EDITOR'S CHOICE

Better research flattens the J shaped curve

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As you reach for your post-election glass of wine this weekend, or perhaps even something stronger, spare a thought for your brain. You may have been told that alcohol, when consumed in moderation, protects against dementia—an example of the workings of the famous “J shaped curve.” Sadly, as with cardiovascular health, the reported benefits of light to moderate drinking on brain health are now looking decidedly shaky.

This week Anya Topiwala and colleagues report their follow-up study of a cohort of 550 civil servants whose alcohol intake and cognitive function were repeatedly assessed over 30 years (doi:10.1136/bmj.j2353). At the end of the study participants also underwent magnetic resonance imaging of their brain. After adjusting for confounders, the authors found a dose dependent association between alcohol consumption, cognition, and atrophy of the hippocampus. Even moderate drinkers (classified as consuming up to 21 units a week for men) were three times as likely as abstainers to have hippocampal atrophy. Very light drinking (1-6 units a week) conferred no protection, and risks for drinkers clearly exceeded abstainers when intake reached 4 units a day.

Recommendations on safe alcohol intake have already been tightened because of evidence linking even light drinking to a raised risk of various malignancies. England's chief medical officer now advises a maximum weekly intake of 14 units for men and women. As our editorialist Killian Welch explains (doi:10.1136/bmj.j2645), this new study strengthens the argument that drinking habits regarded by many as normal have adverse consequences for health.

Welch also explains that this better understanding of the effects of alcohol on health has much to do with improvements in research methods. Elsewhere in the journal we have a range of news on the continuing fight for better research. Agnes Dechartres and colleagues, after mapping over 20 000 randomised controlled trials in Cochrane reviews, conclude that standards of reporting and methods have improved over the past three decades (doi:10.1136/bmj.j2490). But real improvements are confined to higher impact journals.

Meanwhile on BMJ Opinion (<http://blogs.bmj.com/bmj>) Iain Chalmers and Paul Glasziou comment on the continuing scandal of unpublished research: “If 50% of mail we posted never arrived, the outcry would be considerable. Although current estimates are that about half of research goes unpublished, there is little outcry.”

And the International Committee of Medical Journal Editors, of which *The BMJ* is a member, reports on its new requirements for data sharing statements for clinical trials (doi:10.1136/bmj.j2372). These are less demanding than those put out for consultation a year ago (doi:10.1136/bmj.i255), and *The BMJ* already requires authors of randomised trials to commit to sharing their data (www.bmj.com/about-bmj/resources-authors/article-types/research).

But this combined action by the ICMJE shows the clear direction of travel. As the editorial says, “We envision a global research community in which sharing deidentified data becomes the norm.”