Racially Related Health Disparities and Alcoholism Treatment Outcomes

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Published studies comparing the outcomes of black and white patients with alcohol dependence have produced mixed results. We hypothesized that among alcoholic outpatients blacks would have worse outcomes than whites. A sample of 38 blacks and 136 whites were assessed prospectively at baseline and 6–12 months using a naturalistic study design. At baseline, blacks had less education, employment, and income than whites, and they were less likely to be married. They also were more likely to have family histories of substance abuse, previous episodes of treatment, cocaine use disorders, antisocial personality disorder, and poor physical health. Between baseline and follow-up, blacks received less treatment for alcohol dependence than whites. Such differences would seem to favor worse outcomes which were not found. Blacks, however, reported more social support for sobriety than whites. They also had better rates of study retention than whites, suggestive of either higher levels of motivation or stronger alliances with the treatment center. Future studies of racial differences should include measures of social support for sobriety, motivation for treatment, and treatment alliance.

Key Words: race, ethnicity, alcohol dependence, treatment, outcome.

METHODS

The sample was derived from 316 outpatients with a DSM-IV chart diagnosis of alcohol dependence who were consecutively admitted to a single Midwestern addiction treatment center. Of the 316 patients, 250 (80.5%) prospectively completed baseline measures, and 174 (70%) completed a follow-up assessment at 6 to 12 months. The study sample of 174 patients included 38 (21.8%) blacks and 136 (78.2%) whites. It is interesting to note that blacks were more likely than whites to complete the follow-up assessment (90.5 vs. 65.4%; $\chi^2 = 10.40; df = 1; p = 0.001$). The mean (SD) follow-up intervals from baseline to outcome assessments were 216 (45) days for blacks and 221 (54) days for whites ($t = -0.514; df = 169; p = 0.61$).

Patients were nonrandomly assigned to either one of two intensive outpatient programs or to a regular outpatient program on the basis of treatment needs, patient preferences, and insurance approvals. All programs were abstinence based and combined individual, group, and family therapy—tailored to the needs of the individual—as well as elements of 12-step facilitation, relapse prevention, motivational interviewing, and interactive group therapy. For the purposes of this study, treatment was quantified as (1) the total number of days on which a visit occurred, (2) the total number of treatment hours across all visits, and (3) the duration of treatment, calculated as the number of calendar days between the first and last visit.

The following instruments were self-administered at both baseline and follow-up to assess outcomes. The Short Form-36 measured physical and mental health functioning with its physical and mental component summary scores, respectively (Ware et al., 1994). The Brief Symptom Inventory provided another measure of psychiatric severity with its General Severity Index (Derogatis and Melisaratos, 1983). The University of Arkansas Substance Abuse Outcomes Module (Smith et al., 1996) assessed demographics, family history, and alcohol consumption (quantity and frequency in the past 28 days). It also included a 17-item severity scale for substance dependence (scores range from 0 to 17, with higher scores indicating higher severity) and a scale measuring social support for sobriety (range, 3 to 24, with higher scores indicating more social support). In addition to the baseline and follow-up assessments, patients self-administered the computerized Quick Diagnostic Interview Schedule at 1...
month after baseline to assess for lifetime psychiatric diagnoses (Bucholz et al., 1996).

RESULTS

Baseline Comparisons

No significant differences between the two racial groups were found for age and gender (Table 1). Blacks were less likely to be married and employed, had lower incomes, and completed fewer years of education than whites. They were also less likely to have a driver’s license and car available for their use and more likely to have a family history of substance abuse and prior treatment episodes. Despite their marital status, however, blacks endorsed higher levels of social support than whites. No differences between blacks and whites were found for severity of substance dependence, frequency of drinking in the past 28 days, or average drinks per drinking day in the past 28 days. Blacks were more likely than whites to have a lifetime cocaine use disorder. No differences in psychiatric scores were found at baseline, although blacks were more likely than whites to have had a lifetime diagnosis of generalized anxiety disorder and antisocial personality disorder. Blacks also had poorer physical health scores.

Treatment Received

Whites had significantly more treatment visit days and total treatment hours, corresponding to more treatment charges, than blacks (Table 2). More black than white patients were discharged by 1 year and were discharged irregularly (such as against staff advice or dropping out), although the differences were not statistically significant.

Follow-Up Outcomes

Change scores from baseline to follow-up were calculated for each outcome variable (Table 3). No significant differences between groups were found, although the magnitude of change favored white patients for six of seven variables.

DISCUSSION

There were multiple disparities between black and white alcoholic outpatients at baseline in these preliminary analyses. Blacks had less education, employment, and income than whites, and they were less likely to be married. They
were also more likely to have had (1) family histories of substance abuse, (2) previous episodes of treatment, (3) cocaine use disorders, (4) antisocial personality disorder, and (5) poor physical health. Between baseline and follow-up, blacks received less treatment for alcohol dependence than whites. Such differences would seem to favor worse outcomes, yet statistically worse outcomes were not found. The similarity in outcomes may have resulted from the small number of black patients in the sample, the use of a single treatment center, or the method of self-report to measure outcomes. Certainly, future studies should survey larger samples of patients across multiple treatment sites with corroborative measures of outcome.

However, two favorable characteristics of the black subsample may have attenuated outcome differences. First, blacks reported more social support for sobriety than whites. Indeed, social support correlated significantly with improvements in both drinking frequency and quantity in blacks ($r = 0.35, p = 0.035$; and $r = 0.34, p = 0.039$, respectively) but not whites. Second, blacks had better rates of study retention than whites, suggestive of either higher levels of motivation or stronger alliances with the treatment center. Future studies of racial differences should include measures of social support for sobriety, motivation for treatment, adherence to treatment-associated protocols, and treatment alliance.

### REFERENCES


