Communicating Alcohol Risks: Forwards or Backwards?

There is a fundamental conflict at the heart of communication about the risks of drinking alcohol. On the one hand our understanding is now risk based, taking into account long-term exposure, how much we consume, our age and sex. This allows us to consider risks intelligently - compare them, put them in the context of other different rewards, and make choices. Yet the communication of alcohol risks seems to fall back easily upon an alarmist approach of old. This tension needs to be discussed because it is undermining the wider progress in how we understand and communicate risks, and detracts from evaluating practical steps that might help us to reduce risks, should we choose to.

We now calculate risks from alcohol at the population-wide level, taking account of different levels of consumption, in relation to differences such as sex, and drawing upon the range of past data we have available. The full expert report that accompanied a change to UK alcohol guidelines in 2016[1], for example, provides a table plotting the estimated lifetime risk from daily alcohol consumption against the percentage chance of dying from an alcohol related condition.[2] This method illustrates the principal advance of a risk-based approach, recognising that the problem does not lie in the hazard itself – in this case alcohol – but the amount and type of exposure we have to it. That report indicated that one unit of alcohol a day has a protective effect for heart disease and stroke, which is then cancelled out and overtaken by the negative health effect above this level of consumption. High levels of concentrated consumption can cause acute alcohol poisoning which sometimes leads to death and this threshold is lower than most people seem to realise; between 0.4% to 0.5% blood alcohol content (around 2 bottles of wine for an average-sized woman). The chart illustrates the considerable difference in effects upon men and women, based upon average body size and other biological differences.

Population-wide risk perspectives are useful in showing up problems that might not be apparent at the individual level, and in indicating significant improvements such as the enormous benefits that have followed reductions in smoking in recent years. These population-wide approaches give us the opportunity to consider our behaviour in the context of long-term average effects for different levels and types of exposure, where previously behaviour was considered in response to tangible effects that were already being experienced, such as, in the case of alcohol, liver damage, severe alcoholism or anti-social behaviour. This is particularly significant as those consuming more in the UK and increasing their risk accordingly now tend to be the middle classes, including women who are now drinking more than in the past. They are likely not to recognise any immediate problem as other aspects of middle-class lifestyles mitigate rather than compound the early effects of high consumption. The common experience, however, is of being left anxious that perhaps general consumption is too high but not experiencing the dramatic effects that might stimulate behaviour change. Direct problems like liver disease remain relatively small in absolute terms. The confessional

[1] Department of Health, "UK Chief Medical Officers Alcohol Guidelines Review", available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/489795/summary.pdf, accessed 10 November 2017.

[2] Department of Health, 'Alcohol Guidelines Review: report from the guidelines development group to the UK Chief Medical Officers, available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/545739/GDG_report-Jan2016.pdf, accessed 10 November 2017.

media articles from former drinkers who describe 'hitting rock bottom' and only regaining control of their lives after becoming teetotal don't really speak to the common experience of the middle class, middle aged 'problem drinkers', whose problem is more commonly a potential long term one.[3] This raises the broader issue of how to think about the risks of moderate drinking and 'harm to the self'.[4]

Risk is an intrinsically comparative measure, telling us what is more or less risky. It doesn't recognise absolute ideas of safety or danger. So risk based perspectives encourage a relative rather than absolute approach, which is appropriate to considering the possible long-term effects of modern drinking patterns in a society like the UK - as opposed to addressing the highly tangible problem of alcoholism that blights remote Russian communities.[5] The prominence of middle class drinking in the UK is itself relative. It stands out against declining consumption, including among the young people whose 'binge drinking' dominated policy worries in the 1990s and 2000s.[6]

Changes in relative consumption and risk are also useful indicators of broader underlying changes that may only show up at population level or be otherwise problematic to investigate. It was a changing risk profile that showed up a decline in young people's drinking, leading researchers to consider its relationship to the increased cost of alcohol in pubs, more restrictive shop sales, and other drugs and risks taking the place of alcohol. The changing risk picture has also highlighted female drinking, broadly a measure of greater equality as women enjoy more 'male' work and lifestyle patterns, and with them greater risk exposure.

The broad, long-term perspectives offered by population-level risk also help to identify behaviours that may become increasingly harmful while suggesting scope to reduce them through even small changes in habits. This is a very different approach to waiting for those harms to become apparent in individuals or societies, at which point possible interventions are more extreme and hard to achieve. In the risk perspective on alcohol, the future is not closed. Change does not rely on absolutes such as stigmatising alcohol consumption in its entirety and getting people to abstain altogether.

We have moved on a long way in our understanding of drinking, which in early modernity was cast in terms of moral and religious proscription as the 'demon drink'. In Victorian England it defined and demarcated the 'respectable' from the rest, and held up as the principal cause of social ills rather than only the symptom that they really were.[7] The spectre of alcohol was raised above other risks, and led to attempts to simply abolish it through stigmatization, even prohibition. The counter-productive failure of direct attempts to limit drinking led to its reluctant tolerance in an increasingly

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[3] Carmen Fishwick, "Alcohol was my go-to friend: substance misuse in the over 50s", available at https://www.theguardian.com/commentisfree/2017/aug/24/alcohol-was-my-go-to-friend-substance-misuse-in-the-over-50s, accessed 10 November 2017.

[4] See Henry Yeomans, "Blurred visions: experts, evidence and the promotion of moderate drinking" (2013) *Sociological Review* 61, 58-78, and Marian Valverde, Diseases of the Will: Alcohol and the Dilemmas of Freedom (Cambridge University Press, 1998) 171-182.

[5] See Tatiana Kosova, Elena Kosova and Mariia Sheluntkova, "Investigating the Volume and Structure of Alcohol Consumption and Their Impact on Life Expectancy in Russian Regions", (2014) *Higher School of Economics Research Paper No. WP BRP 82/EC/2014.* Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2538524 accessed 12 November 2017.

[6] See Office for National Statistics, "Adult drinking habits in Britain 2005-2016", available at https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/drugusealcoholandsmoking/bulletins/opinionsandlifestylesurveyadultdrinkinghabitsingreatbritain/2005to2016 accessed 13 November 2017.

[7] See for example, Fiona Measham, "A History of Intoxication: Changing attitudes to drunkenness and excess in the United Kingdom", in Marjana Martinic and Fiona Measham, *Swimming with Crocodiles: the Culture of Extreme Drinking* (Routledge 2008) 13-36, and Mariana Valverde, supra cite, 4.

secularised and 'de-moralised' country as it moved through the twentieth century. It was accepted as part of the fabric of social life and only the visible extremes of the alcoholic or the associated violence still seen on a weekend night in British towns remained stigmatized. Long term, moderate dosage population-wide effects were not recognised until the late twentieth century.

To analyse and manage issues as risks is to accept that risks are a part of life. Risks can be tolerated, transferred, reduced or mitigated, but rarely can they simply be abolished. This perspective has made it possible to compare different kinds of risks with each other and the effects of relatively small changes on overall lifetime risks. Professor of risk, David Spiegelhalter, assessed the risk associated with low levels of drinking, from the expert report above, as a 1% lifetime risk, which he calculates as equivalent to the risk of a sedentary hour of watching television per day or eating a bacon sandwich a couple of times each week.[8] In similar, and more controversial terms, psycho-pharmacologist David Nutt equated the risks of taking ecstasy to the risks of horse riding (ref). Personal risk management is then a matter of balancing off risks against each other, making decisions based on available resources, personal history and the benefits – including pleasures - they give us as individuals. A risk perspective is amoral and makes no judgements - even if culturally we tend to approve of some high-risk hobbies like horse riding or skiing, but not habits like smoking or drinking (ref).

However, despite the adoption of a data-backed risk perspective today, policy and communications about alcohol risk keep falling back into more generalised moral alarm. These two approaches are mutually contradictory. Consider the change in the official alcohol limits introduced by the Chief Medical Officer (CMO), Sally Davies, in 2016, which established men's risk levels at the same level as women's. This is not a risk-based change, as women are clearly at greater average risk from alcohol than men. The message that even at low doses alcohol is dangerous is not supported by the data. Announcing the change, the Department of Health baldly declared that 'men should not drink more than 14 units of alcohol per week, the same as women'.[9] Further back, the CMO made headlines by urging women to 'do as I do' and think about the risks of breast cancer every time they consider drinking a glass of wine. She later conceded, following criticism from statisticians, that the wording wasn't ideal.[10] However she didn't retract the substance, which was an implied association between cancer and even a single glass of wine – an association that is unfounded. Her predecessor as CMO, Liam Donaldson, urged a similarly abstentionist and toxifying approach. A focus for him was what he termed the 'middle class obsession' with accustoming their teenagers to drinking diluted wine with their meals in the French style, claiming that it was more likely to lead to them becoming heavy drinkers. Even the tone of his message had more in common with the pre-risk era of moral condemnation: 'Too often childhood is robbed of its clear-eyed innocence and replaced with the befuddled futility that comes with the consumption of dirt cheap alcohol.'[11] While couched in the

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[8] David Spiegelhalter, "Medicine, Poison, Poison, Poison", available at https://understandinguncertainty.org/medicine-poison-poison-poison-%E2%80%A6%E2%80%A6, accessed 11 November 2017.

[9] Department of Health, "New guidelines show increased risk of cancer" (2016), available at https://www.gov.uk/government/news/new-alcohol-guidelines-show-increased-risk-of-cancer, accessed 11 November 2017.

[10] Press Association, "Alcohol warning over wine was poorly worded, says health chief", available at https://www.theguardian.com/society/2016/dec/30/breast-cancer-warning-wine-dame-sally-davies, accessed 11 November 2017.

[11] Kate Devlin, "Parents 'should not give children small amounts of alcohol to encourage responsible drinking", available at http://www.telegraph.co.uk/news/health/news/6826558/Parents-should-not-give-children-small-amounts-of-alcohol-to-breed-responsible-drinking.html, accessed 11 November 2017.

framework and the language of risk, these are messages of more straightforward *danger*; intended to shake the public out of their perceived complacency, even irresponsibility.

The conflict is between an objective, candid assessment of alcohol risk and the policy intent to communicate that alcohol is more of a problem than people realise, and that they need to be woken up to this fact. In spite of the risk approach, there is an impatience to startle people into action. Policy messages are therefore inclined to both toxify all kinds of drinking and extend the range of harms drinkers are exposed to. Inevitably this means downplaying contingencies such as the amount consumed and by whom. In this vein, Donaldson also put out the message that there were far larger, 'secondary effects' to alcohol. He unsuccessfully promoted the idea of 'passive drinking', making it the centre piece of his final annual report.[12] He contended that there are hundreds of thousands of indirect victims of alcohol such as children neglected by alcohol distracted or befuddled parents. These consequences are far from self-evident, which is why they were not previously recognised and why the notion of 'passive drinking' did not catch on.

A recent widely publicized report, *Like Sugar for Adults*, attempted to refine 'passive drinking' and 'secondary effects', claiming to indicate that: 'even moderate drinking can harm child development' and 'prove damaging', in a study finding that some children said they were getting insufficient attention and experiencing other problems.[13] This was done through a survey inviting children to respond to leading questions about whether they experience a range of negative feelings associated with their parents' drinking. Drinking was not considered alongside other risks or aspects of family life that may be less than ideal like a lack of attention from parents looking at mobile phones, and ignored any possible positive effects such as upon parents' sociability. Even with the bias, results do not appear to demonstrate a dramatic effect. For example, only 12% of children said their parents paid them less attention because of their drinking. The intent seems primarily to make the extended, negative association regardless of how significant it really is.

This is using risk vernacular as a 'forensic resource' to signal moral, 'polluting' danger. That co-option of risk language was explored by anthropologist Mary Douglas, whose cultural approach remains the most influential work on risk in society.[14] Asking why particular communities select different risks as an object of concern she considered the function they perform in maintaining identity and marking boundaries from others with different value systems, such as the Victorian boundary of respectability. Perceived threats to communities and cultures that were once understood through ideas of taboo and sin are now communicated through the language of risk, one more appropriate to our science-based society. Risk is communicated in numbers, suggesting objectivity - even if the underlying choice and motivation remains fundamentally moral. Further, the alarming looking numbers involved in risk calculation and the fact that the meaning of statistics, particularly their implications for the individual, are not obvious to most people is an additional benefit considered functionally. And in an age where moralizing and prohibition are discredited – particularly in relation to alcohol – their representation as apparently incontestable fact is an additional attraction of risk

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[12] See Adam Burgess, "The Politics of Health Risk Promotion. 'Passive Drinking': A 'Good Lie' Too Far?" (2009) *Health Risk and Society* 11(6) 527-540.

[13] Institute for Alcohol Studies, "Like Sugar for Adults: the effects of non-dependent parental drinking on chidren and families", available at http://www.ias.org.uk/uploads/pdf/IAS%20reports/rp28102017.pdf accessed 11 November 2017.

[14] See for example, Marjana Martinic and Barbara Leigh, "To each his own: culture, risk and the transgression of boundaries" in *Reasonable Risk* (Brunner Routledge, 2004) 23-52, and David Wagner, "Temperance and the Construction of risk" in *The New Temperance* (Westview Press, 1997) 35-66.

language.[15] Such use of risk as alarm was common in the 1990s and 2000s around a range of new technologies and foods, including mobile phones and genetically modified crops, leading to risk becoming synonymous with media 'scares' (ref).

Why is there a resort to the language rather than the substance of risk when it comes to alcohol? Part of the problem is that it remains difficult to communicate risk meaningfully. We routinely hear that the consumption or exposure to something raises our risk by X%, but this can mislead us: population risk reduction doesn't equate to changes in our individual levels of risk. Your reduction of wine by two glasses a day may be life saving, mine may make no difference to my life expectancy. But across the population reduction by two glasses a day would make a predictable difference. At the individual level it is still valuable to compare risks and consider their relative importance to us in the context of other risks we take, but it is limited. Despite the difficulties involved in communicating risk, great strides have been made. The BBC now uses natural frequencies to explain risk, looking at what a particular increase in risk exposure might mean in a population of 100 people.[16] This enables people to consider both the absolute and relative aspects of the risk. An excellent tool for comparing the risks of different activities is micromorts – a one in a million chance of mortality - popularised by David Spiegelhalter.[17] All human activity – being alive – involves risk, and it's a matter of deciding collectively and individually which we choose.

The real problem of a risk approach for public health authorities though is that it does not seem as likely to induce behaviour change as starker, more alarming health messages. It's easy to see why a bludgeon looks more likely to leave a mark but it's misleading. There is little evidence for the motivating effects of fear, but more specifically in relation to middle class attitudes to drinking, they're clearly not owing to an absence of simplified health messages. Experience and social realism point to the need for the nuanced and practical approach of a risk perspective. They tell us that risk elimination is not really on the table. Not allowing your child to sample alcohol is likely to mean they'll try it elsewhere under less control and develop less ability to recognise and control its effects, replacing one risk with another that may be less acceptable.

Ideally, we would develop an alcohol-free alternative as David Nutt is trying to do[18], but it will be a difficult task to replicate the pleasures of various forms of alcohol appropriate to the settings in which we enjoy them and lower alcohol alternatives have had very modest success. Harm reducing alternatives comparable to the effective smoking substitute of vaping do not and may never exist. Ways forward lie in encouraging a range of smaller scale habit altering devices for those who want to be in a lower risk group. We live in an era of 'nudging'; smartly modifying our environments to encourage better outcomes and reduce harm, covered extensively in the pages of this journal.[19] The promotion of 'feasible interventions for minimizing harm' have a longer history from a harm reduction perspective.[20]The Behavioural Insight Team recently released results from 130 controlled

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[15] Burgess, supra, note 8.

[16] Click through the stages of this graphic for an example, BBC, "Risk in 13 clicks", available at http://news.bbc.co.uk/1/hi/magazine/7937382.stm Accessed 12 November 2017.

[17] David Spiegelhalter, "The Power of the Micro-mort", (2014). *BJOG: An International Journal of Obstetrics & Gynaecology* 121(6): 662-663. Available at http://onlinelibrary.wiley.com/doi/10.1111/1471-0528.12663/pdf

[18] Neil Brady, "Can David Nutt wean us off the demon drink with his alcohol substitute?" The Guardian (2014) available at https://www.theguardian.com/science/blog/2014/feb/27/david-nutt-drink-alcohol-substitute-safer-intoxicant accessed 13 November 2017.

[19] See for example European Journal of Risk Regulation, special issue 3(1) 2012.

[20] See Gerry Stimson et al, "Feasible interventions for minimizing harm" in *Drinking in Context* (Routledge 2007) 173-192.

trials; experiments into finding smart ways to encourage individuals to make better choices in a host of areas from encouraging consumption of sugar-free drinks to safer driving.[21] There is plenty of scope for developing comparable initiatives in relation to drinking.

For heavy drinkers the proposal to have alcohol-free days may be a useful one in encouraging more conscious behaviour generally despite the lack of a scientific basis to allowing the liver 'time to recover'. But there are many more simple nudges that could usefully be suggested along the same lines, such as putting back the time of the first glass of wine later into the evening or buying half bottles to limit the temptation to finish a full bottle. A helpful role can even be played by vendors, such as the expansion in the range of half bottles of wine available that is already taking place. Likewise, greater awareness of the increasingly large measures of wine that have become standard.

There is growing evidence for the effectiveness of small nudges for people who want to self-regulate, whereas seeking ways to present information to alarm people into abstinence is likely to lead to nothing but a loss of trust and credibility in public health assessments. Risk calculation simply can't tell people that they have to stop drinking or else, and history tells us that nothing can do that. Continuing to twist the long term relative indicators of risk into blunt instruments of toxification and extended but implausible harm pointlessly undermines the nuanced adult conversation about alcohol risk that has taken a century to come about and the behavioural choices that might actually emerge from it.

[21] Cabinet Office, "The Behavioural Insights Team update report 2016-17", available at http://www.behaviouralinsights.co.uk/publications/the-behavioural-insights-team-update-report-2016-17/ accessed 12 November 2017.