Nothing good ever happens after midnight: Observed exposure and alcohol use during weekend nights among young male drivers carrying passengers in a late licensing country

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Abstract

Similar to other countries, also in the Netherlands young male drivers (ages between 18 and 24 years) are overrepresented in crashes during weekend nights, thereby fatally injuring one or more of their passengers. This overrepresentation may be due to two contributing factors: (a) a higher exposure-to-risk because of dangerous trip condition, and (b) a higher tendency to take risks. Studies on these factors, mostly carried out in jurisdictions where youngsters are licensed at an earlier age than in Europe, suggest a strong often negative influence from peer-aged passengers. Given that in adolescence susceptibility to peer pressure reduces with age, these findings may not be applicable to late licensing countries, such as in Europe. In the Netherlands a late licensing country youngsters are licensed after the age of 18 years, followed by a 5 year probation period with a legal alcohol limit of 0.2 g/L. Further, designated driver schemes are in place since 2001, alcohol limits are enforced by random breath testing schemes, and no passenger and night time restrictions are in force. Against this background, we examined the incidence of dangerous trip conditions and risk taking among young male drivers and compared those with a reference group with a low passenger fatality rate. To that end, data on trip conditions and risk behavior were obtained from a data base on 18,608 randomly selected drivers during weekend nights in 2010, between 22:00 and 06:00. This data base held information for each randomly selected on breath alcohol concentration (BAC), license status, driver characteristics (age and gender), number of passengers, time of night, and level of urbanization. Binary logistic regression analysis confirmed the overrepresentation of young male drivers in traffic, carrying more frequently passengers than the reference group, especially after midnight. Urbanization level was not a modifying factor, but time of night was, with riskier conditions after midnight in terms of: (a) a higher young male driver presence, (b) young male drivers carrying more frequently multiple passengers and (c) a higher prevalence of illegal BACs. After midnight, no evidence was found for a protective effect of the presence of one passenger on alcohol use. Of the young male drivers, 5% were over the legal limit and 3 in 5 young males who were over the limit carried passengers. However, the indicative result that young male drivers with multiple passengers were less likely to have been drinking than solo drivers or drivers with just one passenger, is suggestive of a protective effect of multiple passengers. These results may guide preventive strategies, including police enforcement and designated driver programmes. Web link

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