

# Negotiating the ‘grey area between normal social drinking and being a smelly tramp’: a qualitative study of people searching for help online to reduce their drinking

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## Abstract

**Introduction and aims** Delivering brief interventions for hazardous and harmful drinking on the Internet may broaden the availability of services and overcome some barriers to accessing help in person. The Down Your Drink (DYD) website, an extended brief intervention, attracted a large number of people looking to reduce their drinking. The aim was to explore the experiences of this e-help seeking population.

**Method** Semi-structured interviews were conducted with participants in the DYD trial – an online trial of the effectiveness of DYD compared with an information-only website. Interviewees were asked how they came across the DYD website. Interviews were recorded and transcribed verbatim. Data were analysed by a multidisciplinary team using detailed thematic analysis.

**Results** Eighteen participants were interviewed. Most interviewees perceived their drinking to be a problem, which led them to search the Internet and register for the DYD trial in order to gain access to an intervention to help them reduce their drinking. The type of help required varied from information on the harms of drinking to help with a recognized problem. The privacy of the Internet was perceived as important when searching for help with drinking, as this avoids the stigma and embarrassment associated with help seeking in person. Almost all interviewees perceived a lack of services both online and offline for people wanting to moderate their drinking.

**Conclusion** There is a perceived gap in services for hazardous and harmful drinkers wanting to reduce their drinking which could be addressed using online interventions.

## Introduction

Using the Internet to deliver brief alcohol interventions combines the scalability of a public health approach, with the capacity to provide a personalized, interactive intervention.<sup>1,2</sup> Internet-based, self-help interventions can be delivered at a population level and are intended to broaden the base of treatment by extending the range of services available to hazardous and harmful drinkers<sup>3</sup> (defined by the World Health Organization (WHO) as people drinking above-recommended limits at risk of experiencing harm, or currently experiencing harm, respectively, but not exhibiting symptoms of dependence<sup>4</sup>) and potentially tackling some of the barriers to accessing help in person. Access to the Internet across the developed world is high, with 89% penetration in Australia, 84% in the United Kingdom and 79% in North America.<sup>5</sup> In 2013, 69% of Internet users in Britain reported using it to access information on health.<sup>6</sup> Benefits of online interventions include simultaneous access by large numbers of people at any time of day or night, convenience of access, particularly for people living in remote areas and flexibility in the timing and length of exposure. The privacy and anonymity of the Internet are thought to be particularly important, with stigma and embarrassment known to impede formal (in person) help seeking for alcohol problems.<sup>7–10</sup> Studies investigating the effectiveness of online brief alcohol interventions have proliferated in recent years,<sup>11–14</sup> with findings tentatively suggesting their effectiveness at reducing alcohol intake although studies are limited by small sample sizes, short-term follow-up and use of unsuitable measures of central tendency.<sup>13</sup> In addition, most research focuses on brief normative feedback interventions for students, with only a few effectiveness studies of extended behavioural interventions aimed at adults in the general population, such as *Minder Drinken* (also known as *Drink Less*), developed in the Netherlands<sup>15</sup> and the *Alcohol Help Centre*, developed in Canada, which was found to result in greater reductions in highest number

of drinks on a single occasion, when compared with a brief online feedback intervention (*Check Your Drinking*).<sup>16</sup>

One of the first extended online alcohol interventions freely available over the Internet was the *Down Your Drink* website (DYD [www.downyourdrink.org.uk](http://www.downyourdrink.org.uk)), which offers help and advice on reducing alcohol intake and is based on the principles of motivational interviewing, behavioural self-control, cognitive behavioural therapy (CBT) and relapse prevention.<sup>17</sup> DYD was accessible as part of a randomized trial<sup>18</sup> from February 2007 until the end of May 2009, where people identified the website by searching the Internet for help to reduce their drinking. The trial found no difference in past week drinking between participants accessing DYD and a basic information website on the harms associated with consuming alcohol above-recommended limits. Both groups of participants, however, reduced their drinking by 20 UK units per week (equivalent to two bottles of wine), which may have been due to reactivity of assessment, regression to the mean or natural recovery.<sup>18</sup> On completion of the trial, qualitative interviews were conducted with trial participants to explore people's experience of using the websites and taking part in the trial. These interviews found that a variety of services and resources were accessed for help in addition to the trial websites which provides another explanation for the equivalent reduction in alcohol consumption in both groups.<sup>19</sup> These interviews also provided an insight into the experiences of online help seeking among this previously unstudied group of drinkers.

The DYD trial attracted a novel sample of 'e-help seekers', who differed from conventional in person help seekers and non-help seekers in a number of ways. Unlike non-help seekers, DYD participants could be seen as demonstrating some motivation to change their drinking by virtue of the fact they self-recruited to the trial (i.e. to access help or information on reducing their drinking). Yet, despite seeking help with their drinking, DYD participants also differed from conventional help or treatment seekers by exhibiting low levels of

dependence [Leeds Dependence Questionnaire mean 9 (SD 6)<sup>20</sup>] and fewer alcohol-related problems [Alcohol Problems Questionnaire mean 7 (SD 4)<sup>21</sup>]. Most people drinking at hazardous and harmful levels do not seek help with their drinking,<sup>22</sup> which makes these e-help seekers a novel group whose needs are not well understood. This study focuses on people's experiences of searching for help with their drinking online.

## Methods

### Study design and sample

This was a qualitative study using semi-structured interviews. The study was conducted from a critical realist perspective,<sup>23,24</sup> where reality 'exists independently of those who observe it but it is only accessible through the perceptions and interpretations of individuals' p. 21.<sup>25</sup>

Ethical approval was granted from University College London (UCL) and University of York research ethics committees. Interviews were conducted at UCL, at the University of York and over the telephone according to the interviewees' preference. Interviewees were recruited via the DYD trial newsletter and a banner on the DYD home page. All interviewees had taken part in the DYD RCT and as such, were aged 18 or over, drinking above-recommended limits, looking for information on their drinking and had received access to either the intervention or control website. Potential interviewees were emailed an information sheet and consent form following an expression of interest in taking part. Interviewees were offered £25 as an acknowledgement of their time and up to £50 for travel expenses.

### Data collection

Eighteen semi-structured interviews were conducted between September and December 2009. The original topic guide consisted of three broad topic areas (Box 1). This study focuses on seeking help over the Internet. Participants were asked to talk in their own words with the topic

guide providing prompts as necessary. An iterative approach was taken, with interview data used to develop and refine the topic guide. The interviews were digitally recorded and transcribed verbatim. Each transcript was checked for accuracy and identifying information was removed. Field notes were taken directly after each interview to record non-verbal information; these provided details of the context of the interview and were used to inform the interpretations and analysis.

### Data analysis

Data from telephone and in-person interviews were combined after detailed examination as there were no perceived qualitative differences between them. The data were analysed using a detailed thematic analysis.<sup>26</sup> Following familiarization with the data through reading the transcripts and listening to the interview recordings several times, areas of interest and potential codes were noted. Initial codes were generated for as much of the data as possible and applied systematically to the corresponding text in the transcripts using Atlas.ti 6. The codes were then organized into broader themes and subthemes. A proportion of transcripts were read and coded by two experienced researchers (EM and FS), both with backgrounds in health services research, e-health and qualitative research. Discussion helped refine the coding framework and resulted in additional themes. This inductive, data-driven approach to analysis is suited to the exploration of experiences of a previously unstudied population.<sup>26</sup> Themes were reviewed by re-examining corresponding data extracts. Uncoded data were examined for disconfirming evidence.

## Findings

### Participant characteristics

A total of 18 people were interviewed: 10 women and eight men. They had an average age of 43 years, ranging from 25 to 67 years. Most interviewees had a university degree

**Box 1:** Topic guide

**Introduction**

Thank interviewee for taking part in the research and introduce myself. Make sure they are comfortable and able to stay for up to 1 h. Remind interviewee that they are here voluntarily and free to leave at any point. Confirm completion of consent form. Start recording.

Opening statement:

The purpose of this research is to hear your experience of using the Down Your Drink website and taking part in the online trial. There are no right or wrong answers, I just want to hear your opinions. The online trial you were involved in will tell us whether, on the whole, people using Down Your Drink reduced their drinking over time or not. But it tells us nothing of your individual experience of using the website. We think this information will help improve the future development of websites and online research studies.

Do you have any questions at this point?

1. Can you tell me a bit about how you came across the Down Your Drink website?

[Objectives]

- How did you find DYD and what were your reasons for looking for it?
- What are the advantages and disadvantages of the Internet setting?

2. Can you tell me what you thought of the Down Your Drink website?

[Objectives]

- Did DYD meet your expectations?
- Which features of DYD were helpful or unhelpful?
- Which features could be improved, added or removed?
- Did you use any other resources to cut down on your drinking?

3. Did you realise that you were part of a research study? What did you think about that?

[Objectives]

- What were your reasons for entering the trial?
- How did you respond to the needs of the trial?
- How would you have improved the conduct of the trial?

4. Is there anything else you'd like to talk about that we haven't covered?

5. Is there anything you would like to ask me?

Close.

Thank interviewee for their time and valuable contribution, turn-off digital recorder. Provide the participant with reimbursement (obtain signature) and complete travel expense claim form.

qualification or above (11/18), two had A' levels or equivalent, four had O' levels or equivalent, and one had 'Other Qualifications'. Most interviewees described themselves as 'White British' (16/18), one was 'Other White' and one was 'Black Caribbean'. Interviewees consumed between 28 and 103 units of alcohol per week, with a median of 56 (where 1 UK unit = 8 g ethanol). Most interviewees were interviewed in person in London ( $n = 10$ ), two were interviewed in person in York, and six were interviewed over the telephone.

Interviews typically took around 1 h (range 25–105 min), with face-to-face interviews taking

on average 11 min longer than the phone interviews (56 vs. 45 min, respectively).

#### The experience of the e-help seeker

Three main themes were apparent in relation to seeking help online about drinking: (i) problem recognition, (ii) type of help wanted and (iii) barriers to formal help seeking, including stigma and gaps in services.

#### *Problem recognition*

A range of motives led interviewees to search for help online. Most interviewees had come to

the realization that their drinking was a problem and that they wanted to try and cut down. In some cases, people indicated their search was driven by the public health message of sensible drinking. A few interviewees, however, were uncertain whether they had a problem with alcohol and wanted to know what constituted normal social drinking. Factors cited in relation to this uncertainty included peers drinking similar amounts without apparent concern, or doctors advocating the health benefits of 'a couple of glasses of red wine a day'. (Ppt. 12 Male 67, 47 units/week).

I was kind of at that point just kind of desperate to find something really, that would give me more information as to what is considered to be normal drinking, and what is considered to be very harmful drinking. A lot of my friends in [place] do tend to drink just how I drank, so... there was a bit of, oh well... I drink sometimes less than some of my friends and how comes the alcohol isn't affecting them how it's affected me? (Ppt. 2 Female 25, 48 units/week)

Although concerned about their drinking, a few interviewees were afraid of what it would mean to acknowledge a problem with alcohol as they viewed having an alcohol problem as synonymous with being an alcoholic. This led to some confusion, as the interviewees did not consider themselves 'alcoholics'.

I've always looked for what people consider too much to drink, whether in conversations or... like with the doctor, or on there [DYD] ... because, I think we do have this hope, because you do not see yourself as an alcoholic but you've come to the point where you realise that you can't do without it, so therefore you must be. (Ppt. 11 Male 67, 87 units/week)

#### *Type of help wanted*

The different motives for searching online meant there were differences in the type of help required. Interviewees who were uncertain whether alcohol was a problem for them wanted to determine whether the amount they were drinking was within recommended limits and to compare their drinking with others. Some interviewees wanted further information on what

constituted harmful drinking, convincing evidence of the associated harms, and help to monitor their drinking to prevent a problem materializing.

And it [DYD] kind of had what I was looking for, which was advice and... kind of a monitor diary type function. (Ppt. 3 Male 44, 92 units/week)

I was trying to spot and stop potential problems... I thought, no, it is creeping up a bit and there are a couple of times when we've been out when I've had too much, more than I'm comfortable with and let's nip it in the bud. (Ppt. 8 Female 46, 72 units/week)

Interviewees, who recognized that their drinking was as a problem, wanted help and advice on cutting down. They wanted something to help them think about their drinking and reassurance that they were not alone; however, they were not sure exactly what type of help they needed or whether it existed.

What were you looking for?

I think probably like reassurance that perhaps, I think finding it [DYD] probably made me think, like you know, thank god it's not just me who has this. (Ppt. 4 Female 30, 39 units/week)

I didn't really know at that stage what I wanted, you know; I knew that I needed or wanted to do something that helped me think about my drinking. (Ppt. 6 Female 60, 38 units/week)

#### *Barriers to formal help seeking*

It was clear that the privacy provided by the Internet was important when searching for help with drinking. The stigma and embarrassment associated with seeking help for an alcohol problem were apparent in this sample of hazardous drinkers. For many, their drinking behaviour was seen as a very personal problem and they did not want to involve other people when looking for help to cut down. Difficulties talking about their drinking face-to-face, the embarrassment, admission of weakness/not coping and the fear of people finding out how much they drank meant a reluctance to seek

help in person from a doctor or alcohol worker. The quotation below is from an interviewee who had seen an advertisement in their doctor's surgery and local community centre for people concerned about their drinking and explains why they would not have attended.

I think I'm not the only type of person that would sort of be like, I might bang into other people and be a bit embarrassed. I actually wouldn't acknowledge I was [seeking help], or what is it you say, you know, airing your dirty washing in public. (Ppt. 9 Female 40, 47 units/week)

It's all about being impersonal, frankly... [searching for help online] cause this is very, very difficult to come here and discuss this. Umm... 'cause basically what it comes down to is like admitting that you've got a kind of alcohol problem. (Ppt. 3 Male 44, 92 units/week)

Another barrier to accessing formal alcohol services was the perceived gap in service provision for people wanting to moderate rather than abstain from drinking. The first treatment option that came to mind after recognizing the need for help was Alcoholics Anonymous (AA). It also appeared to be the only option available or known to many interviewees. This added to the stigma of help seeking as AA was perceived as catering for 'alcoholics'. Only one interviewee had actually attended the meetings. The others felt the programme was not appropriate for them, that their problem was not severe enough and that they did not identify with the types of people AA targeted.

I mean first thing is this kind of... almost "grey" area between normal social drinking and being a smelly tramp in the street... You know, if you've got a problem with drinking then it doesn't really occur to me that there's a spectrum of stuff along there. (Ppt. 3 Male 44, 92 units/week)

When I looked at things like Alcoholics Anonymous and I thought, well, I don't have that problem, I haven't had that problem, I haven't had that problem, and actually I don't want to give up completely and I don't want to go to a group. (Ppt. 8 Female 46, 72 units/week)

Interviewees wanted help suited to their level of need, that did not interfere with their everyday

lives, and that was personal to them. There was also a concern that by attending a service geared towards the more dependent drinker that this would trivialize their problem.

The reason, [I didn't go to AA], I think probably the stigma that's attached to it. And it's not because I think I'm any better than anybody else, but I think I was probably concerned that they would do the same that that doctor had done to me, and say that I was actually okay, because there was alcoholics there. So in comparison with them I might have been drinking hardly anything, although to me, I know that it is too much... I didn't want them to tell me not to drink, because I did want to drink, that's not what this is all about. So it just didn't seem to be the right thing. But it was the only place I knew where to go and get help. (Ppt. 9 Female 40, 47 units/week)

## Discussion

These interviews provide a unique insight into the online help seeking experience of people who had searched the Internet for help with their drinking and taken part in an online trial to gain access to the online intervention, *Down Your Drink*. As this is a previously unstudied population, the findings will be discussed in light of the large qualitative literature on barriers and facilitators to conventional help seeking among dependent drinkers.

Most of the interviewees in this study were searching for help online, having recognized a problem that they wanted to address. Problem recognition, an awareness of the perceived severity of the problem, is an established antecedent to seeking or entering treatment in studies of dependent drinkers<sup>7,9,27-29</sup> and constitutes the first or central stage in several models of professional help seeking for alcohol problems.<sup>27,28,30</sup> This study shows how a similar process of help seeking also occurs in hazardous and harmful drinkers. The types of problems that led to problem recognition were not fully explored in this study, however, would form an interesting area of investigation for future research with e-help seeking populations. Whilst problem recognition was a precursor for searching for help online by the

majority of interviewees in this study, there were a few interviewees who were unsure whether their drinking was a problem, with peers drinking similar amounts without concern, and confusion around the advocated benefits of drinking and the sensible drinking message. Interviewees in this study were consuming between 28 and 103 UK units a week, which may explain the heterogeneity in their motives for e-help seeking. Around 50 000 people accessed the DYD website during the 8-month pilot trial period (of which 7% consented to take part in the trial to gain access to the site),<sup>31</sup> thus demonstrating the high demand for information and help to reduce alcohol intake. A spectrum of resources, from information on sensible drinking through to extensive behaviour change programmes, such as DYD, should be widely available online to meet the varied need and allow people to access help at a much earlier stage with their drinking.

Participants indicated that the stigma associated with seeking help to reduce drinking was one of the reasons why they searched for help over the Internet. Stigmatization is a well-documented barrier to formal help seeking in dependent drinkers,<sup>7–10,32–34</sup> where ‘people fear being labelled alcoholics and subsequently experiencing loss of status and discrimination’ p. 105.<sup>35</sup> Interviewees in this study experienced stigma to self, such as embarrassment, perceived stigma from others, for example not wanting to ‘air dirty laundry’, or reported stigma related to treatment, for example viewing AA as catering for ‘alcoholics’. Cunningham *et al.* found that stigma associated with the label of ‘alcoholic’, in addition to embarrassment and pride, presented a substantial barrier to accessing treatment in dependent drinkers who changed their drinking without treatment or maintained their level of drinking.<sup>7</sup> One of the key advantages of the Internet as a platform for accessing help is that it provides a private setting that mitigates some of the barriers to help seeking, allowing people to seek help at an earlier stage of their drinking, as evidenced by interviewees who were unsure whether their drinking was a

problem and wanted further information on the recommended limits.

The perceived lack of services for help to moderate, as opposed to abstain from drinking, was almost unanimous. Alcoholics Anonymous was often the first and only service that came to mind when considering help with drinking, which added to the stigma surrounding help seeking as AA was viewed as catering for ‘alcoholics’ and focussed on achieving abstinence. This finding is in line with research on dependent drinkers, where negative stereotypes surrounding treatment services<sup>34,36</sup> and their focus on achieving abstinence<sup>33</sup> prevent people from accessing help. Interventions for reducing alcohol intake in people drinking at hazardous and harmful levels were not known to the interviewees in this study. In England and Wales, the National Institute for Health and Care Excellence (NICE) advocates brief advice for hazardous and harmful drinkers, followed by extended motivational brief interventions as part of a stepped care approach.<sup>37,38</sup> Brief advice and extended brief interventions can be delivered online,<sup>11–13,18,39</sup> which not only benefits the individual who can access help appropriate for their level of need, without the stigma of accessing help in person, but also benefits the service provider by providing potentially effective and cost-effective interventions when resources are scarce and practitioner time is limited. This approach is already successfully implemented in UK health-care settings with online CBT provided to patients with mild and moderate depression (Beating the Blues) and panic or phobia (FearFighter), as advocated by NICE since 2008.<sup>40</sup> Efforts are needed to develop extended online interventions for people drinking at hazardous and harmful levels, such as DYD, and to evaluate their effectiveness in a range of pragmatic settings.

### Strengths and weaknesses

The findings from these interviews provide an insight into the experience of people searching the Internet for help to reduce their drinking. The topic guide served as a prompt rather than a ridged guide, which allowed participants to

talk about issues that were important to them and led to the themes presented in this study. The inductive approach to analysis meant that data were not analysed according to a pre-conceived framework; rather, themes were identified by the researchers and codes developed from these. Further research could focus on informing a model of e-help seeking for alcohol intake; as this was not the aim of this study the data could not reliably inform such a model. This study intended to recruit a purposive sample of interviewees who varied by gender, education and level of alcohol consumption; however, this was not possible due to the small number of participants who volunteered to take part. Nevertheless, the characteristics of the interviewees in this study mirrored those of the wider DYD participant population<sup>18</sup> and as we appeared to reach saturation, the findings are likely to transfer to a slightly broader population of people seeking help online to reduce their drinking. Some participants chose to be interviewed by telephone for geographical reasons when unable to access either of the chosen locations. Greater transferability was achieved by having a wider geographical spread of interviewees. Telephone interviews have been criticized for the absence of visual cues, resulting in a lack of informal communication, rapport, contextual information and the possibility of misinterpretation. However, evidence to support these criticisms is limited and their impact on the quality of data is unknown.<sup>41</sup> Finally, it is important to remember that the interviewees in this study were self-selected, in that they responded to an advertised opportunity to provide feedback on their experience of using the DYD website and participating in the trial. It is likely that many potential interviewees did not want to jeopardize their anonymity by talking to a member of the research team. The discussion of alcohol problems is a sensitive topic, which clearly emerged during the interviews, with one interviewee admitting it was extremely hard for them to attend as nobody knew they were seeking help. Some interviewees reported participating out of gratitude to the DYD team, a

motivation which is likely to lead to bias in favour of the DYD website; however, these data are not the focus of this study.

## Conclusion

The interviewees in this study reported a perceived lack of services both online and offline for help with moderating their drinking. Freely available, evidenced-based online interventions for people drinking at hazardous and harmful levels, from screening and brief advice through to CBT and relapse prevention, would help widen the availability of services and provide a private setting for accessing help, thereby avoiding the stigma associated with help seeking.

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## Conflict of interests

No conflict of interests have been declared.

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## References

- 1 Copeland J, Martin G. Web-based interventions for substance use disorders: a qualitative review. *Journal of Substance Abuse Treatment*, 2004; **26**: 109–116.



- 2 Moyer A, Finney JW, Swearingen CE, Vergun P. Brief interventions for alcohol problems: a meta-analytic review of controlled investigations in treatment-seeking and non-treatment-seeking populations. *Addiction (Abingdon, England)*, 2002; **97**: 279–292.
- 3 Kypri K, Lee N. New technologies in the prevention and treatment of substance use problems. *Drug and Alcohol Review*, 2009; **28**: 1–2.
- 4 Babor TF, Higgins-Biddle JC. *Brief Intervention for Hazardous and Harmful Drinking: A Manual for Use in Primary Care*. Geneva: World Health Organisation: Department of Mental Health and Substance Dependence, 2001.
- 5 Internet World Stats: Usage and Population Statistics. Internet usage statistics: the Internet big picture. June 30, 2012; Available at: <http://www.internetworldstats.com/stats.htm>, accessed 30 April 2014.
- 6 Dutton WH, Blank G. *Cultures of the Internet: The Internet in Britain*. Oxford Internet Survey 2013. Oxford: University of Oxford, Oxford Internet Institute, 2013.
- 7 Cunningham JA, Sobell LC, Sobell MB, Agrawal S, Toneatto T. Barriers to treatment: why alcohol and drug abusers delay or never seek treatment. *Addictive Behaviors*, 1993; **18**: 347–353.
- 8 Fortney J, Mukherjee S, Curran G, Fortney S, Han X, Booth BM. Factors associated with perceived stigma for alcohol use and treatment among at-risk drinkers. *Journal of Behavioral Health Services and Research*, 2004; **31**: 418–429.
- 9 Jordan CM, Oei TP. Help-seeking behaviour in problem drinkers: a review. *British Journal of Addictive Behaviors*, 1989; **84**: 979–988.
- 10 Roizen R. *Barriers to Alcoholism Treatment*. Berkeley, CA: Alcohol Research Group, 1977.
- 11 Rooke S, Thorsteinsson E, Karpin A, Copeland J, Allsop D. Computer-delivered interventions for alcohol and tobacco use: a meta-analysis. *Addiction (Abingdon, England)*, 2010; **105**: 1381–1390.
- 12 Carey KB, Scott-Sheldon LA, Elliott JC, Bolles JR, Carey MP. Computer-delivered interventions to reduce college student drinking: a meta-analysis. *Addiction (Abingdon, England)*, 2009; **104**: 1807–1819.
- 13 Khadjesari Z, Murray E, Hewitt C, Hartley S, Godfrey C. Can stand-alone computer-based interventions reduce alcohol consumption? A systematic review *Addiction (Abingdon, England)*, 2011; **106**: 267–282.
- 14 Riper H, Spek V, Boon B, Conijn B, Kramer J, Martin-Abello K, *et al.* Effectiveness of E-self-help interventions for curbing adult problem drinking: a meta-analysis. *Journal of Medical Internet Research*, 2011; **13**: e42.
- 15 Riper H, Kramer J, Smit F, Conijn B, Schippers G, Cuijpers P. Web-based self-help for problem drinkers: a pragmatic randomized trial. *Addiction (Abingdon, England)*, 2008; **103**: 218–227.
- 16 Cunningham JA. Comparison of two internet-based interventions for problem drinkers: randomized controlled trial. *Journal of Medical Internet Research*, 2012; **14**: e107.
- 17 Linke S, McCambridge J, Khadjesari Z, Wallace P, Murray E. Development of a psychologically enhanced interactive online intervention for hazardous drinking. *Alcohol and Alcoholism*, 2008; **43**: 669–674.
- 18 Wallace P, Murray E, McCambridge J, Khadjesari Z, White IR, Thompson SG, *et al.* On-line randomized controlled trial of an internet based psychologically enhanced intervention for people with hazardous alcohol consumption. *PLoS ONE*, 2011; **6**: e14740.
- 19 Khadjesari Z. *Use of the Internet for the Delivery and Evaluation of Interventions Aimed at Reducing Alcohol Consumption*. PhD thesis: University College London, 2012.
- 20 Raistrick D, Bradshaw J, Tober G, Weiner J, Allison J, Healey C. Development of the Leeds Dependence Questionnaire (LDQ): a questionnaire to measure alcohol and opiate dependence in the context of a treatment evaluation package. *Addiction (Abingdon, England)*, 1994; **89**: 563–572.
- 21 Williams BT, Drummond DC. The Alcohol Problems Questionnaire: reliability and validity. *Drug and Alcohol Dependence*, 1994; **35**: 239–243.
- 22 Cunningham JA, Breslin FC. Only one in three people with alcohol abuse or dependence ever seek treatment. *Addictive Behaviors*, 2004; **29**: 221–223.
- 23 Bhaskar R. *A Realist Theory of Science*. Hassocks: Harvester Press, 1978.
- 24 Robson C. *Real World Research*, 2nd edn. Oxford: Blackwell, 2002.
- 25 Ritchie J, Lewis J, McNaughton Nicholls C, Ormston R. *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. London: Sage, 2014.
- 26 Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 2006; **3**: 77–101.
- 27 Finney JW, Moos RH. Entering treatment for alcohol abuse: a stress and coping model. *Addiction (Abingdon, England)*, 1995; **90**: 1223–1240.
- 28 Orford J, Kerr C, Copello A, Hodgson R, Alwyn T, Black R, *et al.* Why people enter treatment for alcohol problems: findings from UK Alcohol Treatment Trial pre-treatment interviews. *Journal of Substance Use*, 2006; **11**: 61.
- 29 Sobell LC, Sobell MB, Toneatto T. Recovery from alcohol problems without treatment. In: Heather N,

- Miller WR, Greenley J (eds) *Self-Control and Addictive Behaviours*. Botany, NSW: Maxwell MacMillan, 1991: 198–242.
- 30 Saunders SM, Zygowicz KM, D'Angelo BR. Person-related and treatment-related barriers to alcohol treatment. *Journal of Substance Abuse Treatment*, 2006; **30**: 261–270.
- 31 Murray E, Khadjesari Z, White IR, Kalaitzaki E, Godfrey C, McCambridge J, *et al.* Methodological challenges in online trials. *Journal of Medical Internet Research*, 2009; **11**: e9.
- 32 Dawson DA. Gender differences in the probability of alcohol treatment. *Journal of Substance Abuse*, 1996; **8**: 211–225.
- 33 Copeland J. A qualitative study of barriers to formal treatment among women who self-managed change in addictive behaviours. *Journal of Substance Abuse Treatment*, 1997; **14**: 183–190.
- 34 Keyes KM, Hatzenbuehler ML, McLaughlin KA, Link B, Olfson M, Grant BF, *et al.* Stigma and treatment for alcohol disorders in the United States. *American Journal of Epidemiology*, 2010; **172**: 1364–1372.
- 35 Schomerus G, Lucht M, Holzinger A, Matschinger H, Carta MG, Angermeyer MC. The stigma of alcohol dependence compared with other mental disorders: a review of population studies. *Alcohol and Alcoholism*, 2011; **46**: 105–112.
- 36 Livingston JD, Milne T, Fang ML, Amari E. The effectiveness of interventions for reducing stigma related to substance use disorders: a systematic review. *Addiction (Abingdon, England)*, 2012; **107**: 39–50.
- 37 DH/National Treatment Agency for Substance Misuse. *Models of Care for Alcohol Misusers (MoCAM)*. London: Department of Health, 2006.
- 38 NICE public health guidance 24. *Alcohol-use Disorders: Preventing the Development of Hazardous and Harmful Drinking*. London: National Institute for Health and Clinical Excellence, 2010.
- 39 White A, Kavanagh D, Stallman H, Klein B, Kay-Lambkin F, Proudfoot J, *et al.* Online alcohol interventions: a systematic review. *Journal of Medical Internet Research*, 2010; **12**: e62.
- 40 NICE Technology Appraisal 97. *Computerised Cognitive Behaviour Therapy for Depression and Anxiety*. London: National Institute for Health and Clinical Excellence, 2008.
- 41 Novick G. Is there a bias against telephone interviews in qualitative research? *Research in Nursing & Health*, 2008; **31**: 391–398.