

## Social inequalities in time trends of alcohol use patterns in Germany

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### ABSTRACT

**Introduction:** Socioeconomic status (SES) is one of the main factors influencing physical and mental health. A number of epidemiological studies have shown social inequalities in alcohol use patterns. In general, a negative social gradient was reported, i.e., the lower the social status, the higher the level of alcohol use. This association was found with regard to average amount of alcohol consumed and frequency of heavy drinking occasions. In order to understand the development of social inequalities based on individual, environmental and generational influences, age-period-cohort analyses will be conducted. The present study examines social inequalities in the independent and non-confounded effects of age, period, and cohort on (1) alcohol volume and (2) episodic heavy drinking (EHD). **Methods:** Data come from eight waves of the German Epidemiological Survey of Substance Abuse (ESA) that were conducted between 1995 and 2015 in the general adult population aged 18 to 59 (64) years. Age-period-cohort (APC) analyses will be conducted using linear and nonlinear partial least squares regression models. The analyses were stratified by socioeconomic status (SES). **Results:** Descriptive age, period and cohort patterns by SES for males and females will be presented. Results of the statistical analyses will be summarised by presenting adjusted predicted values for volume and EHD for each effect keeping the other effects constant at their mean. **Conclusion:** The delineation of age, period and cohort effects in long-term trends of alcohol use patterns by SES enables the identification of specific risk factors such as aging and growing up in a particular environment at a particular time. Comparison of temporal trends in alcohol use patterns by SES is important for the prevention of health inequalities. **Declaration of interest:** Daniela Piontek and Ludwig Kraus declare having received a grant from Lundbeck GmbH for a research project on alcohol epidemiology unrelated to this study.