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LETTER TO THE EDITOR

Can Ireland's Increased Rates of Alcoholic Liver Disease Morbidity and Mortality be Explained by Per Capita Alcohol Consumption?

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Analysis of data from Ireland's Hospital In-Patient Enquiry (HIPE) scheme has revealed a considerable increase in alcohol liver disease (ALD) morbidity and mortality between 1995 and 2007. The rate/100,000 adults (aged \geq 15) increased by 190% from 28.3 in 1995 to 82.2 in 2007.

Over two-fifths (43%) of all discharges were aged 50–64 years; 6% were 15–34 years old, 35% were 35–49 years old and 16% were aged \geq 65 years. There were considerable increases in age-specific rates especially among younger age groups, albeit from a low base; the rate of ALD discharges increased by 247% for 15–34 year olds and by 224% for 35–49 year olds. This is a worrying trend but is not surprising as survey data have shown that 18–29-year-old drinkers have the highest level of alcohol consumption among Irish drinkers and two-fifths binge drink weekly. People in Ireland are also starting to drink at a younger age compared with older generations (O'Connor *et al.*, 2008); recent school survey data have shown that 47% of 17 year olds had their first alcoholic drink at the age of 14 or under, while 74% had been drunk at least once (Nic Gabhainn *et al.*, 2007).

The majority of ALD discharges were male (70%); however, there was a higher proportion of females in the youngest age group. This is not surprising as young Irish women drink in a manner similar to males with harmful drinking patterns, including weekly binge drinking common among this group (Morgan *et al.*, 2009). These drinking patterns among women could potentially lead to problems in the future as women are more likely to experience earlier onset of ALD and at lower levels of alcohol consumption.

The mortality rate/100,000 population aged \geq 15 who died while in hospital was 2.6 in 1995 and 7.1 in 2007, an increase of 173%. As this does not include those with ALD who may have died outside of the public hospital system, it is likely that the actual ALD mortality rate in Ireland is higher. It is seen that 72% of deaths occurred in those aged <65 years, highlighting the link between ALD and premature mortality. As these people were of working age, it represents a considerable economic loss to the country and contributes to the wider, intangible human costs associated with premature mortality due to alcohol.

In 1987, alcohol consumption among adults was 9.81 but in the 14 years up until 2001 consumption increased by 46% to 14.31. There was a year-on-year increase in the overall rate of ALD throughout the study period with the exception of 2003 when the rate of ALD decreased by 7%. In 2003, consumption decreased by 6% to 13.41, which was the first notable decrease in consumption since 1987 and is widely attributable to an increase in excise duty on spirits that year. Although alcohol consumption remained stable from 2003 to 2007, the rate of ALD discharges increased by 39%. Given the dose-time response relationship between alcohol and ALD, we would expect that there would be a lag period between changes in per capita alcohol consumption and ALD. It may be possible that we are now really beginning to see the effects of the large increase in per capita consumption up until 2003 and that this increase will continue over the next few years.

These results indicate that there has been a genuine increase in the occurrence of and mortality from ALD and this is consistent with an increase in per capita consumption and harmful drinking patterns. The introduction of effective policy measures to reduce overall per capita alcohol consumption and harmful drinking patterns in Ireland is urgently required. The early detection of harmful drinking patterns and the provision of brief interventions for such drinkers are also required.

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