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Centre for Addictions Research of BC

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Executive Summary

This literature review intends to be a guide for colleges and universities that are in the process of implementing and/or evaluating initiatives in response to the impact of alcohol on their campus communities. Strategies that have demonstrated promising results or have proven effective in reducing

The individual and environmental approaches discussed in this paper are presented in the following chart.

INDIVIDUAL APPROACH	
Strategies	Contribution
Raising awareness of risky and safer drinking patterns as well as support services on campus	Useful if situated within a comprehensive emphasis on health and wellness that engages students
Providing personalized normative feedback to encourage more modest consumption	, o ‰ (µ o (} Œ µ v Œ u] v] v P š Z

BACKGROUND PERSPECTIVE

The Current Situation

> Alcohol consumption and its consequences on Canadian campuses is a cause for concern.

After tobacco, alcohol is the cause of the greatest harms in terms of health, social, and economic costs and problems. The Canadian Campus Survey (CCS, 2005) is the best available source of information on drinking practice and its negative impact in the post-secondary context within our country. The CCS attends to a number of variables for more particular indications of problematic behaviour or susceptibility to effects among collegiate students. Besides region and, of course, gender, such factors include year of study, living arrangement and extracurricular orientation. While sometimes proving statistically significant, such relative differences do not detract from the major lines of the overall portrait, summarized as follows.

Typical Drinking Patterns

According to the CCS (2005), examining alcohol consumption patterns over t

In addition to examining drinking behaviour over the previous 12 months, the CCS checks on drinking patterns among BC undergraduates during the past month, a period when they were on campus. During this past month timeframe, nearly 71% of students report drinking on at least one occasion, and heavy drinking on a more or less frequent basis was typical for a quarter of these. Just over 19% of BC undergraduate drinkers report heavy frequent drinking (consuming five drinks or more on the days that they drink at least once a week), and 5% consume five drinks or more on the days that they drink but drink less frequently (less than once a week). Approximately 40% of undergraduate drinkers are light frequent drinkers (consuming less than five drinks on the days that they drink but drink at least once a week).

Episodic Heavy Drinking

t Z š Z Œ } Œ v } š] šusual pattern of drinking episodic heavy drinking is associated with elevated liability to a broad range of acute or short-term harms. Even if not their typical pattern, nearly one-quarter of BC undergraduates queried admit drinking risky amounts (more than five drinks at least twice in the past month) during the school term. Almost one in ten consume at even riskier levels, drinking more than eight drinks at least twice in the same period.

Indicators of Harmful Drinking

In addition to examining drinking patterns, the CCS embedded into its inquiry the Alcohol Use Disorders Identification Test (AUDIT) to measure hazardous and harmful drinking patterns as well as alcohol dependence among undergraduates. The AUDIT is a well established screening tool developed by the World Health Organization. Looking at the prior twelve months, nearly 27% of BC undergraduates register a hazardous or harmful pattern of drinking. Almost 40% of BC undergraduates have incurred at least one harm related to their drinking: feeling guilty or remorse, experiencing memory loss, reporting an alcohol Œ o š] v i µ Œ Ç U } Œ } v Œ v } (} š Z Œ Œ P [Œ Æ ‰ } Œ } v • • [ ] • } v • Œ }] (v l Á] v Œ Œ X Œ Ç about 30% of BC undergraduates report one or more symptoms for dependence being unable to stop drinking, failing to perform normal activities, or needing a first drink in the morning

Problems or Consequences

A number of Canadian undergraduates report problems due to alcohol use. The most common adverse outcomes include hangover (53.4%), memory loss (25.4%), regretting an action (24.5%), and missing class due to a hangover (18.8%).

Among BC undergraduates, unwelcome alcohol-related consequences suffered from] Z [include

Among the students surveyed, overall both male and female perceptions of safe alcohol intake levels for single drinking sessions exceed low-risk guideline limits. CCS (2005) indicators on alcohol use and related harms reveal no statistically significant change in the campus situation from earlier survey results and analyses (CCS, 2000; Demers et al., 2002; Gliksman et al., 2003). The totality of the CCS findings show post-secondary institutions in BC to be appropriate settings for a strategic initiative aimed at effective policy implementation and improved programs to increase awareness and impact behavior.

Contributing Factors to the Problem

A number of realities have an evident bearing on student practice.

As research recognizes, some college and university students have developed unhealthy drinking patterns before entering this stage of schooling that may transform into more acute problem behaviours during their campus experience, while others commence consumption only after entering college (McCarty et al., 2004). For those in either the former or the latter situation, certain factors come into play or continue as contributors to development of an outlook and practice in regard to alcohol use. Researchers looking at the roots of heavy drinking and alcohol-related harms among college/university students cite the following in particular:

Peer Influence, Peer Pressure, Need of Conformity, and Misperceived Peer/Social Norms

Social bond theory is employed to explain behaviours (Hirshi, 1969 in Hamand Hope, 2003). Used to analyze college student heavy drinking behavioural patterns, the social bond theory presents four elements that play a crucial role in [illegible] naming studet behaviour(:)] TJ ET BT 1 0 0 13475.07 372.89 Tm [(o(m)-4(it)11((ent)-3(to)11(oin)6ve(n)3(t(o)] TJ ET BT 1 0 0 1187.134 357.51 Tm [(n)14(a)3l acn)6tivitie( )] TJ

As already mentioned, drinking among college students is a form of self-validation, social acceptability and assertiveness. Social assertion has been found to be correlated with excessive alcohol consumption among college students (Martin and Hoffman, 1993 in Ham and Hope, 2003). It was found that the greater the expectancies are in social assertiveness, the higher is the level of alcohol consumption.

Misperception of overall drinking norms on campus is another factor related to heavy drinking among college/university students. The term perceived drinking norms refers to the impressions students form about how typical or predominate

negative effects lead to excessive alcohol consumption (Burke and Stephens, 1999 cited in Ham and Hope, 2003; Neighbors et al., 2004). The expectancy theory holds that drinkers positively value certain immediately expected effects of alcohol use (e.g., sociability, tension reduction, courage, sexuality, aggression) rather or more than being deterred by concerns over negative consequences (e.g., impaired social functioning v Lewis and K [E] o o ctd 2 ìm ì Ham and Hope, 2003).

Campus Policy and College/University Social Events

The recommendations we offer below are rooted in the evidence mentioned in the literature review. These recommendations incorporate more than one variable, since it has been shown that a key to any successful prevention/interventionary policy is consistency and coherency with on campus as well as off campus resources.

INDIVIDUAL APPROACHES

Recommendation 1

> Raise awareness about both unhealthy and safer drinking patterns as well as the availability of support and treatment services, both on and off campus. Information around alcohol [illegible] (and related harms, and on preventive and harm reduction behaviours, should be disseminated within a sustained overall thrust on positive health and via a multi-pronged approach (e.g., student manuals/handbooks/toolkits, health services web pages, orientation seminars, special events, curriculum infusion).

Evidence Base

Raising consciousness of the consequences of heavy drinking appears a logical first step in trying to reduce and prevent such harmful patterns of consumption. Creating awareness and disseminating information are among the most popular approaches used by colleges and universities in their effort to promote and increase understanding about alcohol use and its short- and long-term negative effects. Educational programs during freshman orientations along with awareness weeks and peer education remain among the most common prevention efforts found on campuses (DeJong et al., 1998; cf. Wechsler et al., 2000, 2002).

Whatever the moral imperative in providing rather than withholding accurate, pertinent knowledge [illegible] potential and often realized adverse impact, basic education alone is not an effective preventive tool, as noted by Larimer and Cronce (2002, 2007; cf. Weitzman et al., 2000; Walters and Bennett, 2000; DeJong et al., 1998). Whether the means are, e.g., occasional pamphlets/brochures, cards sent in conjunction with an upcoming 21st birthday (aimed at discouraging excessive celebratory intake) or informative content offered in a more extended format and time frame, such instruction or notification has not made demonstrable differences for consumption or liability to harms. Some concern has even been expressed over whether typically employed warnings are counterproductive in giving undue prominence to prevalence of use and incidents of trouble, in the process unwittingly reinforcing impressions of normalcy, desensitizing students and even facilitating use that is bolder for being more cognizant about effects. There are [illegible] ET BTRs and en2(tio)-5()] TJ3 T0 1 181.94 1a

lives; as well, information tables, a pledge, pictures of people affected by abuse may be presented

- Games/Game Shows like Alcohol IQ Tests with confidential self-assessments, Progressive Drinking Games featuring students going through residence halls quizzing other students on facts related to alcohol
- Alcohol Free Fun Activities including movies, parties, dances and other events which can include mocktails being served instead of alcoholic beverages
- Orientation Programs these can take a more formal format involving video presentations and discussion about individual and institutional stances on alcohol use, effects, misuse, values, history and goals; they can also follow a march

promotional initiatives can and should not only highlight the availability of a range of related support services but also find creative ways of positively eroding and removing the stigma that is commonly associated with using them.

Recommendation 2

> Provide personalized normative feedback as means to correct perceived social norms and encourage gravitation toward more modest consumption habits. Where possible, universities/colleges should conduct an annual survey of µ v [o } Z } o v µP µ U l v } ` o P v ] µ X d Z µ À ` ` administration in the effort to gather valuable information on substance use patterns and trends present on campus that would be subsequently addressed in messaging both individually and generally directed.

Evidence Base

Although exercises in enhancing awareness have frequently proven unfruitful in effecting behavioural change, what have garnered a significant measure of desired reduction are initiatives in individual normative reeducation (Larimer and Cronce, 2007). The agenda with such personalized feedback (and a focus on descriptive/behavioural norms) has been to point out a couple of contrasts, namely, (1) between what the person has mistakenly supposed the practice of their peers to be and the more modest actual norm concerning consumption habits of their fellow students, and (2) between those } o o P u actual intake and š Z ‰ Œ • } v [• } Á v Œ] v l] v P ‰ š š Œ v X] • } À Œ Ç š Z overestimated the extent to which others around them are indulging has, as hypothesized, served to prompt heavier drinking study participants to decrease their own intake in the direction of their truly more m w 6<etiu

below actual norms are drawn towards higher levels of drinking by provision of an accurate picture of typical patterns.

Personalized feedback interventions can contain considerable content beyond norms clarifications and be delivered in a number of ways (e.g., in-person, mail, internet) to variously targeted audiences (White, 2006). Discussion at this point will focus on feedback applications that Œ } (^ • š v o } v _ • } Œ š v } accompanied by in-person counseling and are exclusively confined to correcting perceived norms.
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• (À } Œ o š }] š • Ç } u Z l y ‰ ‰ v a š] i o r • t . The broadly issued impersonal marketing approach on the other hand assumes wide exposure to its publicity and that those reached will indeed process the norms clarification in the desired manner by drawing the merely implied contrast to unmentioned previous impressions they have had. The fact that PNF spells things out so much more is a definite plus that some suspect contributes to more recognized results over against the mass marketing endeavours.

Recommendation 3

> Implement a diversely accessible screening program to identify who may benefit from alcohol-related services and to complement this by providing a range of brief intervention opportunities on campus.

Evidence Base

As discussed in the previous section, some very basic personalized feedback (including at least the normative aspect) in the form of responses delivered by computer or mail has been shown beneficial without need of supplementation by face to face counselling. Such results make this a mode of intervention worthy of consideration for implementation on a much expanded scale. Minimal feedback •] u ‰ o Ç } v š Œ • š] v P • } u } v u [• with Œ] v r e] v r norms Z of À] i } peers rather than also situating it explicitly within a risk continuum would not constitute a screening exercise for the recipient. It would, however, serve as a brief intervention in primary care if provided in a general outreach, in secondary care when directed at those in known groups of elevated risk, and in tertiary care as intentionally issued to indicated individuals.

Screening is an important facilitating component for brief intervention including feedback. In itself it is an effective technique in identifying students at risk. Screening is a first step towards prevention/intervention when it serves as the initial link between those at risk and the appropriate support/treatment resources available for them. During the screening process students can receive information about alcohol use and the consequences attached, and if necessary they can be referred to available treatment/support resources.

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YAACQ, CAPS, and RAPI have been developed to account especially for the indication of problematic consequences (Larimer et al., 2004/2005; Larimer and Cronce, 2007). The AUDIT is recognized as useful on risky drinking, though the proper cut-off score for a collegiate population is debated, with specificity (over-identification) an issue.

Questions pointedly directed at consumption itself, both usual frequency and quantity and also frequency of heavy drinking, can be helpful, along the lines of the minimal sets recommended by NIAAA for survey purposes (NIAAA, 2003; cf. Larimer et al. 2004/2005). More testing is being done on the adequacy of efficient single question screens on episodic heavy consumption, which may describe it in terms of frequent excessive intake of standard drinks or getting drunk. U ^ / v š Ç ‰] o Á l U Z } Á u v Ç Ç • } Ç } µ P š Œ µ v l M _ U V K [} Á Œ] u w Ç š š] u X • U] ì ì š Z ‰ • š Ç Œ Z À } Œ u } Œ Œ] v l •] v Ç M _ ~ (} Œ u v • Y ð w) Œ (n) µ } N I A A A , 2 0 0 3 ; c f . t] Z v v Ç M _ ~ (Á • š Z o • š š] u Ç } µ Z u } Œ š Z v y Œ] v l •] v í Ç M _ S é z l e Œ y A A ñ (} al., 2006).

There is a range of special challenges associated with an ambitious attempt to implement annual screening of all students or even just incoming first year students. Most, clarifying how results will and will not be used, and P] v] v P Œ • ‰ } v v š • [} v ( ] v š } } ‰ Œ š] } v š } v • µ Œ µ reporting. Screening that employs reputable instruments should be available in a campus health centre, emergency medical facilities on or near campus where students would present, and at campus counseling services. It can also be conducted in occasional display settings, and in careful conjunction with policy infraction citations. Increasing evidence shows utility of interventions with mandated students, and screening can certainly facilitate the pursuit of a tailored response.

Consistent positive promotion of opportunities for screening is important to increasing access, and training of competent peers in basic provision may be a worthwhile exercise in enhancing more public consciousness and participation, complementing persistent efforts to ensure that professional staff are both well-equipped and committed to including screening among their regular if not routine services (Larimer et al., 2004/2005; Monti et al., 2004/2005).

Screening can at least prove informative for those who submit to it, enlarging or consolidating their awareness of circumstances indicative of difficulty for themselves and others. For those whose self-report reveals a need, at least further brief intervention should follow suit. Brief interventions are among best practices that have commended themselves as worthwhile alcohol policy initiatives for Canada (Collin, 2006). They have had a statistically significant medium size effect especially among the ^ v } - treatment - • l] v P ‰ } ‰ µ o š] } v _ ~ D } Ç Œ š o X U î ì ì î ‹ The literature] v ^ µ v Œ • suggests that brief, individualized and private interventions provided by professional health care practitioners can lead to reductions in alcohol use and related harms among young adults. There is evidence that a 5-minute advice session might reduce consumption and have long-term effects. Saunders et al. (2004) report that brief, in-person interventions incorporating motivational feedback are even more effective in reducing drinking and negative consequences in the college age population.

The value of aptly conducted brief interventions for college students toward intake and harm reduction has now been confirmed by various reviews and meta-analyses (Larimer and Cronce, 2007; Carey et al.,

an assessment. Notwithstanding such hindrances to obtaining reliable results, indication from initiatives undertaken suggest worthwhile behavioural benefits are being achieved in this special population through brief interventions again featuring motivational enhancement, personalized feedback (on norms etc.) and skill-building. In-person counselling may be more useful with this group in facilitating later involvement with them and greater use of harm-reduction techniques (cf. Larimer and Cronce, 2007; White et al., 2007; White, 2006; Barnett and Read, 2005; LaBrie et al., 2007).

Key Considerations

Personalized feedback delivered without need of encountering a health professional has had a positive outcome among New Zealand and American college students, as shown, e.g., by research from Kypri and Walters summarily presented in Saunders et al. (2004; cf. Walters and Neighbors, 2005; Larimer and Cronce, 2007; Larimer et al., 2007). Such research indicates that mailed, or even more so, electronically supplied questionnaires and feedbacks are positively accepted by students as innovative forms of advice, education/awareness and prevention, often being preferred to person-to-person interventions by a health-care provider.

These distributed feedbacks are attractive for institutions that lack resources to provide students with readily accessible one-on-one counselling. Besides obtaining an overall picture of campus practice (and, possibly too, attitudes), the intention is still to motivate individual students to make healthy choices by offering information about drinking patterns (personal and collective) and associated risks (Saunders et al., 2004). Mailed feedbacks as used in some American small colleges have served multiple functions: adjunct treatment tool, stand-alone intervention for students identified via health center screening or phone screening, and evaluative as well as orientation tool for groups such as fraternities, freshmen, š Z o š • v l } Œ } ršZ coerced Zgr ‰ • Ÿ. They can serve a more universal prevention purpose in larger post-secondary institutions too, encouraging maintained abstinence, delayed initiation, reduced consumption (including episodic excess) as well as increased employment of protective behaviors (Larimer et al., 2007).

With students increasingly attracted to the active use of the internet for inquiry into health education (and for entertainment purposes), web

Reviews discussing environmental options admit a relative lack of evaluation conducted on campus initiatives, compared to the often positive corroboration obtained for such strategies when assessed for the effectiveness of their broader application in the general public (e.g., Toomey and Wagenaar, 2002; Toomey et al., 2007; Wagenaar et al., 2004/2005; DeJong and Langford, 2002; cf. Saltz, 2004/2005). Results received so far from the campus context point in the same direction of utility, in varying degrees for different measures.

Recommendation 4

> Consider social norms marketing campaigns as a strategy of modest value not to be employed at the expense of other stronger more personalized normative-re education or other more impactful environmental initiatives.

Evidence Base

While hoping to have an effect on individual attitudes and practice, social norms marketing campaigns address themselves more broadly to a general audience and aim to affect the collective climate of a campus community in its consciousness of either the predominate pattern(s) of alcohol use or the extent to which alcohol is approved among them. It is generally conceded that perceived norms on this scale are typically too high, assuming consumption habits that are in excess of the actual intake and/or level of favorability toward alcohol that exceeds actual acceptance of it (Perkins et al., 2005; Perkins, 2007; Kypri and Langley, 2003). However, the degree to which mass clarification of the misimpression elicits significant reduction of use or erodes support remains more in debate. Various adherents to social norms theory who are persuaded proponents of personalized normative feedback question the comparative value in the admittedly less costly enterprise of marketing campaigns, finding the evidence for the latter equivocal by comparison (Lewis and Neighbors, 2006; Neighbors et al., 2006). The social norms marketing strategy has yet to accredit itself at the level of endorsement accorded either to brief interventions or various other initiatives to change the campus milieu (Toomey et al., 2007; Saltz, 2004/2005; NIAAA, 2002).

Exponents of social norms marketing point to numerous alleged success stories, some of them quite celebrated, in which welcome declines in actual norms were registered over an extended initiative in contrast to previous futile endeavours pursuing more traditional informative agendas (Haines, 1996; Haines and Spear, 1996; Haines and Barker, 2003; Glider et al., 2001; US Department of Education, 2002; DeJong and Linkenbach, 1999; Berkowitz, 2004; Perkins and Craig, 2003). Critics cite various conspicuous failed attempts at normative advertising in regard to alcohol (e.g., Werch et al., 2000; Clapp et al., 2003; cf. Toomey et al., 2007) and apparent lack of results in a considerable number of other efforts supposedly pursuing such a social norms promotion on use of the substance (Wechsler et al., 2003). The rejoinder to such disqualifications is generally along the lines that the analysis has itself failed to sufficiently distinguish which initiatives really belong in the category and consistently implement its principles (e.g., Berkowitz, 2003, 2004; Perkins cited in AADAC, 2005; DeJong et al., 2006). Evaluations are still being refined, but the most rigorous to date supports significant decreases in consumption in

association with appropriate mass media endeavours to correct misperceptions of subjective drinking norms, albeit generally a more modest decline than earlier instances implied (De Jong et al., 2006).

Advocates of social norms marketing may be less minded than practitioners of personalized normative feedback to support attendant messaging about negative consequences to excessive drinking, fearful that focus on such matters could unwittingly reinforce erroneous presumed norms of large indulgence and thereby unintentionally encourage unconscious movement in that direction regardless of publicized risk (e.g., Berkowitz, 2005). While a warning against sensationalizing and a call to major instead on positives is salutary, a case against careful candid communication on adverse effects is unsubstantiated. The effects of mass public normative reeducation is not in itself nearly sufficient to remove the need for personal interventions or to preclude open counsel or private feedback that might also be frank (though balanced) about unwelcome outcomes avoided by less hazardous habits. Nor

Langford, 2002; Toomey et al., 2007). The provision of alcohol-free campus residences (if not required), attractive alcohol-free student centres and coffeehouses all qualify here (the latter perhaps even in place of, rather than just as an option to, a pub). Regular strong promotion of alcohol-free campus events and social activities (with good supply of non-alcoholic beverages instead), starting from the very outset of the academic year, would likewise support such a climate.

Scheduling a full week of courses at the beginning of the school year and putting core course classes into the timetable for Friday mornings (with instructors arranging for assignment deadlines and other requirements on those days) could contribute as well, along with increasing frequency of faculty-student contact outside of the classroom. Expanding evening and weekend hours in which gymnasiums and recreational sports are available might help. Strong backing for student involvement in volunteer community service opportunities may well serve the cause too (Ziemelis et al., 2002), besides its other benefits, rather than just using community service as a mandated sanction for students who commit infractions.

Recommendation 5

> Limit alcohol availability on campus. If sales and other distributions must be permitted, restrict and regulate those rigorously, requiring approved registration

higher pricing have both been widely associated with lower consumption and a lesser degree of related problems (Toomey et al., 2007). While such supply reduction issues and strategies are better attested in the general population, there is little doubt that they are also an integral factor toward limiting unhealthy consumption and associated harm within a campus community as well.

Some post-secondary schools take a very strong stance in entirely prohibiting consumption of alcohol on campus. While studies already exist with evidence of lower consumption patterns and harm in the u } v P • š µ v š • } À Œ o o] v š Z • ^ Œ Ç _ • š š] v P • U use of such • Z À v } š v differences; other factors unmeasured may account at least in part for them (Toomey et al., 2007). Campuses that do apply such an interdiction still need to wrestle with the impact of availability in the vicinity nearby. Those campuses that require or provide alcohol-free or, more so, substance-free residences (and ^Greek_houses) are subject to the same challenge, though indications of lower

Besides taking up the role of watch

(Weitzman et al., 2003a; Williams et al., 2004 in Toomey et al., 2007; Zimmerman, 2004

Æ š v š Œ] v P Z } µ Œ • X Z] l (2002) study of Australian public houses demonstrates a significant relationship between longer hours of operation and increased levels of ingestion and violence. These authors also cite evidence of a link between later trading hours and the š] u] v P } (u } š } Œ À Z] o] v š • v š Á v increased in whole alcohol purchases (suggesting greater consumption and thus the potential for greater harm). Norton and ^ l } P [• ~ î ì ì ï • Œ • Œ Z } v ^ š µ Œ Ç } ‰ v] v P • } (o] ‹ µ } Œ } µ š o š •] v ^ Á increased consumption coincident with extended operation hours. Room et al. (2005) note multiple analyses that verify the relationship between service time and drinking and alcohol-related harms. For

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