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#### Commentary

# Alcohol Dependence and Mortality: Implications for Treatment



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Alcohol use disorders are the most common mental disorder world-wide with an estimated 3.6% prevalence among adults aged 15–65 (Rehm et al., 2009). They are associated with significant morbidity as well as negative social consequences for both the sufferer and those around them.

The categorization of alcohol use disorders is complicated and the subject of much debate. Within the current World Health Organisation International Classification of Disease (ICD 10) alcohol dependence syndrome is a separate diagnosis characterised by a cluster of behavioural, cognitive and physiological phenomena including a strong desire to drink alcohol, difficulty in controlling use, tolerance (need to consume greater amounts to get the same effect) and withdrawal symptoms on stopping alcohol use distinct from the diagnosis "harmful alcohol use" (World Health Organisation, 1997). Until recently this distinction was also reflected in the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders (DSM IV) but within the DSM V updated in 2013 the previous diagnoses of "alcohol dependence" and "alcohol abuse" were merged to one diagnosis of "Alcohol Use Disorder" due to concern that these are not two distinct phenomena but represent a spectrum of severity of the same underlying disorder (National Institute on Alcohol Abuse and Alcoholism, 2015).

In their systematic literature review and meta-analysis Laramée and colleagues have shown that those with alcohol dependence (using broad criteria not limited to clinical diagnoses by either ICD 10 or DSM IV criteria) are at approximately 3.5 times higher risk of death than the general population (Laramée et al., 2015). This finding is similar to a previous systematic review of the association between all alcohol use disorders and mortality which found that mortality risk was 3 times higher in men and over 4 times higher in women with alcohol use disorders

DOI of original article: http://dx.doi.org/10.1016/j.ebiom.2015.08.040. E-mail address: sarah.cook@lshtm.ac.uk. (Roerecke and Rehm, 2013). Interestingly however Laramée et al. also showed an increase in mortality of 25% among those with alcohol dependence compared to those with criteria for the diagnosis alcohol abuse suggesting an increased severity of this diagnosis in terms of health risk, even if the two conditions represent an underlying continuum. Roerecke and Rehm have previously shown that this increased risk in those with alcohol use disorders is found for all causes of death with particularly high standardised mortality ratios for digestive disease, especially liver cirrhosis, and mental disorders (Roerecke and Rehm, 2014). Risk from unintentional injuries and suicides was also substantially higher. Cause-specific mortality from alcohol dependence has not been investigated in this way but similarities between findings for both alcohol use disorders and alcohol dependence and all-cause mortality suggest that this pattern is likely to be similar.

In addition to showing the substantial increased mortality risk found in those with alcohol dependence Laramée et al. also consider whether mortality risk differed among those with alcohol dependence who continue to drink heavily versus those who are abstinent and those who have reduced their alcohol consumption. The results show a doseresponse with lowest mortality in those who are abstinent but also reduced mortality in those who reduce their drinking. The authors use this finding to justify reducing drinking as a valid treatment outcome alongside total abstinence, but further than this these results add to body of evidence that effective treatment outcome which actually leads to decreases in drinking can save lives. If reducing alcohol consumption even among those in treatment, who are likely to have the most severe disease, results in lower mortality then it is clear that the health effects of heavy alcohol use are at least to some extent reversible and it is never too late to intervene. The findings from Laramée et al. are consistent with findings for alcohol use disorder that decreasing alcohol consumption substantially reduces the increased mortality risk associated with this illness (Roerecke et al., 2013). However despite the high prevalence of alcohol use disorders and the high cost associated with morbidity and mortality the treatment gap for alcohol use disorders is larger than for any other mental disorder (Kohn et al., 2004). The majority of people with alcohol use disorders receive no treatment at all (Kohn et al., 2004; Drummond et al., 2011).

Reasons for this low level of treatment are multi-factorial and diverse but stigma (Schomerus et al., 2011), lack of recognition by medical professionals and low levels of funding (Kohn et al., 2004) are likely to be key factors. The paper from Laramée et al. showing the substantial increased mortality among those with alcohol dependence emphasises the need for both better prevention and treatment of this harmful disease.

#### Disclosure

The author declared no conflicts of interest.

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