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**Summary (50 words)**

Internet based interventions can reach large numbers of those in need of help and advice about their drinking and reduce levels of consumption. While many systematic reviews suggest that this is an effective mechanism to promote behavioural change, the effective components are unclear. User involvement is needed for effective design.

**Commentary (690 words)**

Bertholet and colleagues (2015) report on a RCT testing the efficacy of an internet based intervention addressing hazardous alcohol use. Like many computerised interventions the researchers employed a scatter gun (multiple methods) technique; normative feedback was provided together with information about risk and recommendations on cutting back. All participants in the trial were either drinking 14+ drinks/week OR 6+ drinks on a single occasion at least once/month (Binge) OR had an AUDIT score of 8+. The intervention significantly reduced the volume of alcohol consumed and AUDIT score at six months, but not the prevalence of binge drinking.

The study adds to the growing body of evidence supporting internet based screening and interventions addressing hazardous alcohol consumption [1-3], in particular those that target young people [4]. While most reviewers would agree that this approach is effective, the sheer variation in study populations and the content of the interventions themselves means that precise recommendations are difficult to make. Bertholet et al.’s study has a broad inclusion criteria, which may well reflect the wider population of problematic drinkers, but does not allow further refinement of the intervention for specific types.

Computerised screening and brief intervention is not a new approach, I evaluated “Blip!” a drugs education programme built for the BBC Micro, almost 20 years ago. Today, advances in technology permit a hitherto unobtainable level of detail with regard to exploring how participants interact with our materials. We are able to note when and where websites are accessed, how long participants stayed on specific pages and where they visited next; all of which ought to allow further refinement of the intervention. Unfortunately these details are seldom reported, perhaps due to the sheer volume of data generated. While the ‘effective ingredients’ of web based interventions remain unclear, nevertheless, such interventions are effective. Future studies should take advantage of the rich vein of user data to begin to unpick exactly what works and what doesn’t work.

Web based interventions can be easily customised to suit the needs of specific groups, and the role of patient / public involvement in the design and implementation of these materials should not be underestimated. Our ongoing trial of a web based intervention for 14-17 year olds [5] has been shaped by user involvement at all stages of the design process, and has been key to its acceptability among our target group. Engagement is the first step on the road to change.

Recruitment and management of trial participants online has a number of advantages – participants are able to access study materials, data is collected and delivered to the researcher clean and ready to crunch; however, concerns have been raised as to the reach of such methods – internet access is a
requirement, and in some cases mobile device ownership is also a pre-requisite to participation. While
the prevalence of smartphone ownership is on the increase, it is by no means universal, and there is
a danger that those who may benefit most from help and advice may not be best placed to receive it.
However, the use of this technology also helps widen the reach of clinical services, allowing important
efficiency savings to be made in case management, appointment keeping and relapse prevention.

There is a danger that as researchers we may strive to integrate the latest technology into the design
of our materials and methodologies. We would do well to remember that ‘pen and paper’ and ‘face-
to-face’ programmes have had great success in reducing consumption and harm. Likewise, ‘old tech’
approaches such as SMS messaging, have also proved effective at reducing levels of consumption [6],
and may be more effective than smartphone based programmes (at least in smoking cessation) [7].

Internet based identification and brief advice has an important role to play as part of a stepped care
approach for the management of alcohol use disorders, making effective interventions available en
masse for those who are known to benefit from this approach, and facilitating access to services for
those with more complex needs. The use of this technology ought to be of great benefit to patient,
clinician and researcher, but it has its limitations, and so our recommendation: proceed, with caution.

screening and brief intervention for reducing levels of alcohol consumption: a systematic
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