## alcohol: it's more damaging than we realised

A major new research paper was published in the Lancet last week - "Alcohol use and burden for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016." It's the biggest and best overview of damage caused by alcohol that has ever emerged. It's available in free full text and it makes concerning reading. Here's the abstract:

"Alcohol use is a leading risk factor for death and disability, but its overall association with health remains complex given the possible protective effects of moderate alcohol consumption on some conditions. With our comprehensive approach to health accounting within the Global Burden of Diseases, Injuries, and Risk Factors Study 2016, we generated improved estimates of alcohol use and alcohol-attributable deaths and disability-adjusted life-years (DALYs) for 195 locations from 1990 to 2016, for both sexes and for 5-year age groups between the ages of 15 years and 95 years and older. Methods Using 694 data sources of individual and population-level alcohol consumption, along with 592 prospective and retrospective studies on the risk of alcohol use, we produced estimates of the prevalence of current drinking, abstention, the distribution of alcohol consumption among current drinkers in standard drinks daily (defined as 10 g of pure ethyl alcohol), and alcohol-attributable deaths and DALYs. We made several methodological improvements compared with previous estimates: first, we adjusted alcohol sales estimates to take into account tourist and unrecorded consumption; second, we did a new meta-analysis of relative risks for 23 health outcomes associated with alcohol use; and third, we developed a new method to quantify the level of alcohol consumption that minimises the overall risk to individual health. Findings Globally, alcohol use was the seventh leading risk factor for both deaths and DALYs in 2016, accounting for 2.2% (95% uncertainty interval [UI] 1.5–3.0) of age-standardised female deaths and 6.8% (5.8–8.0) of age-standardised male deaths. Among the population aged 15-49 years, alcohol use was the leading risk factor globally in 2016, with 3.8% (95% UI 3.2-4·3) of female deaths and 12·2% (10·8–13·6) of male deaths attributable to alcohol use. For the population aged 15-49 years, female attributable DALYs were 2.3% (95% UI 2.0-2.6) and male attributable DALYs were 8.9% (7.8–9.9). The three leading causes of attributable deaths in this age group were tuberculosis (1·4% [95% UI 1·0–1·7] of total deaths), road injuries (1·2% [0·7– 1.9]), and self-harm (1.1% [0.6–1.5]). For populations aged 50 years and older, cancers accounted for a large proportion of total alcohol-attributable deaths in 2016, constituting 27.1% (95% UI 21·2–33·3) of total alcohol-attributable female deaths and 18·9% (15·3–22·6) of male deaths. The level of alcohol consumption that minimised harm across health outcomes was zero (95% UI 0·0–0·8) standard drinks per week. Interpretation Alcohol use is a leading risk factor for global disease burden and causes substantial health loss. We found that the risk of all-cause mortality, and of cancers specifically, rises with increasing levels of consumption, and the level of consumption that minimises health loss is zero. These results suggest that alcohol control policies might need to be revised worldwide, refocusing on efforts to lower overall population-level consumption."

As the linked (free full text) commentary - "No level of alcohol consumption improves health" - states "The systematic analysis from the Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) 2016 for 195 countries and territories, 1990–2016, is the most comprehensive estimate of the global burden of alcohol use to date. The GBD 2016 Alcohol Collaborators clearly demonstrate the substantial, and larger than previously estimated, contribution of alcohol to death, disability, and ill health, globally. The burden is particularly borne among those aged 15–49 years, for whom alcohol ranks as the leading cause of DALYs. In this population, alcohol use was the leading risk factor globally in 2016, with 3·8% (3·2–4·3) of female deaths and 12·2% (10·8–13·6) of male deaths attributable to alcohol use ... The conclusions of the study are clear and unambiguous: alcohol is a colossal global health issue and small reductions in health-related harms at low levels of alcohol intake are outweighed by the increased risk of other health-related

harms, including cancer. There is strong support here for the guideline published by the Chief Medical Officer of the UK who found that there is "no safe level of alcohol consumption". The findings have further ramifications for public health policy, and suggest that policies that operate by decreasing population-level consumption should be prioritised. The most effective and costeffective means to reduce alcohol-related harms are to reduce affordability through taxation or price regulation, including setting a minimum price per unit (MUP), closely followed by marketing regulation, and restrictions on the physical availability of alcohol. These approaches should come as no surprise because these are also the most effective measures for curbing tobacco-related harms, another commercially mediated disease, with an increasing body of evidence showing that controlling obesity will require the same measures. These diseases of unhealthy behaviours, facilitated by unhealthy environments and fuelled by commercial interests putting shareholder value ahead of the tragic human consequences, are the dominant health issue of the 21st century. (my emphasis) The solutions are straightforward: increasing taxation creates income for hard-pressed health ministries, and reducing the exposure of children and adolescents to alcohol marketing has no downsides. The outlook is promising: the UK has just embarked on a huge controlled natural experiment with a progressive evidence-based alcohol strategy in place in Scotland, and with similar measures planned in Northern Ireland and Wales, with England as the placebo control. MUP in Scotland was introduced in May, 2018, without so much as a whisper of complaint from the media, the public, and politicians. Mortality and morbidity rates might be expected to diverge dramatically within just a few years, and pressures to extend these measures across Europe and elsewhere will start to rise."

I only drink at low levels, but - as of today - I have stopped entirely. This is a three month experiment and I then plan to revisit the personal pluses & minuses of staying alcohol free. It will be a bit of a challenge ... although I've never been a heavy drinker, I have also never gone three months without alcohol since my mid-teens. One can certainly argue that low levels of alcohol use cause only minor physical damage (one can't suggest, as previously, that low level use may be beneficial). However, one can argue the same for low levels of tobacco use, but not many of us then happily smoke two or three cigarettes a day rather than simply guitting. I think, for me, I'll miss the occasional beer after physical exercise or a long day at work - but I've ordered a mixed taster case of alcohol-free beers so I'll probably find a replacement I like. A quick Google search on 'best non-alcoholic drinks' yields a treasure trove of fun ideas too. I've also bought myself copies of Allen Carr's "Stop drinking now: the easy way" and Catherine Gray's "The unexpected joy of being sober" ... partly as potential resources for interested clients & friends. We affect those around us. I certainly don't want to be a killjoy or a self-righteous presence, but we affect many others by our behaviours - often without even realising it - see, for example, the post based on Gandhi's quote "Be the change you want to see in the world". These are interesting times ...

(This handout was published as a blog post – with hyperlinks – on 28.08.18)