Excessive alcohol consumption continues to be a societal problem. Effective and sustained alcohol-related behaviour change requires a multi-pronged approach that includes public health campaigns, minimum unit pricing and individual level behaviour change interventions. The key challenge is to ensure that psychological science is at the heart of efforts to maximise the effectiveness of alcohol-related behaviour change interventions.

**Background information**

Despite high-profile public health campaigns and legal restrictions designed to reduce alcohol consumption, alcohol-related admissions to English hospitals increased from 510,800 in 2002–2003 to 1,057,000 in 2009–2010 (NHS Information Centre, 2011). A report for the UK Cabinet Office entitled, ‘Alcohol misuse: How much does it cost?’ (UK Cabinet Office, 2003) estimated that misuse of alcohol cost the UK economy between £18B and £20B, due to its impact on health (e.g. hospital admissions), the economy (e.g. absenteeism), and society (e.g. crime). The harm associated with excess alcohol consumption in the UK is greater than comparable nations. For example, according to the most recently-available figures (for 2010), the rate of chronic liver disease and cirrhosis (conditions that are largely caused by excessive alcohol consumption) in the UK was 10.97 per 100,000 but was 10.15 per 100,000 in nations...
who joined the European Union (EU) before 2004 (WHO, 2012). Beyond this, alcohol is also associated with cancer, divorce, domestic violence, psychiatric admissions, and parasuicide (e.g. Royal College of General Practitioners, 1986).

Consistent with the high rates of chronic liver disease and cirrhosis, UK adults (defined as people aged 15 years and older) are among the highest consumers of alcohol in Europe. Although the amount of alcohol consumed in the UK has fluctuated over the years, it has remained consistently higher than the broader European region (Armitage, 2013). For example, according to the most recently-available figures, in 2009, UK adults were consuming 10.70 litres of pure alcohol per year compared with 10.49 litres of pure alcohol per year in comparable European countries (those who joined the EU before 2004 – WHO, 2012). Despite the fact that drinking in childhood is a key predictor of subsequent use and misuse of alcohol (Hawkins et al., 1997), it is notable that there is a dearth of data on alcohol consumption among children younger than 15 years (Armitage, 2013).

The current approach to moderating the general public’s alcohol consumption consists of legal restrictions on the availability of alcohol alongside public health campaigns designed to promote ‘responsible’ drinking:

- The sale of alcohol is licensed and restricted to over-18s only.
- Until January 2016, the UK government recommendations defined ‘responsible drinking’ as women not regularly exceeding 2–3 units alcohol/day and men not regularly exceeding 3-4 units alcohol/day. A unit is defined as 8 grams/10ml of pure alcohol, which is equivalent to half a pint/300ml of ordinary strength beer, a 125ml glass of wine at 9 per cent strength or one measure/25ml of spirits. Note that the concept of ‘standard drinks’ differs between countries.
- Since January 2016, the UK government recommended that both men and women should not regularly exceed 14 units of alcohol per week.

In England, 30 per cent of adults exceeded the pre-2016 government responsible drinking levels (General Household Survey, 2004) and it is likely that the January 2016 adjustment to UK government recommendations will mean a greater proportion of adults are classified as exceeding responsible drinking limits.

Underlying the UK Government’s advice about ‘responsible drinking’ are other concerns such ‘binge drinking’, ‘hazardous drinking’, ‘drunkenness’, ‘drinking to get drunk’, ‘drinking too much’, ‘heavy episodic drinking’, and ‘single-session drinking’. However, none of these terms have accepted public health or clinical definitions for adults or children.

**The challenge**

Despite wide dissemination of what constitutes ‘responsible drinking’ (e.g. every alcoholic drink served in portable containers is required to contain information about government-recommended responsible drinking levels), rates of alcohol-related morbidity and mortality continue to rise (NHS Information Centre, 2011).
The evidence – so what do we know?

Unit pricing

Woodhouse and Ward (cited in Woodhouse, 2017) report the result of a government consultation that recommended a minimum price of 45p per unit, which was predicted to reduce: (a) alcohol consumption by 3.3 per cent; (b) crime by 5240 per year; (c) alcohol-related hospital admissions by 24,600; and (d) mortality by 714 deaths per year (after ten years).

However, consideration of increasing the price-per-unit of alcohol for England, Wales and Northern Ireland was abandoned in July 2013. In Scotland, the 'Alcohol (Minimum Pricing) Act' was passed in June 2012, but (as of July 2017) has yet to be implemented due to legal challenges from industry. On 27 June 2017, the Welsh government announced plans to introduce new legislation to set a minimum price for alcohol based on a formula that takes into account the strength and volume of alcohol in packaged products containing alcohol.

Advertising

Another means of influencing alcohol consumption concerns the regulation of advertisements via the Advertising Standards Authority’s Code of Broadcast Advertising, which specifies 16 rules designed to prevent advertisements encouraging excessive alcohol consumption. However, evidence suggests that the majority of consumers perceive many breaches of these guidelines, implying that the current system for regulating advertisements for alcoholic products is lacking (Searle et al., 2014).

The psychology

The evidence reviewed above assumes that people respond automatically and uniformly to policy interventions. In contrast, the psychological evidence shows that people are under-aware of government recommendations in relation to responsible drinking (e.g. Cooke et al., 2010) and base their alcohol consumption on personal experiences (Lovatt et al., 2015) rather than epidemiology-based information. Even when people do feel threatened by alcohol-related information, they seem to be adept at defending themselves from it making them more liable to acting counter-message (e.g. Armitage et al., 2011).

Psychologists have increased awareness and understanding of the kinds of factors that influence behaviour, which can broadly be defined as spanning conscious decision making to unconscious processes, and lack of motivation to problems ensuring strong motivation is translated into relevant action (Armitage, 2015). This work can help identify individuals at whom resources might be targeted as well as the psychological processes that might need to be changed in individual-level interventions in order to bring about reductions in alcohol consumption.

For example, people may lack motivation to drink responsibly because they find health-risk information threatening, which makes them act defensively. Armitage and Arden (2016) have shown how pairing self-affirming statements with health-risk information can help to stop people acting defensively. Exposure to self-affirming statements increased people’s receptiveness to health advice and made them more likely to heed the health-risk information by drinking fewer units of alcohol subsequently.
In contrast, many people are motivated to drink responsibly, but do not act on their good intentions. Armitage and Arden (2012) have shown that getting people to form ‘if-then’ plans (or ‘implementation intentions’, Gollwitzer, 1993) is a good way of ensuring that good intentions to drink responsibly are acted upon and thus lower alcohol consumption. Furthermore, it has been shown that forming ‘if-then’ plans are able to overcome people’s habits thereby tackling some of the unconscious influences on people’s behaviour (Armitage, 2016).

**Psychological interventions**

Current policy approaches to encouraging moderate alcohol consumption are currently limited by political will and legal considerations and so the best solutions in the short-medium term may be in psychological intervention. Two broad approaches are advocated:

- Increasing the potency of current health promotion messages around responsible alcohol consumption by using theory-based approaches, as opposed to ‘common sense’, to design messages (e.g. www.behaviourchangewheel.com)

- Better supporting people who want to consume alcohol in moderation by helping them form ‘implementation intentions’ (e.g. Arden & Armitage, 2012).

**Recommendations**

- Work with a broader range of interest groups and use the highest quality available evidence to encourage moderate alcohol consumption. Graham Stringer (Blackley and Broughton) (Lab): ‘Governments of all political colours have made a mistake in involving campaign groups and pretending that they are scientific experts…’ Westminster Hall Debate: Alcohol Consumption Guidelines, 28 June 2016.

- Develop widely-accepted clinical/public health definitions of concepts such as ‘binge’, ‘heavy’, ‘problematic’, and ‘hazardous’ drinking. Lack of clarity and consistent terminology (e.g. ‘binge’, ‘heavy’, ‘problematic’, ‘hazardous’) allows individual drinkers to convince themselves that the health message does not apply to them personally. New scientific work tracing the harms associated with such specific forms of drinking might help to inform public health campaigns.

- Invest in a programme of behavioural sciences research dedicated to improving both policy-level (e.g. public health campaigns, unit pricing) and individual-level brief low cost psychological interventions that will bring about sustained reductions in alcohol consumption. Including but not limited to:
  - Develop appropriate guidance for public alcohol consumption beyond the concept of ‘responsible drinking’ to increase the impact of public health campaigns;
  - Reduce the availability of alcohol (e.g. increasing unit pricing, decreasing prominence in retail outlets) to reduce alcohol consumption;
  - Improve the policing and scrutiny of advertisements for products containing alcohol; and
  - Conduct further research into the potential impact of psychologically-informed strategies to improve the impact and the reach of public health interventions.
References


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