# Effect of Alcohol Consumption on Cognitive Decline among Mexicans 50 Years and Older

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**Background**. Studies on the association between alcohol use and cognitive impairment have yielded controversial results suggesting a reduced risk of dementia in drinkers vs. nondrinkers. We aimed to examine the effect of alcohol use on cognitive trajectories among Mexican adults aged 50 and over. **Methods**. Data are from 5,898 cognitively normal individuals (2,512 men and 3,386 women) from the Mexican Health and Aging Study (MHAS) with a mean age of 59 years (50-90 years) at baseline (2001) and followed-up after 11 years (2012). The Cross-Cultural Cognitive Examination was the cognitive battery measuring verbal memory, visual memory, attention, and constructional praxis. Impairment was defined if scores in two or more functions were 1.5 standard deviations below the mean based on norms by age and education. Using self-reported data on frequency and quantity of alcohol consumption, as well as scores on the CAGE questionnaire, a 4-question screening tool for the detection of alcoholism, we constructed a comprehensive measure to classify alcohol use into five categories: never, mild, moderate, and heavy drinking. Those who reported they had never drunk in their life were classified as never drinkers, mild drinkers included those drinking less than one day per week, and those who drunk before and scored zero in the CAGE questionnaire, moderate drinkers included those who reported having one or two drinks each day, and as heavy drinkers, we classified those who reported having three or more drinks per day and those who drunk before and scored one or more in the CAGE questionnaire. Multivariate logistic regression models were used to analyze the predictive role of alcohol consumption in developing cognitive impairment. Sociodemographic and health variables known to increase the risk of cognitive decline (age, education, gender, locality, cardiovascular risk factors, smoking, and depressive symptoms) were included as covariates. **Results**. At follow-up, 4,844 participants (82.1%) remained cognitively normal, while 1,054 participants (18%) showed impaired cognition. When the more generally classified drinkers were compared to never-drinkers, they had a reduced risk of cognitive impairment (OR 0.78, 95% CI 0.64-0.95). However, when we analyzed mild, moderate, and heavy drinkers compared to never-drinkers, only mild drinkers had a significantly reduced risk of cognitive decline (OR 0.76, 95% CI 0.62-0.93). The reduced risk of cognitive impairment in moderate drinkers (OR 0.72, 95% CI; 0.49-1.05) and heavy drinkers (OR 0.90, 95%CI .70-1.16) was not significant. Conclusions: Our results suggest that among drinkers, only mild drinking has a protective effect on cognitive decline in Mexican adults aged 50 years and older