

Alcohol and Other Drug Use Among Northern Plains Indians

Melissa Wheeler
University Of North Dakota

Jacqueline S. Gray
University Of North Dakota

Topics: 29.2 American Indian/Alaska Natives; 76 Substance Abuse

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Background:

This project showcases the prevalence of alcohol and other drug (AOD) use by American Indians in the northern plains region. American Indians/ Alaska Natives (AI/AN) have some of the highest rates of marijuana and alcohol use and abuse, yet neurobiological measures associated with dependence on these substances in this population remain unknown (Ehlers, Phillips, Gizer, Gilder, & Wilhelmsen, 2010). Gaining a better understanding of the behavioral health needs of particular racial/ethnic groups can help inform public health policy, build prevention and treatment programs that target the different needs of these populations, and expand access to services for individuals who need them (The NSDUH Report, 2010). The high prevalence rate of alcohol and other drugs (AOD) use by AI/ANs must be understood in light of their unique history. Moderating factors such as health status, education level, quality of life, socioeconomic status, cultural identification, and historical trauma may contribute to use of alcohol and other drug (Szlemko, Wood, & Thurman, 2006). These findings add to the sparse collection of available literature on AOD use among AI/AN populations

Methods:

Six hundred male and female adult, Northern Plains Indians were recruited from IHS and tribal behavioral health clinics on seven North and South Dakota Reservations to complete a series of mood disorder assessments. The participants were recruited from three groups: 1) diagnosed depressed (by clinician), 2) diagnosed anxious (by clinician), and 3) no mental health diagnosis (control). Assessments were completed by paper and pencil, placed in an envelope and returned to the site coordinator. Participants received \$10 in gift/gas cards in compensation for their time and the tribes received \$5/participant for compensation. Site coordinators added the clinical diagnoses to the envelopes and returned them in separate envelopes from the consent forms to the researchers. Data was then entered using SPSS for all returned measures. Assessments included depression, anxiety, hopelessness, rumination, culture, quality of life, substance abuse, substance use, demographics, and the clinician's diagnosis code.

Results:

A total of 600 participants from eight approved sites completed assessments: 233 males and 360 females between the ages of 18 and 80 years with a mean age was 36.2 years with a standard deviation of 12.7 years. Seventy-nine percent of participants had at least a high school education and 54% had household incomes below \$8,000/year, 55.6% were single, and 37.9% are currently unemployed. As expected alcohol (52%) and cigarette (65.3%) usages were the most common type of substances used by NPI and the general population (55.2%; 20.6%) and AIAN as a group (43.9; 23.2%).

Participants with no mental health diagnosis used tobacco less in the past month than those who have mental health diagnosis (56.4% vs. 76%). More of those with a mental health diagnosis smoked frequently (62.1%) than those with no mental health diagnosis (38.9%). Similarly, those with mental health diagnoses used alcohol in the past month more than those with no mental health diagnosis (48 vs.38.5%). This was also true of binge alcohol drinking (45.5% vs. 30.8%) Participants with a mental health diagnosis were twice as likely to use

marijuana in the past month compared to those having no diagnosis (16.2% vs. 8%). Age groupings were examined: 18-25 years old smoked marijuana (13.4%) more than any other age group, 31-35 years old had the highest cocaine usage (14.3%) 36-40 year olds had the highest methamphetamine usage (16.3%). All substance use decreases in participants over the age of 45.

Further Findings:

- 1) Male>Female use in all AOD categories, except methamphetamine where both groups have similar use at about 21%.
- 2) Participants with a diagnosed mental health problem used more AOD (48%) than those with no mental health diagnosis (38.5%).
- 3) Younger adults use more AOD than older adults with dramatic decrease after 45 years of age.
- 4) Marijuana use peaks in the 18-25 age group, cocaine peaks in the 31-35 age group, and methamphetamine peaks in the 36-40 age group.
- 5) Illicit drug use among AI/AN nationally were higher than the general population (18.3% vs. 8.8%).
- 6) Current alcohol use among NPI is lower than general population (16.8 % vs. 56.7%). AI/AN nationally (37.1%), is higher than NPI, and lower than the general population.
- 7) Binge drinking of alcohol among NPI is than lower than general population (11.2% vs. 24.8%). Rates of AI/AN nationally (22.2%), is higher than NPI, and but lower than the general population.
- 8) Tobacco Use among NPI is than lower than general population (21.6 % vs. 29.6%). AI/AN nationally (41.8%), is higher than NPI and the general population.

References:

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This research supported by grant # U26IHS300127 from IHS and NIDA. The University of North Dakota IRB approval # 200704-294 and Aberdeen Area IHS IRB # 07-R-07AA and 10-A-32AA.