Comorbidity of Alcohol Abuse and Dependence with Medical Conditions in 2 American Indian Reservation Communities

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Abstract

BACKGROUND: The objective was to examine the association of self-reported Diagnostic and Statistical Manual–IV edition alcohol abuse and dependence with medical conditions among American Indians (AIs).

METHODS: We analyzed data previously collected in a large epidemiological study of members of 2 culturally distinct AI tribes from the Southwest (SW; n=1,446) and the Northern Plains (NP; n=1,638) living on or near their reservations. Associations of combined self-reported alcohol abuse and alcohol dependence with 19 medical conditions were examined through multinomial logistic regression.

RESULTS: Medical conditions that had significant relationships with alcohol abuse/dependence were sprains and strains [odds ratio (OR) 2.04, p<0.001], hearing and vision problems (OR 2.05, p<0.001), kidney and bladder problems (OR 1.55, p<0.01), head injuries (OR 2.20, p<0.001), pneumonia/ tuberculosis (OR 1.49, p<0.01), dental problems (OR 1.89, p<0.001), and liver problems/ pancreatitis (OR 2.18, p<0.001). The total count of medical conditions was also significantly related to alcohol abuse/dependence, with a higher count being associated with the outcome (OR 1.17, p<0.001).

CONCLUSIONS: In this community-based study of rural AIs, diverse medical conditions were associated with alcohol abuse and dependence. Further research should examine, and confirm, the nature, extent, and tribal variation of the medical consequences of alcohol abuse and dependence in these unique populations.