

## **ABSTRACT**

**Title:** Association between alcohol use and semantic verbal fluency in older adults over 65 years of age

**Objectives:** To determine the association between alcohol consumption and one of the memory components - semantic verbal fluency in older adults over 65 years.

**Methods:** This diploma thesis was carried out as the secondary analysis of data from an international cross-sectional study, which was a part of the Survey of Health Aging and Retirement in Europe (SHARE) project. For the purposes of this thesis, the participants were divided into six categories according to their education levels, and sex. Generalized linear models were calculated for each of the categories separately.

**Results:** A total of 41,224 participants average age  $75.1 \pm 7.4$  years were included in the survey, out of them 22,737 were women and 18,487 were men. 83.0% of participants reported no consumption any alcohol during the last three months prior to testing. More frequent alcohol consumption was associated with lower performance in the semantic verbal fluency test in the several categories according to education ( $p < 0.001$ ). This relationship was primarily among participants with less education, the unstandardized regression coefficient  $B = -1.416$  ( $p = 0.045$ ) was estimated in women who consumed alcohol five or six days a week and for men who consumed alcohol three or four days a week the  $B = -1.128$  ( $p = 0.002$ ).

**Conclusion:** The results suggested that there was a relationship between alcohol consumption and lower performance on a test of semantic verbal fluency. These findings confirm that alcohol could have a negative impact on memory and its proper function.