The correlation between Reproductive Events and development of Alcohol Use Disorder across time

Background: Prior studies have found that pregnancy has a protective effect on alcohol and other substance use and is inversely related to alcohol use disorder (AUD). Nonetheless, according to a national survey in the US, 5.9% of pregnant people use illicit drugs, 8.5% drink alcohol, and 15.9% smoke cigarettes. There is less research on longitudinal examinations of AUD prevalence among those who have experienced pregnancy and other reproductive events including stillbirth and miscarriage. Methods: Using a subset of female participants from the Collaborative Studies on the Genetics of Alcoholism (COGA) age 18+ who did not meet Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) criteria for alcohol dependence (AD) at baseline (n= 1046, Mage = 22.29), we examined the correlation between reproductive events and AD over eight time points. Results: Within the sample, 20% of participants reported at least one reproductive event at baseline. 24.4% of participants met the criteria for AD at some point during follow-up. We observed no evidence of a significant correlation between the number of times a participant had been pregnant, current pregnancy at the time of the interview, number of reported stillbirths and miscarriages, and number of children the participant has given birth to with AD at later time points. Future investigation of this data will explore associations with other substances (e.g., marijuana, cocaine, and opiates), as well as comorbid mental health disorders. Conclusions: Although there is prior literature suggesting a protective effect of pregnancy on alcohol-related outcomes, our preliminary analyses showed no evidence of this association in the COGA dataset.