

RAPID COMMUNICATION

ACCEPTABILITY OF VARIOUS BRIEF INTERVENTION APPROACHES FOR HAZARDOUS DRINKING AMONG UNIVERSITY STUDENTS

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Abstract — **Aims:** To determine the acceptability to university students of practitioner-delivered screening and brief intervention (SBI) versus a novel approach—web-based SBI (e-SBI). **Methods:** A random sample of 1910 university students was invited to indicate their preferences for various brief intervention approaches in an internet survey. **Results:** e-SBI was the most popular intervention. It was favoured by 81% of all students and 82% of hazardous drinkers. **Conclusions:** e-SBI is a promising approach for the reduction of hazardous drinking among young people.

INTRODUCTION

Despite reductions in per-capita consumption of alcohol in several countries (World Health Organization, 2000), the extent of hazardous drinking, consumption 'that will probably lead to harmful consequences for the user...' (Edwards *et al.*, 1981), shows no sign of abating among 15–24-year-olds (Habgood *et al.*, 2001; Naimi *et al.*, 2003), and university students in particular (Gill, 2002; Wechsler *et al.*, 2002). A number of recent studies spanning several countries, reveal that university students have a very high prevalence of hazardous drinking (Gill, 2002; Kuo *et al.*, 2002; Kypri *et al.*, 2002).

A promising response to this public health problem is the use of screening and brief intervention (SBI), delivered in the context of primary care. This refers to the systematic identification of people with health risk behaviours and the provision of brief advice on how to reduce or avoid these. There is now compelling evidence for the efficacy of SBI in reducing hazardous drinking in a wide variety of settings. The most recent meta-analysis showed significant reductions in consumption and in alcohol-related problems for non-treatment-seeking individuals which lasted for at least 12 months (Moyer *et al.*, 2002).

Evidence on SBI for younger people, while promising, is more meagre (Saunders *et al.*, in press). Questions remain as to the effectiveness of SBI when it is provided under conditions of normal healthcare delivery, as distinct from researcher-driven programmes primarily designed and executed by researchers. Some studies reveal obstacles to the implementation of SBI. For example, Beich *et al.* (2002) reported that many general practitioners (GPs) object to initiating discussion about alcohol with their patients, while Lock *et al.* (2000) found that many medical receptionists do not see screening as a legitimate part of their role. The state of evidence with respect to the

implementation of SBI is a matter of ongoing debate (see a series of letters at bmj.com/cgi/eletters/325/7369/870).

A key consideration is whether healthcare professionals would actually deliver such interventions and whether they would be acceptable to patients, especially if hazardous alcohol use were not the primary reason for the consultation. Focus group studies conducted at a New Zealand university suggested that student hazardous drinkers would be unwilling to discuss their drinking with a doctor, nurse, counsellor or psychologist, unless the discussion was self-initiated (Kypri, 2002). Students were interested in receiving personalized assessment of their drinking, but were highly sensitive to being judged by a health professional. Web-based alcohol risk assessment and feedback, also known as electronic screening and brief intervention (e-SBI), was considered by the investigators to be a practicable option, given the concerns about practitioner-delivered SBI and this population's familiarity with computers. The approach has the added appeal of reducing demands on professional time, and of being deliverable without limitations of distance.

Given the cost of developing, implementing and evaluating a web-based intervention approach, it was important to know whether members of the wider student population would be willing to utilize this form of intervention. Our aim was thus to determine the acceptability of various modes of delivering brief intervention.

SUBJECTS AND METHODS

Within the context of a survey of alcohol use among students at the University of Otago, Dunedin, New Zealand, questions were asked about forms of brief intervention potentially deliverable on the university campus. The data collection procedures are described in detail elsewhere (Kypri and Gallagher, 2003). In summary, a random sample of 1910 students was sent an invitation to participate in an internet survey of their alcohol use. After extensive follow-up, responses were received from 1564 students (82% response),

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including 902 women and 662 men. The mean age of the respondents was 20.5 (SD = 2.5) years.

Respondents were asked the following questions concerning the acceptability of alcohol related services: 'For the following services concerning alcohol, which do you think (A) should be available to students; and (B) you would use if you had a drinking problem?: (1) reading materials/leaflets about alcohol and its effects, (2) health education seminars on alcohol, (3) anonymous web-based alcohol risk assessment and personalized feedback, (4) alcohol risk assessment and advice from a nurse, counsellor, or psychologist, (5) alcohol risk assessment and advice from a doctor'.

Respondents gave a yes/no answer for parts A and B relating to each of the five items (i.e. a total of 10 answers). Items 1 and 2 are not forms of brief intervention but they are commonly used in university campus health promotion in New Zealand and elsewhere. The inclusion of items 1 and 2 served to provide a gradient in the intensity of the intervention, from minimal and inexpensive to more intensive and costly (item 5).

There were 980 (62.7%) respondents to the Alcohol Use Survey who were classified as hazardous drinkers (i.e. they attained a score of 8 or higher on the AUDIT). Of these, 950 completed the questions concerning brief intervention services. Given that brief intervention efforts would be focused on hazardous drinkers, responses to the above questions were examined separately for this group.

Responses were analysed statistically by using the McNemar test, a non-parametric test for two related dichotomous variables, which tests for changes in responses using the binomial distribution (Everitt, 1977).

RESULTS

Table 1 shows the percentage of respondents who answered yes to each item. The total sample size was 1564. Of these, 45 respondents (3%) did not complete this section (the last in the survey). The cases missing these data were excluded, leaving 1519 cases for analysis. For the purpose of describing the analyses (see Table 1), each cell displaying the frequency of a yes response is numbered.

All of the proposed services and interventions were popular in principle, that is students thought they should be generally available (Table 1A). The proportion of respondents that reported willingness to use the service (Table 1B) was considerably lower than the level of general support for some of the other services (e.g. health education seminars). The services were not significantly less popular among hazardous drinkers. The following pair-wise cell comparisons were made: 3–4, 3–5, 8–9, 8–10. McNemar tests were used to determine statistical significance. All four comparisons were significant, with *P*-values of <0.05. e-SBI was found to be more acceptable than SBI delivered either by a nurse, by a counsellor or psychologist or by a doctor.

DISCUSSION

Anonymous web-based alcohol risk assessment and personalized feedback, or e-SBI, was more appealing, in general, than each of the practitioner-delivered interventions, and substantially more students said they would be willing to use e-SBI if they themselves had a problem with alcohol. This held true even if the respondent was considered a hazardous drinker. These data support the observations made in focus group discussions organized by the investigators, in which students indicated unwillingness to discuss their drinking with a health professional or counsellor. This sentiment was epitomized in the comments of a 24-year-old male student who said 'I'd rather publicly admit I had a drinking problem than admit I was seeing a counsellor' (Kypri, 2002).

The finding of a preference for electronic methods is consistent with results of research conducted in the general population. Of 1257 current drinkers in a telephone survey of Ontario residents, 16% reported interest in receiving 'a telephone call from a therapist to help them evaluate their drinking', 26% in receiving a self-help book, and 39% in 'a computerized summary comparing their drinking to that of other Canadians' (Koski-Jannes and Cunningham, 2001, p. 91).

The standard SBI paradigm in which a medical or other health practitioner counsels the client appears to be less suitable for student health services, where few of the clients

Table 1. Acceptability of various alcohol-related services on campus in a study on the acceptability of various brief intervention approaches for hazardous drinking among university students in Dunedin, New Zealand

Measure	(A) It should be available to students (<i>n</i> = 1519)		(B) I would use it if I had a problem (<i>n</i> = 1519)		(B) I would use it if I had a problem (hazardous drinkers only; <i>n</i> = 980)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Reading materials/leaflets about alcohol and its effects	1447 (1)	95.3	1110 (6)	73.1	690	72.6
Health education seminars on alcohol	1244 (2)	81.9	626 (7)	41.2	381	40.1
Anonymous web-based alcohol risk assessment and personalised feedback (e-SBI)	1400 (3)	92.2	1232 (8)	81.1	778	81.9
Alcohol risk assessment and advice from a nurse, counsellor, or psychologist (SBI)	1374 (4)	90.5	932 (9)	61.4	551	58.0
Alcohol risk assessment and advice from a doctor (SBI)	1332 (5)	87.7	921 (10)	60.6	551	58.0

have the kind of established trust relationship with medical staff, on which the success of SBI may depend. e-SBI may be a more acceptable way of addressing hazardous drinking among tertiary students. However, it should be noted that, to date, there are no published studies on the efficacy of e-SBI in reducing hazardous drinking in tertiary students.

The results of this study supported the development and implementation of e-SBI at the university's Student Health Service in 2002. Its efficacy was assessed in a randomized controlled trial, the subject of a paper currently in preparation. Baseline recruitment data in that trial showed that 94% of students who screened positive for hazardous drinking consented to receiving the intervention and follow-up assessments. This approach shows considerable promise as an intervention for reducing hazardous drinking among university students, and may be worthy of investigation in other groups of drinkers.

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