Quantifying harm to others from alcohol: the example of Germany

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Abstract

Introduction. While research primarily deals with the harm to drinkers, a person’s drinking can affect people other than him- or herself. The present paper aims to estimate the extent of harms that drinking causes to people other than the drinker: (1) newborns affected by fetal alcohol syndrome (FAS) or fetal alcohol spectrum disorder (FASD), (2) road traffic accident deaths, and (3) interpersonal violence-related deaths. Methods. Estimates were based on a meta-analytical approach using data on the prevalence of FAS and FASD and the prevalence of alcohol use during pregnancy, and on the alcohol fraction methodology applied to data from cause of death statistics concerning road traffic accidents and interpersonal violence. Results. FAS was estimated at 0.41\% (95\% CI: 0.24\% - 0.63\%) or 41 children per 10,000 live births and FASD at 1.77\% (95\% CI: 1.35\% - 3.2\%) or 177 children per 10,000 live births per year; these estimates translate into 2,926 and 12,638 children born with FAS and FASD, respectively. The overall number of third party deaths from road traffic accidents was estimated at 525, accounting for 19.5\% of the total mortality of third parties from road traffic accidents. Alcohol-attributable deaths from interpersonal violence were estimated at 111 people per year. In males, alcohol-attributable fatalities accounted for 36\% of all deaths from interpersonal violence. Conclusion. The findings reveal that alcohol may not only cause harm to the drinker, but may also harm a substantial number of third parties. More research is required, particularly respecting how to improve both the relevant data and the methods to be used for estimating the harms to others resulting from alcohol consumption.