982; Haberman and Sheinberg, 1967; Leland, 1984; Lowe and Hodges, 1972; Rimmer et al., 1971; HERD,

D. A review of drinking patterns and alcohol problems among U.S. Blacks; ROBINS, L. N. Alcohol abuse in Blacks and Whites as indicated in the ECA. Papers presented at NIAAA Conference on Epidemiology of Alcohol Use and Abuse among U.S. Ethnic Minorities, Bethesda, Md., September, 1985). In a national random sample Cahalan and Cisin (1968) found that more Black women (51%) were abstainers and more (38%) were also heavy escape drinkers when compared with White women (39 and 11%, respectively). Regional studies in California (Caetano, 1984; Cahalan et al., 1974) and New York City (Bailey et al., 1965) also have reported a higher prevalence of heavy drinking among Black women.

Epidemiological data also indicate that Black and White women may differ in the age-related patterns of alcohol-related disorders and treatment entry. Robins (unpublished ms., 1985) found that among Black women rates of lifetime alcohol-related disorders are highest in the 45-59 age category whereas these rates are higher among White women under age 45. It is unclear whether the difference is due to onset of alcohol-related disorders at a later age among Black women or to a higher incidence of alcohol-related deaths among middle-aged White women (Robins, unpublished ms., 1985). A related and seemingly contradictory finding is that Black women in treatment are younger than White women (Gorwitz et al., 1970; Rimmer et al., 1971; Zax et al., 1967). For example, although the finding in epidemiological surveys that alcohol-related disorders peak at a later age for Black women, Gorwitz et al. (1970) found that

Received: 19 March 1986. Revision: 4 August 1986.

\* This research was supported in part by National Institute on Alcohol Abuse and Alcoholism research scientist development award AA-0002 and by a State of California Department of Alcohol and Drug Problems contract. The research was carried out while Doctors Amaro and Beckman were with the University of California at Los Angeles.

† Dr. Amaro is also with the Department of Pediatrics at Boston University School of Medicine, Dr. Beckman is with the California School of Professional Psychology, Los Angeles and Dr. Mays is with the University of California, Los Angeles.

the median age for Black women admitted for alcoholism treatment was 38, whereas for White women it was 44. The puzzle posed by the findings that indicate a later age at onset of alcohol-related disorders and earlier age at treatment entry among Black women is yet to be understood (Herd, unpublished ms., 1985).

Black women face fewer familial constraints against drinking than do White women (Bailey et al., 1965; Cahalan and Cisin, 1968; Gaines, 1976). Black women and Black men also exhibit more similar drinking behaviors than do White women and White men (Cahalan and Cisin, 1968; Sterne and Pittman, 1972). Black women at almost twice the rate of White women prefer to drink in the company of others (Cahalan and Cisin, 1968; Strayer, 1961). Attitudes toward drinking are more liberal among Black women and men than among White women and men (Caetano, 1984). However, fewer Black women than White women approve of women getting drunk (Caetano, 1984). This finding suggests that while Black women may live in a social context with more liberal norms with respect to drinking, they do not necessarily have a more liberal norm regarding female drunkenness. On the contrary, Caetano (1984) reports that the acceptance of drunkenness is less differentiated by gender among White women than among Black women.

The pattern of polarized drinking practices among Black women may be explained by two coexisting social norms. One pattern reflects a norm of abstinence that appears to be associated with adherence to strict religious beliefs (Cahalan and Cisin, 1968; Sterne and Pittman, 1972), whereas the other, which involves heavy drinking, is often associated with lack of concern about conventional norms and with status as the family's principal breadwinner (Bailey et al., 1965; Cahalan and Cisin, 1968; Herd, unpublished ms., 1985; Sterne and Pittman, 1972).

In one of the few studies that has compared Black and White women in alcoholism treatment, Dawkins and Harper (1983) found that race is associated with some drinking behaviors. After controlling for demographic characteristics, race was significantly associated with age at onset of heavy drinking, quantity of alcohol consumption at the height of problem drinking and social context of drinking. Black women were more likely than White women to start heavy drinking at a younger age, drink more heavily and drink in groups and with friends. In addition, differences were found in perceived causes of alcohol-related problems. Black women were less likely than White women to attribute the cause of their drinking problem to male-female relationships and to loneliness or boredom. Another study (Corrigan and An-

derson, 1982) found that Black women alcoholics were more likely to drink with others and less likely to hide their drinking than White women alcoholics.

In addition to influencing alcohol use and abuse, cultural and ethnic-related attitudes and behaviors may be critical factors in defining alcohol use as a problem and in seeking help. If ethnic differences also exist in other factors such as attitudes toward alcohol use and treatment, personality characteristics and social factors, then consideration of such differences during treatment would be critical.

The present study examines personal and social characteristics of Black and White women alcoholic patients that may have implications for the treatment process. The variables investigated were chosen based on results of previous studies that have identified factors associated with characteristics of female problem drinkers (for a review, see Beckman, 1978). The primary focus of the present study is on demographic, attitudinal, personality and social-situational characteristics that may influence the course of treatment and treatment continuation.

## Method

### *Sample*

The sample consisted of 25 Black and 67 White women who had recently entered alcoholism treatment facilities in Alameda or Kern Counties in California. These counties were chosen as the geographic base for the study because they provided a cross-section of California's population with respect to ethnicity and urban-rural area of residence. Population statistics at the time of the present study indicate that Kern County, primarily rural, had a population of 403,089 (5% Black) and Alameda County, primarily urban, had a population of 1,105,379 (18% Black) (Bureau of the Census, 1981). All agencies in the two counties (including outpatient alcoholism clinics, detoxification facilities, inpatient alcoholism treatment units and combination facilities) willing to allow their patients to be interviewed were included in the sample. Only three facilities of 26 declined to participate in the study. The results presented in this article are part of a large study (Beckman and Amaro, 1986) that investigated similarities and differences among men and women who had recently entered alcoholism treatment. The sample included White, Black and Hispanic women and men. Results of gender differences among White subjects have been reported elsewhere (Beckman and Amaro, 1986).

### *Measures*

The interview schedule and questionnaire included both standardized scales and questions specifically designed for this study. A detailed description of the instruments is found elsewhere (Beckman and Amaro, 1986). The instruments were used to collect information on demographic characteristics, health beliefs and attitudes, personality char-

acteristics, alcoholism history and characteristics of the patient's social context and social support.

Demographic variables included age, marital status, current religious affiliation, education, employment status, monthly household income and occupational status assessed via the Socioeconomic Index (Duncan, 1961).

Health-related attitudes and beliefs were measured by the Health Perceptions and Beliefs Scale (Ware et al., 1979), the Health Locus of Control Scale (Wallston and Wallston, 1978), eight questions on the perceived negative consequences of drinking (answered yes or no), seven questions on the perceived negative consequences of not getting treatment (answered yes or no), eight questions on the perceived negative consequences of entering treatment (answered yes or no), self-perception of predisposition to alcoholism (answered yes or no) and degree of satisfaction with current treatment (answered on a 4-point scale ranging from 1, very satisfied, to 4, very dissatisfied).

Personality characteristics were measured using the Self-Esteem Scale (Rosenberg, 1965) and the Social Isolation Scale (Dean, 1961). Alcoholism history was assessed by number of days spent in previous treatment for alcoholism, quantity-frequency of alcohol intake before the respondent stopped drinking, age at onset of excessive drinking, an index of behavioral impairment (Polich et al., 1980), presence of alcoholism in family of origin (scored yes or no) and use of illegal and legal drugs as sedatives or for recreation.

The respondent's social network and social support were measured by (1) amount of contact with close friends, parents, siblings, children and other relatives (contact with each group was rated on a 5-point scale ranging from 1, less than once a month, to 5, daily), (2) a summary measure of the number of close friends and (3) number of family members and friends who suggested or opposed the respondent's entry into treatment. This index was based on three questions: Did any family members or friends suggest treatment? (scored 1), Did anyone other than family members or friends suggest treatment? (scored 1), Was anyone against treatment? (scored 2). Other characteristics of the respondent's social context that were assessed are: (1) increase in conflict with family, friends or employer in the month prior to treatment (0 = no increased conflict, 1 = increased conflict with close persons or increased disapproval and 2 = both increased conflict and increased disapproval), (2) number of children under 18, (3) insurance coverage for alcoholism treatment, (4) travel time to facility, (5) services perceived to be available at the current treatment facility and (6) congruence between the client's views on the role of women in society and those of family, friends and community members. This last measure was based on the sum score for three questions: Do family members (friends; community members) share your views about the role of women in society? Responses were scored for each as -1 = no, 1 = yes.

#### Procedures

Patients admitted to each of the 23 participating alcoholism treatment facilities were informed of the purpose

of the study and asked to participate by treatment agency personnel. Trained female interviewers of the same ethnicity as the subject conducted the interviews within an average of 2 1/2 weeks of the client's entry into treatment. The interview took approximately 1 hour and was followed by a self-administered questionnaire that took about 30 minutes to complete.

### Results

Descriptive statistics for respondents on selected variables, including demographic characteristics, attitudes and beliefs, personality characteristics, alcoholism history, social support and social context variables, are shown in Tables 1 and 2.

#### Demographic characteristics

A larger percentage of Black than White clients were in inpatient treatment in publicly-funded facilities in Alameda County. White patients had an average monthly income of \$601-800, compared with \$201-400 for Black patients. Although both groups had a similar number of years of education, fewer Black (16%) than White (27%) clients were currently

TABLE 1. Subject by treatment agency characteristics, in percent

	Black (N = 25)	White (67)
County		
Alameda	92.0	47.8
Kern	8.0	52.2
Agency funding source		
Public	100.0	67.2
Private	0.0	32.8
Treatment program		
Detoxification	8.0	20.0
Inpatient	68.0	46.2
Outpatient	24.0	33.8
Marital status		
Married	8.0	22.6
Separated	44.0	19.4
Widowed	12.0	8.1
Divorced	4.0	38.7
Living together	4.0	3.2
Never married	28.0	10.4
Religious affiliation		
Protestant	36.0	22.6
Catholic	16.0	12.9
None	48.0	64.1
Employed	16.0	26.9
Perceive self at risk for alcoholism	43.5	57.6
Frequent and heavy drug use		
Licit drugs	27.3	17.2
Illicit drugs	45.5	29.3
Social isolation	63.6	77.6
Have alcoholism treatment insurance coverage	3.0	30.3

TABLE 2. Mean ( $\pm$  SD) scores for subjects on selected variables

	Black (N = 25)	White (67)
Age	35.12 $\pm$ 9.27	41.34 $\pm$ 11.37
Education (years)	11.84 $\pm$ 1.14	12.05 $\pm$ 2.82
Occupational status	28.76 $\pm$ 19.86	36.05 $\pm$ 22.23
Monthly household income (\$) <sup>a</sup>	249.00 $\pm$ 60.00	752.00 $\pm$ 489.00
Attitude toward the sick role <sup>b</sup>	16.92 $\pm$ 2.60	16.76 $\pm$ 2.92
Health worry and concern <sup>b</sup>	13.84 $\pm$ 2.46	13.09 $\pm$ 2.45
Attitude about going to the doctor <sup>b</sup>	7.24 $\pm$ 1.69	6.95 $\pm$ 1.49
Internal locus <sup>c</sup>	27.16 $\pm$ 5.28	28.55 $\pm$ 3.90
Chance locus <sup>c</sup>	20.32 $\pm$ 6.16	17.70 $\pm$ 6.24
Powerful other locus	21.68 $\pm$ 5.30	18.13 $\pm$ 7.00
Sum of negative consequences:		
Of drinking	4.36 $\pm$ 1.96	4.84 $\pm$ 2.04
Of no treatment	4.44 $\pm$ 1.94	4.32 $\pm$ 1.92
Of treatment entry	.60 $\pm$ .96	.82 $\pm$ 1.13
Degree of satisfaction with treatment	1.80 $\pm$ .87	1.38 $\pm$ .66
Self-esteem	3.41 $\pm$ 1.62	2.71 $\pm$ 1.72
Social isolation	28.25 $\pm$ 5.32	25.02 $\pm$ 3.62
Behavioral impairment	19.47 $\pm$ 4.96	18.48 $\pm$ 5.17
Years drinking	8.91 $\pm$ 10.91	10.05 $\pm$ 7.98
Years problem drinking	5.95 $\pm$ 3.88	8.83 $\pm$ 5.91
Oz alcohol consumed daily	12.41 $\pm$ 7.03	9.57 $\pm$ 7.51
Previous treatment for alcohol problems		
Days hospitalized	1.77 $\pm$ 2.09	2.10 $\pm$ 3.54
Outpatient visits	4.04 $\pm$ 10.94	7.94 $\pm$ 20.99
Months of counseling	2.09 $\pm$ 7.63	2.33 $\pm$ 8.67
Months of A.A.	3.64 $\pm$ 6.13	6.40 $\pm$ 15.85
Number of close friends	4.52 $\pm$ 1.40	2.60 $\pm$ 5.17
Sum of contacts with important others <sup>d</sup>	25.29 $\pm$ 6.92	20.89 $\pm$ 7.20
Degree of congruence with social network on role of women	1.57 $\pm$ .81	1.79 $\pm$ 1.12
Degree of conflict with others prior to treatment <sup>e</sup>	1.24 $\pm$ .89	1.02 $\pm$ .84
Summary index of others suggesting and/or opposing treatment <sup>f</sup>	1.00 $\pm$ 1.00	.38 $\pm$ .96
Number of children under 18	4.52 $\pm$ 1.36	2.60 $\pm$ 1.18
Index of travel time to facility <sup>g</sup>	1.24 $\pm$ 6.92	1.53 $\pm$ 7.20
Number of services perceived available	.95 $\pm$ 5.67	1.83 $\pm$ 6.50

<sup>a</sup> Measured in a 13-point scale with unequal intervals ranging from 1 (< \$200) to 13 (\$4000 +). Means  $\pm$  SDs have been converted to dollars.

<sup>b</sup> Subscales of the Health Perception and Beliefs Scales (Ware et al., 1979), high scores indicate positive attitudes toward health concerns or health care.

<sup>c</sup> Subscales of the Multidimensional Health Locus of Control Scale (Wallston and Wallston, 1978), high scores indicate the perception that one's health is due to one's actions, chance or the actions of others for each scale respectively.

<sup>d</sup> High scores indicate frequent contact with others, possible range, 6-30.

<sup>e</sup> High scores indicate more conflicts, possible range, 0-2.

<sup>f</sup> High scores indicate support from others for entering treatment, possible range, -2-2.

<sup>g</sup> Scored as four categories: 1 (30 min), 2 (30-60 min), 3 (1-2 hours) and 4 (2+ hours).

employed. The Black participants were about 5 years younger. Almost 50% of the Black women were separated and more than 25% had never married. Among White women about 38% were divorced, 19% were separated and 10% had never married. Although many clients had no religious affiliation, this was more common among White (64.1%) than Black (48%) women.

*Beliefs about health, alcohol and treatment.* The mean scores on the scales of health beliefs and attitudes show virtually no differences between Black and White women in attitudes toward the sick role,

health worry and concern, and attitudes toward going to the doctor. Mean scores on the Health Locus of Control subscales are similar for Black and White women, although Black women scored higher in the Chance and Powerful Others subscales. The mean scores on the total number of perceived consequences of drinking and treatment indicate similar scores across ethnic groups on negative consequences of drinking, of not obtaining treatment and of treatment entry. More White (57.6%) than Black (43.5%) women believed that because of their social or genetic background they were at risk for alcoholism. Both groups

seemed satisfied with treatment; on average, however, Black clients were "satisfied," whereas White clients were "very satisfied."

*Personal traits and history.* Compared with White women, Black women had a more positive sense of self and reported on average fewer years of drinking and of problem drinking and had also received fewer days of previous alcoholism treatment through hospitalization, outpatient services, counseling and Alcoholics Anonymous (A.A.). However, Black subjects had stronger feelings of social isolation, and they scored higher on behavioral impairment and ounces of alcohol consumed daily prior to treatment entry. A higher percentage of Black subjects reported a history of familial alcoholism. Over 25% of the Black clients compared with less than 18% of White clients had a history of frequent and heavy use of prescription drugs. Frequent and heavy use of illicit drugs was found in almost 50% of Black women but only in less than 30% of White women.

*Social and situational factors.* On average Black women had two more close friends than White women. The mean score on the summary frequency of contact with important others indicates that both groups had frequent contact with others, however, Black women had somewhat more contact. More Black (68%) than White (49.2%) women had family members or friends who suggested treatment. Very few Black (8%) but almost 25% of White women had someone who opposed their treatment entry. Perhaps due to their younger age, Black women had on average two more children under 18 years of age than White women. Few services were named as available in their agencies by both groups, however, White women named twice as many services as did Black women. There was a striking difference between groups in access to insurance coverage for alcoholism treatment—10 times as many White as Black women reported such coverage.

#### *Multivariate analyses*

The primary aim of the multivariate analyses was to identify the variables that best differentiated between Black and White women clients while controlling for possible confounding factors. Age and income were chosen as control variables to avoid confounding possible effects of socioeconomic class and life state with actual differences between the two groups. In the first step of data analysis, we attempted data reduction via factor analytic technique. However, this failed to reveal a strong general factor (or two strong factors) for any of the four sets of variables. The first principal component accounted for 15–20% of the variance in the four variable sets. When the first

principal component scores were used together in a discriminant function analysis with ethnicity as the dependent variable, only 60% of the cases were correctly classified. The second approach was to conduct multivariate discriminant function analysis with BMDP Program P7M (Dixon and Brown, 1983) to examine differences between Black and White women clients on four sets of variables: (1) demographic characteristics, (2) attitudes and beliefs, (3) personality traits and alcoholism history and (4) social-situational factors. Separate stepwise discriminant function analyses were performed for each of the four sets of variables. In the analyses for the last three sets of variables, the effects of income and age are controlled for by forcing them to enter the analysis as the first two variables. All discriminant function analyses used an *F*-to-enter value of 4.00. Because of missing data, the number of subsets (those for whom all variables within a set were available) differed slightly across analyses. The discriminant function classification coefficients for the four sets of variables are shown in Table 3. The analyses presented group all clients in detoxification inpatient and outpatient treatment. A chi-square comparison between Black and White women revealed no significant differences between ethnic groups in treatment type. It would have been desirable to conduct all analyses separately by type of treatment, but this was not feasible due to the sample size.

*Demographic characteristics.* Independent variables included in the first discriminant function analysis were age, education, occupational status, monthly household income, employment status, present religious affiliation and marital status. The last three variables were specified as a series of dummy variables in the analysis. One dummy variable (employed versus unemployed) was used to measure employment status, two dummy variables (Catholic versus Protestant versus other) were used to measure religious affiliation and four dummy variables (married versus other, separated versus other, widowed versus other and living with partner versus other) were used to measure marital status.

Income (*F*-to-enter = 12.60, 1/85 df,  $p < .001$ ) and divorce (*F*-to-enter = 15.41, 1/84 df,  $p < .001$ ) entered the discriminant function and together were able to significantly ( $F = 15.07$ , 2/84 df,  $p < .001$ ) discriminate between Black and White women in treatment. Based on this information, 26.4% of the variance could be accounted for and 77% of the subjects were correctly classified. The descriptive statistics and classification function coefficients indicate that compared with White women, Black women had significantly lower income and were less often divorced, tending more often to be separated.

TABLE 3. Discriminant function classification for demographic, attitudinal, personality and social characteristics

	Classification function coefficients	
	Black (N = 25)	White (67)
<b>Demographic characteristics</b>		
Income	0.268	0.619
Divorce	0.600	2.986
Percent correctly classified <sup>a</sup>	71.0	92.0
	U-statistic = 0.736	
<b>Attitudes and beliefs</b>		
Age	0.253	0.313
Income	0.540	0.838
Powerful others locus	0.424	0.327
Sum of negative consequences of drinking	1.529	1.831
Percent correctly classified <sup>a</sup>	68.0	65.1
	U-statistic = 0.752	
<b>Personality characteristics</b>		
Age	0.475	0.503
Income	0.193	0.439
Self-esteem	4.130	3.307
Social isolation	2.553	2.307
Percent correctly classified <sup>a</sup>	77.3	69.0
	U-statistic = 0.708	
<b>Social and situational characteristics</b>		
Age	0.413	0.457
Income	-0.267	0.020
Insurance	0.740	-0.551
Contact with important others	0.655	0.549
Suggestion/opposition to treatment	-0.434	-1.177
Percent correctly classified <sup>a</sup>	76.2	75.5
	U-statistic = 0.637	

<sup>a</sup> Using jackknifed classification, that is with each case eliminated in turn from the group means and cross products. Mahalanobis D and the posterior probability are computed for the distance from the case to the groups formed by the remaining cases (Lauchenbruch and Mickey, 1968).

**Health attitudes and beliefs.** Two control variables (age and income) and 11 independent variables were included in the analysis. The independent variables included scores from three subscales of the Health Perceptions and Beliefs Scale (Ware et al., 1979); three subscales from the Multidimensional Health Locus of Control Scale (Wallston and Wallston, 1978); the total numbers of perceived negative consequences of drinking, of not entering treatment and of entering treatment; the degree of satisfaction with the treatment and perception of own risk for alcoholism.

After controlling for income and age, two health attitudes and beliefs variables entered the equation ( $F = 6.84$ , 4/83 df,  $p < .001$ ) and accounted for 25% of the variance leading to the correct classification of 65.9% of the cases. The two health attitudes

and beliefs variables that best discriminated between the groups were the Powerful Others subscale of the Multidimensional Health Locus of Control Scale ( $F$ -to-enter = 5.44, 1/84 df,  $p < .05$ ) and the total number of perceived consequences due to drinking ( $F$ -to-enter = 4.46, 1/83 df,  $p < .05$ ). The classification function coefficients indicate that Black women were more likely to attribute importance to the role of health care providers in the maintenance of their health and to perceive fewer negative consequences due to drinking.

**Personal traits and history.** The independent variables in this discriminant function analysis were self-esteem, social isolation, alcohol-related behavioral impairment, number of years drinking, number of years of problem drinking, average daily amount of absolute alcohol consumed, number of days of previous hospitalization for drinking problems, number of visits for outpatient alcoholism treatment, number of months of counseling for alcohol-related problems and number of months of A.A. participation. Finally, several dichotomous dummy variables were included: yes or no responses were determined for presence of family drinking problems or alcoholism, frequent and heavy illicit drug use, and frequent or heavy licit drug use.

After controlling for income and age, two variables entered the discriminant function equation ( $F = 7.71$ , 4/75 df,  $p < .001$ ) accounting for 29% of the variance and leading to the correct classification of 71% of the cases. The two personal characteristics that best discriminated between the groups were the measures of social isolation ( $F$ -to-enter = 4.55, 1/76 df,  $p < .05$ ) and self-esteem ( $F$ -to-enter = 8.78, 1/75 df,  $p < .001$ ). The results indicated that Black women had higher adjusted scores than did White women on the measures of both self-esteem and social isolation.

**Social support and situational characteristics.** The independent variables in this analysis included measures of the social network such as the number of close friends, a summary score of frequency of contact with important others, a measure of conflict with important others prior to treatment entry and a summary measure of opposition to treatment. Other variables were the number of children under 18, number of services that the client perceives as available at her treatment facility, time it takes the client to reach the treatment facility from home, the availability of insurance for alcoholism treatment and congruence between the client's views on the role of women in society and those of family, friends and community members.

After controlling for income and age, three social-situational variables entered the discriminant function

( $F = 7.76$ , 5/68 df,  $p < .001$ ) explaining 36.3% of the variance and correctly classifying 75.7% of the cases. The three social-situational variables that best differentiated Black and White women in treatment were access to alcoholism insurance ( $F$ -to-enter = 6.57, 1/70 df,  $p < .05$ ), frequency of contact with important others ( $F$ -to-enter = 7.22, 1/69 df,  $p < .01$ ) and the degree of opposition from others to entering treatment ( $F$ -to-enter = 4.44, 1/68 df,  $p < .05$ ). The classification function coefficients indicate that compared with White women, Black women were less likely to have insurance that covered alcoholism treatment, had more frequent contact with family and friends and were more likely to have obtained support for entering alcoholism treatment.

### Discussion

This study provides a comparison of the psychological and social characteristics of Black and White women in the early stages of alcoholism treatment. There are several methodological limitations that deserve mention. First, women in the sample had been in treatment an average of 2 1/2 weeks and were at times asked to recall events prior to or at the time that they entered treatment. Participants were also asked to report beliefs, attitudes and personal traits, with the assumption that these responses were not affected by the treatment itself. Second, the sample of Black women was small, thus generalization from these results should be limited until they are corroborated by studies with larger and more diverse samples. The sample size also prohibited the analyses of differences across treatment types. Even though there was not a significant difference between ethnic groups by treatment type, it is important that future studies investigate the characteristics and needs of women entering different types of treatment. Third, the current study did not follow clients to assess how the variables studied related to actual treatment outcome. Research is needed to investigate how background characteristics, health-related attitudes and beliefs, personality characteristics, alcoholism history and social-situational factors are associated with treatment outcome across ethnic groups. Nevertheless, the results of this study suggest that Black and White women in alcoholism treatment differ in several characteristics that may have important implications for treatment.

Compared with White women in treatment, Black women had more limited financial resources. Although there were no differences in the educational level of the two groups, Black women were less often employed and had a significantly lower annual income. The significant difference in income between

the two groups is particularly striking when we consider that White women in alcoholism treatment are themselves at an economic disadvantage in comparison to White men (Beckman and Amaro, 1986). The economic differentials between Black and White women reported here are consistent with trends in nonalcoholic populations.

Since previous research (Bateman and Petersen, 1972; Schuckit and Morrissy, 1976; Vannicelli, 1984) indicates that socioeconomic factors such as full-time employment are associated with better treatment outcome, Black women may be at higher risk for negative treatment outcome. A related consequence of the reduced economic resources available to Black women clients is that, with the exception of A.A., they lack alternatives to public alcoholism treatment programs. This is clearly evidenced in the underrepresentation of Black women in private alcoholism treatment agencies in Alameda and Kern Counties. For this reason it is crucial that public alcoholism agencies in particular be responsive to the needs of Black women and create programs to motivate and facilitate their entry and continuation in treatment.

Black women in treatment were also significantly younger than their White counterparts. This finding corroborates a similar observation in other research (Gorwitz et al., 1970; Rimmer et al., 1971; Zax et al., 1967) and may have implications for treatment-relevant issues.

Black clients were more likely than White clients to believe that health professionals are crucial to their own health maintenance. This belief in the role of the professional may represent a positive force in the treatment process during which it is important for the client to trust and believe in the efficacy of the treatment regimen prescribed by the health care provider. On the other hand, overreliance on the power of the health care provider in treatment may be counter-productive if it is obstructive to the client taking responsibility for her recovery.

Black women were more likely than White women to report feelings of social isolation. Although this may seem to be contradictory to the finding that Black women had more contact with individuals in their social network and more close friends than White women, the measure of social isolation may have tapped a general sense of alienation based on Black women's marginal social status. Some of the items on the Social Isolation Scale (Dean, 1961) focus on the individual's perception of the general society rather than on her immediate social environment (e.g., "The world we live in is basically a friendly place"). From this perspective, the findings of greater social isolation and more frequent social contact among Black women are not necessarily contradic-

tory. Rather, the score on the social isolation scale may reflect the view that Black women have of the larger society in response to both racism and sexism.

Feelings of social isolation vis-a-vis the larger society are relevant to treatment especially if the client perceives the treatment program to be part of the dominant culture rather than part of her own ethnic community. These findings lend support to the argument that for alcoholism treatment agencies to be successful in Black communities, they must provide services in a manner that is culturally consistent with the values of that community (Benjamin, 1976; Blum and Blum, 1967; Bourne et al., 1966; Davis, 1975; Feagins, 1974; Johnson and Garzon, 1978; Lowe and Hodges, 1972; Zimberg, 1974; Zimberg et al., 1971).

Black women demonstrated a significantly higher sense of self-worth than White women, a finding that is consistent with other reports (Epstein, 1972; Fichter, 1967; Gurin and Epps, 1975; Harrison, 1977) and which may play a positive role in treatment motivation and continuation.

Although individuals in Black women's social network provided more encouragement to seek treatment, it would be useful to know more about what role family and friends play once the woman is in treatment. It cannot be assumed that more contact with individuals in the social network necessarily brings more support. In fact some poor single Black mothers often experience more demands and stress than support from individuals in their network (Belle, 1982).

The most outstanding situational variable that differentiated between Black and White women was access to insurance coverage for alcoholism treatment. The lack of third-party coverage for alcoholism treatment together with the significantly lower financial resources of Black women severely restrict their treatment options and virtually exclude them from more personalized treatment programs and those that provide more supportive services. Black women have fewer alternatives to public programs than do White women. Such programs are frequently filled to capacity with long waiting lists and, perhaps as a result, have little incentive to attract Black women to treatment or motivate them to remain in it.

Alcohol researchers (e.g., Schuckit and Morrisey, 1976) have noted that sociocultural factors that contribute to the development and experience of alcoholism treatment programs among Black women may differ substantially from those for White women. Yet virtually no research has been conducted to investigate whether in fact there are ethnic differences in the development and experience of alcohol-related problems among women and the nature of possible sociocultural factors that shape this experience and

their impact on treatment.

To explore the implications of the ethnic differences found in this study, our discussion has referred to studies that have investigated the prognostic value of factors related to treatment outcome. However, it is not possible to ascertain the extent to which these factors or characteristics associated with treatment success or failure are predictive of treatment outcome among Black women. Most of the studies of treatment outcome and prognostic factors have been based on male samples and a smaller number on White female samples (Vannicelli, 1984). Certainly no studies have directly investigated ethnic differences among women in the predictors of treatment outcome. The results of the present study indicate that differences exist between Black and White women in alcoholism treatment. However, to truly understand the nature of these differences we need to investigate ethnic group variations in the course of alcoholism, characteristics of the encounter with treatment programs and prognosis for female alcoholics.

### Acknowledgments

Katie Kocel deserves a special thanks for her valuable contributions to this research. We also thank Denise Herd, Alice Seeman, Pat Tobey and Cathy Heron for their assistance in data collection and Linda Moody Chilingar for her suggestions about data analysis. We also acknowledge the helpful editorial comments provided by Kathy Grady, Maxine Rawlings and Althea Smith on an earlier draft of this manuscript.

### References

- BAILEY, M. B., HABERMAN, P. W. AND ALKSNE, H. The epidemiology of alcoholism in an urban residential area. *Q. J. Stud. Alcohol* 26: 19-40, 1965.
- BATEMAN, N. I. AND PETERSEN, D. M. Factors related to outcome of treatment for hospitalized white male and female alcoholics. *J. Drug Issues* 2: 66-74, 1972.
- BECKMAN, L. J. Psychological characteristics of alcoholic women. *Drug Abuse Alcm Rev.* 1 (No. 5/6): 1-12, 1978.
- BECKMAN, L. J. AND AMARO, H. Personal and social difficulties faced by women and men entering alcoholism treatment. *J. Stud. Alcohol* 47: 135-145, 1986.
- BELLE, D. (Ed.) *Lives in Stress: Women and Depression*, Beverly Hills, Calif.: Sage Pubns., Inc., 1982.
- BENJAMIN, R. Rural black folk and alcohol. In: HARPER, F. D. (Ed.) *Alcohol Abuse and Black America*, Alexandria, Va.: Douglass Pubns., 1976, pp. 49-60.
- BLUM, E. M. AND BLUM, R. H. *Alcoholism: Modern Psychological Approaches to Treatment*, San Francisco: Jossey-Bass, Inc., 1967.
- BOURNE, P. G., ALFORD, J. A. AND BOWCOCK, J. Z. Treatment of Skid-Row alcoholics with disulfiram. *Q. J. Stud. Alcohol* 27: 42-48, 1966.
- BUREAU OF THE CENSUS. 1980 Census of the Population and Housing: Advance Reports, California, PHC80-V-6, Washington, D.C.: U.S. Department of Commerce, 1981.



- CAETANO, R. Ethnicity and drinking in northern California: A comparison among Whites, Blacks, and Hispanics. *Alcohol and Alcoholism* 19: 31-44, 1984.
- CAHALAN, D. Problem Drinkers, San Francisco: Jossey-Bass, Inc., 1970.
- CAHALAN, D. AND CISIN, I. H. American drinking practices: Summary of findings from a national probability sample. *J. Extent of drinking by population subgroups. Q. J. Stud. Alcohol* 29: 130-151, 1968.
- CAHALAN, D., ROIZEN, R. AND ROOM, R. Alcohol problems and their prevention: Public attitudes in California. In: ROOM, R. AND SHEFFIELD, S. (Eds.) *The Prevention of Alcohol Problems: Report of a Conference*, Sacramento, Calif.: Office of Alcoholism, Health and Welfare Agency, 1974, pp. 354-403.
- CLARK, W. B. AND MIDANIK, L. Alcohol use and alcohol problems among U.S. adults: Results of the 1979 national survey. In: NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM. *Alcohol Consumption and Related Problems. Alcohol and Health Monograph No. 1*, Washington: Government Printing Office, 1982, pp. 3-52.
- CORRIGAN, E. M. AND ANDERSON, S. C. Black alcoholic women in treatment. *Focus Women* 3: 49-58, 1982.
- DAVIS, F. T., JR. Effective Delivery of Services to Black Alcoholics, Washington, D.C.: Roy Littlejohn Associates, Inc., 1975.
- DAWKINS, M. P. Alcohol information on Black Americans: Current status and future needs. *J. Alcohol and Drug Educ.* 25 (No. 3): 28-40, 1980.
- DAWKINS, M. P. AND HARPER, F. D. Alcoholism among women: A comparison of Black and White problem drinkers. *Int. J. Addict.* 18: 333-349, 1983.
- DEAN, D. G. Alienation: Its meaning and measurement. *Amer. Sociol. Rev.* 26: 753-758, 1961.
- DIXON, W. J. AND BROWN, M. B. (Eds.) *BMDP Statistical Software 1983 Manual*, Berkeley, Calif.: Univ. of California Press, 1983.
- DUNCAN, O. D. A socioeconomic index for all occupations. In: REISS, A. J., JR. (Ed.) *Occupations and Social Status*, New York: Free Press of Glencoe, Inc., 1961, pp. 109-138.
- EPSTEIN, C. F. Positive effects of the multiple negative: Explaining the success of black professional women. *Amer. J. Sociol.* 78: 912-935, 1972.
- FEAGINS, J. L. A Descriptive Study of Variance in Source of Referral Pathways to Treatment for Black and Non-Black Alcoholics, Ph.D. Dissertation, University of Pittsburgh, 1974.
- FICHTER, J. H. Career expectations of Negro women graduates. *Mon. Labor Rev.* 90 (No. 11): 36-42, 1967.
- GAINES, J. J. Alcohol and the Black woman. In HARPER, F. D. (Ed.) *Alcohol Abuse and Black America*, Alexandria, Va.: Douglas Pubs., 1976, pp. 153-162.
- GORWITZ, K., BAHN, A., WARTHEN, F. J. AND COOPER, M. Some epidemiological data on alcoholism in Maryland: Based on admission to psychiatric facilities. *Q. J. Stud. Alcohol* 31: 423-443, 1970.
- GURIN, P. AND EPPS, E. Black Consciousness, Identity and Achievement: A Study of Students in Historical Black Colleges, New York: John Wiley & Sons, Inc., 1975.
- HABERMAN, P. W. AND SHEINBERG, J. Implicative drinking reported in a household survey: A corroborative note on subgroup differences. *Q. J. Stud. Alcohol* 28: 538-543, 1967.
- HARRISON, A. O. Black women. In: O'LEARY, V. E. (Ed.) *Toward Understanding Women*, Monterey, Calif.: Brooks/Cole Publishing Co., 1977.
- HARPER, F. D. Alcohol use among North American Blacks. In: ISRAEL, Y., GLASER, F. B., KALANT, H., POPHAM, R. E., SCHMIDT, W. AND SMART, R. G. (Eds.) *Research Advances in Alcohol and Drug Problems*, Vol. 4, New York: Plenum Press, 1978, pp. 349-366.
- JOHNSON, S. AND GARZON, S. R. Alcoholism and women. *Amer. J. Drug Alcohol Abuse* 5: 107-122, 1978.
- LAUCHENBRUCH, P. A. AND MICKY, A. E. Estimation of error rates in discriminant analysis. *Technomet.* 10: 1-11, 1968.
- LELAND, J. Alcohol use and abuse in ethnic minority women. In: WILSNACK, S. C. AND BECKMAN, L. J. (Eds.) *Alcohol Problems in Women: Antecedents, Consequences, and Intervention*, New York: Guilford Press, 1984, pp. 66-96.
- LOPEZ-LEE, D. Alcoholism among third world women: Research and treatment. In: BURTLE, V. (Ed.) *Women Who Drink: Alcoholic Experience and Psychotherapy*, Springfield, Ill.: Charles C Thomas, Pub., 1979, pp. 98-115.
- LOWE, G. D. AND HODGES, H. E. Race and the treatment of alcoholism in a southern state. *Social Probl.* 20 (2): 240-252, 1972.
- POLICH, J. M., ARMOR, D. J. AND BRAIKER, H. B. The Course of Alcoholism: Four Years after Treatment. Prepared for the National Institute on Alcohol Abuse and Alcoholism, Santa Monica, Calif.: Rand Corp., 1980.
- RIMMER, J., PITTS, F. N., JR., REICH, T. AND WINOKUR, G. Alcoholism. II. Sex, socioeconomic status, and race in two hospitalized samples. *Q. J. Stud. Alcohol* 32: 942-952, 1971.
- ROSENBERG, M. *Society and the Adolescent Self-Image*, Princeton, N.J.: Princeton Univ. Press, 1965.
- SCHUCKIT, M. A. AND MORRISSEY, E. R. Alcoholism in women: Some clinical and social perspectives with an emphasis on possible subtypes. In: GREENBLATT, M. AND SCHUCKIT, M. A. (Eds.) *Alcoholism Problems in Women and Children*, New York: Grune & Stratton, 1976, pp. 5-35.
- STERNE, M. W. AND PITTMAN, D. J. Drinking Patterns in the Ghetto, Vols. I and II, St. Louis, Missouri: Social Science Institute, Washington University, 1972.
- STRAYER, R. A study of Negro alcoholics. *Q. J. Stud. Alcohol* 22: 111-123, 1961.
- VANNICELLI, M. Treatment outcome of alcoholic women: The state of the art in relation to sex bias and expectancy effects. In: WILSNACK, S. C. AND BECKMAN, L. J. (Eds.) *Alcohol Problems in Women: Antecedents, Consequences, and Intervention*, New York: Guilford Press, 1984, pp. 369-412.
- WALLSTON, K. A., WALLSTON, B. S. AND DeVELLIS, R. Development of the Multidimensional Health Locus of Control (MHLC) Scales. *Hlth Educ. Mon.* 6 (2): 160-170, 1978.
- WARE, J. E., JOHNSTON, S. A., DAVIES-AVERY, A. AND BROOK, R. H. Conceptualization and Measurement of Health for Adults in the Health Insurance Study, Vol. III, Mental Health, Report #4-1987/3-HEW, Santa Monica, Calif.: Rand Corp., 1979.
- ZAX, M., GARDNER, E. A. AND HART, W. A survey of the prevalence of alcoholism in Monroe County, N.Y., 1961. *Q. J. Stud. Alcohol* 28: 316-327, 1967.
- ZIMBERG, S. Evaluation of alcoholism treatment in Harlem. *Q. J. Stud. Alcohol* 35: 550-557, 1974.
- ZIMBERG, S., LIPSOMB, H. AND DAVIS, E. B. Sociopsychiatric treatment of alcoholism in an urban ghetto. *Amer. J. Psychiat.* 127: 1670-1674, 1971.