Dementia Risk Directly Raised by Increased Alcohol Consumption

Researchers investigated whether raising the consumption of alcohol causes the risk of developing <u>dementia</u> to increase among individuals who currently drink.

Their findings indicate that predicted alcohol consumption based on genetic factors increases, so does <u>dementia risk</u>, challenging previous knowledge and suggesting that no amount of alcohol is safe when it comes to dementia prevention.



Study

This study used data from the UK Biobank to find out if drinking light-to-moderate amounts of alcohol causes a higher risk of dementia in people who currently drink <u>alcohol</u>.

First, researchers looked at the relationship between alcohol and dementia using a common statistical method, which allowed them to see if the risk changed at different levels of drinking.

Then, they used a genetic approach called <u>Mendelian Randomization</u> (MR) to see if genes linked to alcohol consumption could help determine if alcohol is directly connected to dementia risk.

The study included over 300,000 white British adults who currently drink alcohol. These participants answered questions about their alcohol habits and provided genetic information. People who did not drink or had dementia at the start of the study were excluded.

Alcohol intake was calculated based on how much people said they drank each week, following UK health guidelines. Dementia cases were tracked through hospital and <u>death records</u>.

The genetic part of the study used information from 95 genes related to alcohol consumption to help figure out if drinking alcohol directly affects dementia risk while adjusting for other factors like age, sex, and <u>lifestyle habits</u>.

Results

In this study, researchers followed 313,958 current <u>alcohol drinkers</u> for about 13 years to see if their drinking habits were linked to dementia risk. During this time, 1.7% of participants (5,394 people) were diagnosed with dementia.

The average amount of alcohol consumed each week was 13.6 units, with nearly half (48.6%) drinking more than the <u>UK's recommended</u> 14 units per week.

Men generally drank more than women, with men drinking about 20.2 units per week compared to 9.5 units for women. Interestingly, more women (68.6%) stayed within the <u>safe drinking</u> limits compared to men (34.2%).

When analyzing how alcohol consumption is linked to dementia, a "J-shaped" pattern was found.

This means that light-to-moderate drinking (around 11.9 units per week) was associated with the lowest risk of dementia, while higher levels of drinking increased the <u>risk</u>. For men, the lowest dementia risk was at 16.8 units per week, but no clear pattern was found for women.

Genetic analysis showed that people with genes linked to higher alcohol consumption were more likely to develop dementia, especially women. This suggests that alcohol may play a direct role in increasing dementia risk, particularly with <u>heavier drinking</u>.

Conclusion

The study found a <u>linear relationship</u> between the consumption of alcohol and the likelihood of developing dementia, with current drinkers facing higher dementia risk as alcohol intake increased.

This contrasts with conventional epidemiology, which often shows a J-shaped relationship, suggesting moderate drinking might have <u>protective effects</u>.

However, this study's MR analysis suggests these protective effects could be due to biases in traditional studies, such as "abstainer bias" or confounding factors like socioeconomic status.

Strengths include the use of MR to minimize confounding and reverse causality and both linear and non-linear MR analyses to assess alcohol's impact on dementia. The study's limitations include its reliance on self-reported alcohol data, potential bias from selective <u>UK Biobank</u> participants, and the focus on current drinkers, limiting the results' applicability to other groups.

Future research should include diverse populations to better understand alcohol's impact on dementia risk across racial and ethnic groups.

Source:

https://www.news-medical.net/news/20240908/Study-shows-increased-alcohol-consumption-directly-raises-dementia-risk.aspx