## Alcohol Dependence Among Alaskan Natives and Their Health Care Utilization

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Native AMERICANS, including Alaskan Natives, have experienced significant problems with alcohol since its introduction into their cultures by the early European settlers. Morbidity and mortality rates attributable to alcohol abuse among the Native American population are at epidemic levels within certain segments of this population. As in the majority population, alcohol abuse substantially contributes to rates of death from all types of accidents, liver disease (including cirrhosis), homicide, suicide, other types of psychiatric illness, and fetal alcohol effects and fetal alcohol syndrome (Young, 1991). With a Native American/Alaskan population of approximately 2 million people representing more than 300 distinct tribal and ethnic groupings, the magnitude of the problem is quite large.

The term *Alaska Natives* often collectively refers to three indigenous and linguistically distinct groups: Eskimos, Indians, and Aleuts (Phillips and Inui, 1986). Eskimos represent approximately 8.5% of the Alaskan population and include the Yupik- and Inupiat-speaking groups. Indians represent approximately 5.4% of the Alaskan population and include the Tlingit, Haida and Tsimpshian, and Athabascan tribes. Aleuts comprise approximately 2% of the population and are found in the Aleutian Island chain, as well as in south central Alaska. Although a number of investigations of alcohol problems among Alaska Natives have been undertaken, few have used standardized assessment measures or sampling procedures that permit direct comparisons with studies conducted on the majority population.

We have previously provided a comprehensive clinical description of 650 Alaska Natives in residential treatment in Anchorage for alcohol dependence by using a standardized assessment protocol (Hesselbrock et al., 2000; Parks et al., 2001). These Native Alaskan inpatients were typically affected with a very severe form of alcohol dependence.

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abuse and withdrawal was the most frequently reported psychiatric condition; antisocial personality disorder (ASPD) was also quite prevalent among both males and females. Alaska Native alcoholics with comorbid ASPD had a particularly early onset of first intoxication (average, 11.5 years) and onset of regular drinking (average, 14.5 years). Both males and females with ASPD had a rapid development of alcohol problems and entered treatment at an early age (approximately 23 years). Multivariate cluster analysis yielded a two-cluster solution similar to those of Babor et al. (1992): type A (later onset and milder form of alcohol dependence) and type B (adolescent onset, more childhood problem behaviors, adult antisocial traits, and multiple alcoholism treatments). Type B individuals were more likely to be characterized by parental alcohol dependence and antisociality. Female patients reported a poorer overall perceived health status than men, and 49% of the women experienced some form of personal violence; in general, their victimization was related to drinking by themselves and the perpetrators and to their treatment outcomes.

Lifetime comorbid drug problems were also quite preva-

lent. Major affective disorder due primarily to alcohol

However, even with this severe form of alcoholism, general medical health care utilization among hospitalized Alaska Natives with alcohol dependence is quite similar to the health care utilization patterns found among index inpatient alcohol-dependent patients participating in the Collaborative Study on the Genetics of Alcoholism (COGA) study (Hesselbrock et al., 2001; Reich et al., 1998) (Table 1). In general, the number of lifetime overnight stays for medical reasons, outpatient surgeries, emergency room visits, and clinic or doctor visits in the 6 months before the interview did not vary across the different ethnicities, although the rates did vary by gender.

It is important to note that, even given the differences in geography and the density of health care availability, Alaska Natives used general health care and hospital care for alcohol or substance abuse problems as frequently as alcohol-dependent patients from the COGA study subjects living in the lower 48 states.

When the alcohol-dependent Alaska Native sample was compared with the COGA sample in relation to mental health utilization for all types for problems (see Table 2), including alcohol or substance abuse, some differences were noted. Male Alaska Natives with alcohol dependence were less likely to use the services of all types of mental

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| Table 1. Medical Care Utilization Among Alaska Natives With Alcohol D | Dependence |
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|   |                     | Male      | es       |                  | Females             |           |          |                  |  |
|---|---------------------|-----------|----------|------------------|---------------------|-----------|----------|------------------|--|
| Variable  | African<br>American | Caucasian | Hispanic | Alaska<br>Native | African<br>American | Caucasian | Hispanic | Alaska<br>Native |  |
| No overnight hospital stays, excluding psychological or substance abuse       | 2.7                 | 2.8       | 2.0      | 2.2              | 5.8                 | 4.7       | 5.1      | 5.4              |  |
| Outpatient surgeries  | 0.6                 | 1.0       | 0.6      | 0.5              | 1.0                 | 1.5       | 1.3      | 0.9              |  |
| Emergency room visits (accident or injury)                                    | 4.7                 | 5.5       | 3.7      | 4.5              | 3.9                 | 4.1       | 5.1      | 3.7              |  |
| Clinic or doctor visits in the last 6 months                                  | 3.0                 | 2.0       | 2.4      | 2.1              | 4.1                 | 3.3       | 4.6      | 4.2              |  |
| Times hospitalized for psychological disorders or alcohol or substances abuse | 3.7                 | 2.9       | 2.6      | 3.1              | 3.2                 | 2.7       | 3.7      | 3.7              |  |

Table 2. Mental Health Service Utilization by Ethnicity: Alcohol-Dependent Patients

|                 |                     | Males     | (%)      |                  | Females (%)         |           |          |                  |  |  |
|-----------------|---------------------|-----------|----------|------------------|---------------------|-----------|----------|------------------|--|--|
| Ever spoken to: | African<br>American | Caucasian | Hispanic | Alaska<br>Native | African<br>American | Caucasian | Hispanic | Alaska<br>Native |  |  |
| Psychiatrist    | 74                  | 63        | 62       | 40               | 62                  | 61        | 61       | 59               |  |  |
| Psychologist    | 41                  | 53        | 48       | 23               | 36                  | 54        | 44       | 32               |  |  |
| Social worker   | 47                  | 36        | 45       | 21               | 38                  | 41        | 36       | 42               |  |  |
| Counselor       | 73                  | 66        | 74       | 82               | 72                  | 67        | 72       | 86               |  |  |
| Medical doctor  | 43                  | 39        | 48       | 26               | 42                  | 50        | 50       | 38               |  |  |
| Clergy          | 43                  | 29        | 33       | 25               | 22                  | 30        | 19       | 27               |  |  |

Table 3. Types of Alcohol Treatment Received, by Ethnicity

|                                |                     | Males     | (%)      |                  | Females (%)         |           |          |                  |  |
|--------------------------------|---------------------|-----------|----------|------------------|---------------------|-----------|----------|------------------|--|
| Variable                       | African<br>American | Caucasian | Hispanic | Alaska<br>Native | African<br>American | Caucasian | Hispanic | Alaska<br>Native |  |
| Alcoholics Anonymous/self-help | 86                  | 90        | 84       | 77               | 86                  | 92        | 92       | 73               |  |
| Outpatient alcohol program     | 58                  | 50        | 54       | 41               | 62                  | 47        | 48       | 46               |  |
| Other outpatient program       | 8                   | 7         | 8        | 10               | 13                  | 9         | 4        | 15               |  |
| Inpatient medical treatment    | 13                  | 8         | 4        | 13               | 10                  | 9         | 13       | 15               |  |

health professionals (except counselors) than the COGA alcohol-dependent males of other ethnicities. Alaska Native females with alcohol dependence, though, had a history of mental health provider utilization similar to that of Caucasian alcohol-dependent females from the COGA sample. Both male and female alcohol-dependent Alaska Natives were less likely to use the services of nonphysician clinicians (psychologists, social workers, or clergy) compared with alcohol-dependent subjects participating in the COGA study. This is likely due to the reduced availability of these professionals across the state of Alaska compared with the six metropolitan areas where the COGA sites are located.

Similarly, the variety of different types of services ever used for alcohol problems was compared across ethnicities by gender (see Table 3). In general, Alaska Natives were less likely to have used Alcoholics Anonymous, other types of self-help programs, or outpatient alcohol treatment than the alcohol-dependent COGA subjects. Again, this is likely due to the reduced availability of these types of services across the state of Alaska compared with the metropolitan areas of the US surveyed by COGA. Further, self-help groups, such as Alcoholics Anonymous, typically are not consistent with traditional Alaska Native healing ways and practices and may have less of an effect among Alaska Natives than among non-Natives.

Although there are a variety of cultural, psychological,

and biological factors that distinguish Alaska Natives from the majority population with respect to alcohol use and the development of alcohol dependence, it is also apparent that there are many similarities. This study can provide the groundwork for a variety of subsequent studies. For example, the identification of possible cultural differences between alcohol-dependent Alaska Natives and the majority population may suggest avenues for changing treatment technologies to improve Alaska Native patient utilization and outcomes, i.e., designing treatments that are culturally sensitive, matching clients to relevant psychosocial treatments, and identifying promising pharmacotherapies that target the clinical expression of alcohol dependence among Alaska Natives.

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