
Alcohol on Campus: Programs and Policies

Review and Recommendations

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 harms associated with alcohol misuse among young adults are discussed. This review is divided into two main parts. The first part summarizes the current situation of alcohol use and its impact on Canadian campuses as well as factors that lead to the evident problem. The second part of the paper offers recommendations on how universities and colleges may improve their programs and policies. Each recommendation is followed by supporting evidence and key considerations that contribute towards more constructive applications. The ideal is a combination of more inclusive programs/services and pertinent policies that will together help campus populations lead a healthier life during their collegiate experience.

The present paper reports on several activities—programs, services, policies—that contribute to effective prevention, harm reduction and treatment of alcohol misuse among collegiate populations. Offered in isolation these measures demonstrate modest impact. However, when these strands are woven together in a concerted initiative—especially involving both committed internal (staff, faculty and student representatives) and external (off-campus resource) personnel—they have the potential to effect meaningful and important changes.

Although there is evidence that most colleges and universities in Canada and US have some form of substance use prevention measures on site available for those who seek help, the literature registers a great demand for more comprehensive and holistic approaches to address, prevent and reduce harmful patterns on campus.

This review paper presents to the reader a range of preventive and intervention services/programs/policies that belong either to the category of *individual approaches* or that of *environmental approaches*. Individual approaches focus mainly on students, addressing their characteristics, needs, particularities, and the conducive role those characteristics have towards certain behavioural patterns. These approaches tend to pursue demand reduction strategies. The environmental approaches are more general and focus more on the overall context in which the individual operates, with more of a tendency toward supply reduction initiatives. The interaction between the individual and the environment is important in determining the factors that lead to particular behaviours.

The individual and environmental approaches discussed in this paper are represented 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	Helpful for undermining the supposed social “in” status of drinking and its influence
Supplying diversely accessible screening and brief intervention opportunities	Beneficial care, especially when made available in various vehicles and venues to serve universal, selected and indicated student audiences on campus
ENVIRONMENTAL APPROACH	
Strategies	Contribution
Regulating alcohol consumption, sales, pricing, advertising and promotion on campus	Effective in reducing intake and adverse outcomes where consistently enacted and enforced
Forming a community coalition to address student consumption issues off campus	Worthwhile to expand the breadth and depth of a culture that confronts harm from excessive use of alcohol

The literature features options from which college and university personnel can choose when designing comprehensive strategies to prevent and reduce harms associated with alcohol use among students. Whatever the strategy, for any initiatives to prove fruitful on a collective scale and continuing basis, a crucial requirement is the concerted effort of a committed group of people putting their passion, energies and expertise together in a common cause. Such a campus community of concern and practice needs to include representation from a spectrum of stakeholders (e.g., health and counseling services, school administration, student affairs, those in charge of campus residence, security personnel, certainly students, preferably also faculty). Beyond the supportive participation of such members, communication and collaboration among universities and with off-campus communities will contribute significantly to the successful development and implementation of any strategy pursued on a campus.

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BACKGROUND PERSPECTIVE

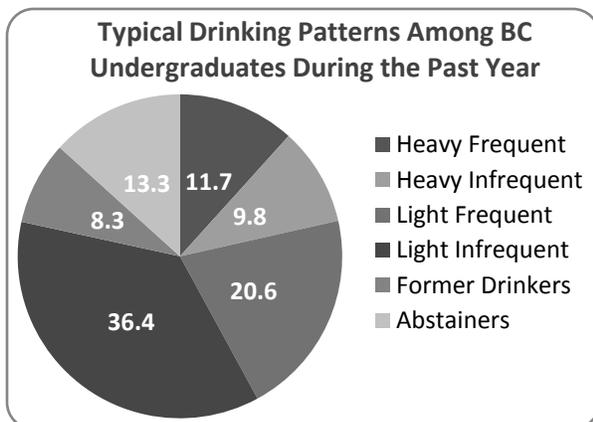
The Current Situation

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, legal, 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 extra-curricular orientation. While sometimes proving statistically significant, such relative differences do not detract from the major lines of the overall portrait, summarized as follows.

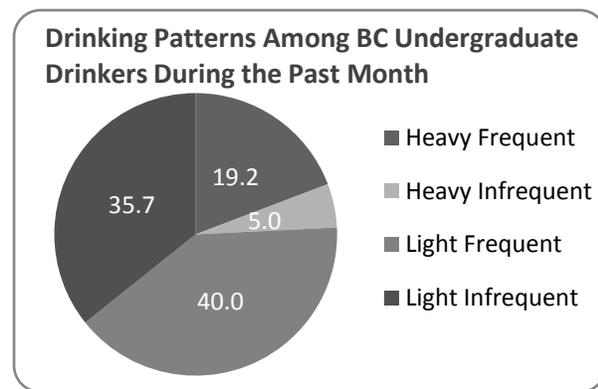
Typical Drinking Patterns

According to the CCS (2005), examining alcohol consumption patterns over the previous twelve months, over 20% of BC undergraduates fall into the more troubling brackets within a drinker typology framed on (a) frequency of drinking days and (b) volume (number of standard drinks [SD]) usually consumed on those days. Almost 12% report heavy-frequent drinking (more than five drinks on the days that they drink and drinking at least weekly or more often), and nearly 10% report heavy-infrequent drinking, (usually consuming five drinks or more on the days that they drink and drinking less than once a week).



Over half of BC undergraduates are light drinkers. Just over 36% are light-infrequent drinkers usually consuming less than five drinks on the days that they drink and drinking less than once a week, and nearly 21% are light-frequent drinkers usually consuming at least once a week and consuming one to four drinks on the days that they drink. Rounding out the picture of alcohol consumption by BC undergraduates, nearly 22% are either lifetime abstainers or former drinkers.

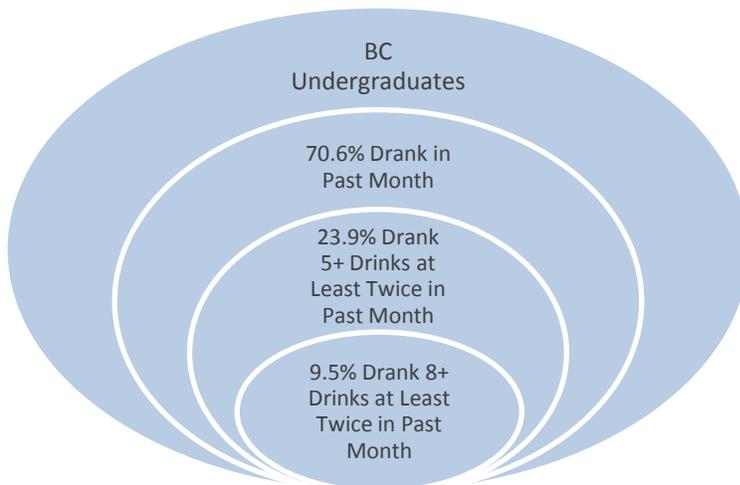
In addition to examining drinking behaviour over the previous 12 months, the CCS checks on drinking patterns among BC undergraduates during the *past month*, a period when they were on campus. During this past month time-frame, nearly 71% of students report drinking on at least one occasion, and heavy



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

Whether or not it is a person’s usual 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



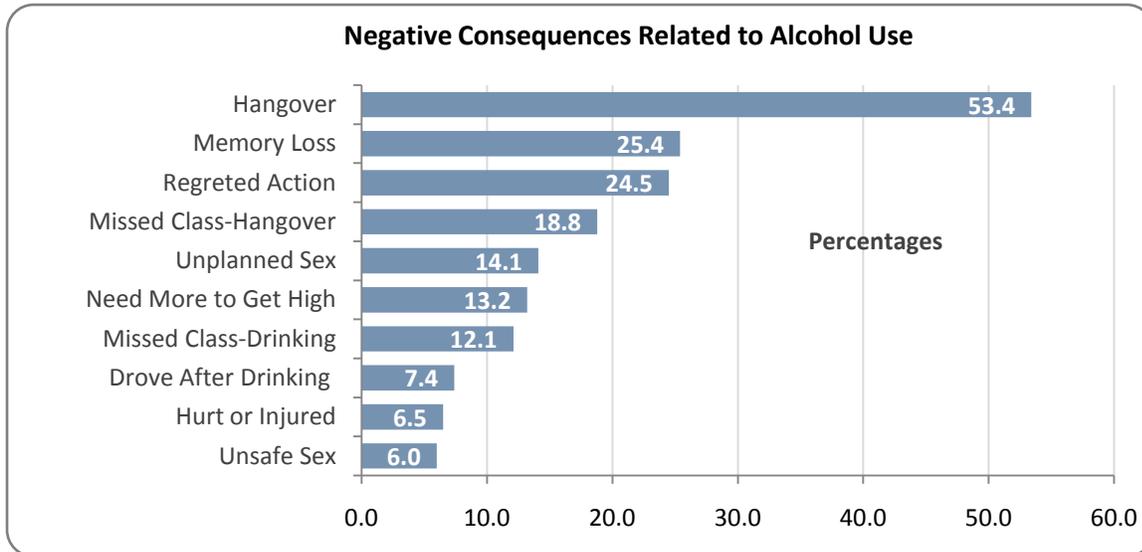
one-quarter of BC undergraduates queried admit drinking risky amounts (more than five drinks at least twice in the past month) during the school term. Almost one in ten consume at even riskier levels, drinking more than eight drinks at least twice in the same period.

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-related injury, or concern of others’ expressions of worry in regard to one’s drinking. Just 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 *others'* use include study or sleep interruptions (30.4%), serious arguments (13.5%), sexual harassment (7.4%), and being pushed, hit or assaulted (5.8%).

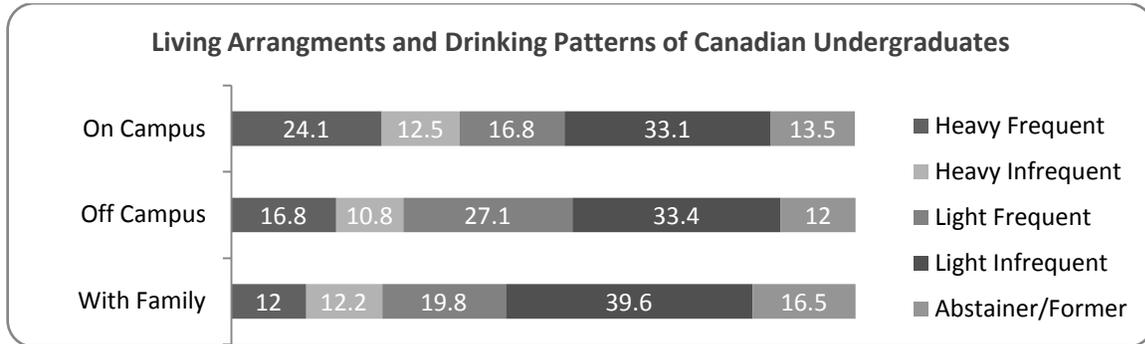
Environmental Factors

The CCS also inquires concerning campus environmental factors such as drinking locations and living arrangements for Canadian students. With respect to drinking locations, most drinking among students takes place off campus in private premises or in bars and nightclubs. While the percentage of drinking occasions is lowest for university residences or fraternity and sorority houses, the average number of drinks per occasion in these venues is higher than in locations off campus.

Location of Drinking Occasions and Average Number of Drinks per Occasion		
Location	Percent of Drinking Occasions	Number of Drinks
Someone's Home	41.8	4.4
Bar/Disco/Pub/Tavern	35.5	5.1
Restaurant	9.7	2.5
University Residence	6.6	5.7
Fraternity/Sorority House	0.6	5.9

Regarding living arrangements, Canadian undergraduates who live at home with family tend to be light-infrequent drinkers. However as they move away from home, more become frequent drinkers. The CSS shows heavy-frequent drinking is significantly higher among students living on campus (24.1%) than

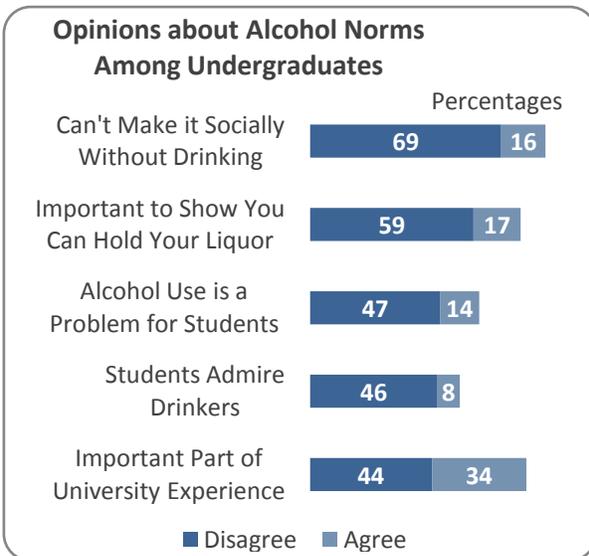
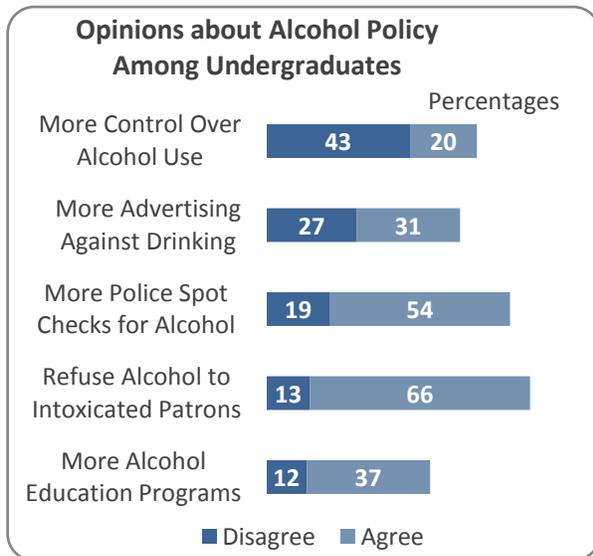
among those living off campus (16.8%) or with family (12%). As for light-frequent drinkers, slightly more than 27% live off campus on their own, compared to 19.9% who live with family.



Alcohol Norms and Policies

On opinions and beliefs about alcohol policy options, the CCS charts student attitudes towards general control issues, campus security/policing, and education/prevention initiatives. The largest segments are more inclined overall to favour less control, but back stronger stances on security and enforcement while registering as neutral on the need for more campus education programs dealing with alcohol.

In regard to norms, only a minority align themselves with several statements that cast drinking in a positive light, though again only a minority (14%) concur that alcohol use is problematic on their campus.



Certain perceptions characterize particular types of consumers: frequent drinkers regard the campus environment favourable for their drinking patterns while heavy drinkers have the impression that alcohol policies on their campuses are not upheld. Over 15% of students not already benefitting from alcohol-free university housing express a preference to live in some accommodations where alcohol is not permitted.

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; Gliksmann 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 behaviour.

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 Ham and Hope, 2003). Used to analyze college student heavy drinking behavioural patterns, the social bond theory presents four elements that play a crucial role in determining student behaviours: *attachment to significant others, commitment to conventional activities, involvement in conventional activities and belief in conventional wisdom* (i.e. acceptance of societal rules/norms). The literature underlines that the most desired things at this stage for students are social approval, peer acceptance and conformity. Conformity has been identified as the main reason for high-risk drinking patterns among college students (Ham and Hope, 2003). Cooper (1994 in Ham and Hope, 2003) notes that conformity motives are associated with drinking in situations where there are strong pressures to comply and in general with alcohol-related problems.

Peers and socializing are crucial in defining attitudes and behaviours among college students also because, once at college, young adults feel disconnected from their old environment—parents, siblings, friends—and are in search of self-validation and integration in a new context, in this case the campus community. Several researchers (Perkins, 1997; Borsari and Carey, 2001, 2003; Carey et al., 2006) demonstrate that students' use of alcohol and other drugs is much more closely associated with peer use than with other influences. However, Perkins (1997) stresses that peer influence can represent also the other side of the coin and is not 'necessarily negative' since it is directly linked to and depends on 'one's peer cluster associations or [...] reference group orientation'. This means that students who have a safe, more healthy and active group of friends are more likely to stay safe and healthy.

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 various drinking behaviours are (descriptive norms), or how widely held certain attitudes about alcohol are (injunctive norms): Borsari and Carey, 2001, 2003; Neighbors et al., 2004; Baer, 2002 in Ham and Hope, 2003. *Misperception of the norm* refers to erroneous impressions concerning how extensive or how approved indulgence in alcohol is within the campus community. Biases and misperceptions of norms have been well documented in the literature (Carey et al., 2006; Ham and Hope, 2003 who cite several articles: Baer, 2002; Baer and Carey, 1993). Perceived norms including misperception of actual norms are directly connected to attitudes towards drinking, drinking quantity or frequency, drinking to intoxication and/or other behaviours associated with drinking. In general, students perceive the peer/social/community level of alcohol consumption as more liberal (and more acceptable) than it is in reality. This helps us draw the conclusion that, the higher or more permissive the perceived norms, the higher the levels of drinking among college students (Perkins and Wechsler, 1996, Thombs et al., 1997, Wood et al., 1992 cited in Baer, 2002).

There is a tendency to overestimate the typical drinking behaviour of other students as greater than one's own behaviour, and perceptions of behaviour of social norms are higher than reported means of groups (Carey et al., 2006; Baer and Carey, 1993, Baer et al., 1991 cited in Ham & Hope, 2003). Students who overestimate the amount of alcohol consumed by their peers are more likely to consume more alcohol themselves (Agnostinelli et al., 1995 cited in Ham and Hope, 2003). According to several authors, perception of norms may not strictly be a function of the college environment but also "an extension of the norms developed before college" (Carey et al., 2006; Read et al., 2002; Baer, 1994 cited in Ham and Hope, 2003).

Beliefs and Expectancies

Some researchers link these two factors to those previously mentioned and suggest that destructive behaviour—drinking to intoxication, smoking etc.—is wrongly perceived by students as a form of tension/stress/anxiety relief. Several studies have indicated a relationship between stress and problematic drinking in college. Quantity and severity of stressors are related to greater problematic drinking (Carey and Correia, 1997; Perkins, 1997). In their literature review, Ham and Hope (2003) cite several studies (Camatta and Nagoschi, 1995; O'Hare and Sherrer, 2000; Kidorf and Lang, 1999) that define college students' alcohol use as 'a means of coping with daily college life demands'. These studies along with Perkins' (1999) article explain the relationship between high levels of stress and high levels of drinking. It seems that one's ability to cope may mediate the relationship between stress and drinking (Ham and Hope, 2003).

Expectancy theory also offers an explanation for the phenomenon of drinking on campus. According to this theory, high positive prospects regarding alcohol use combined with low expectancies about

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—Lewis and O’Neill, 2000 cited in Ham and Hope, 2003).

Campus Policy and College/University Social Events

The social context and the environment where drinking takes place definitely have an influence on drinking behaviour. An important factor affecting students’ attitudes and perhaps having an impact on their behaviour and substance use tendencies is the campus policy. When we mention the term *campus policy*, we refer to the campus stance and/or written policy in regard to drinking practice among students. The more conservative the campus policy against drinking and substance related harms, the more likely students’ drinking behaviours will be moderate (Perkins, 1997).

The Need for a Comprehensive Response

Researchers recognize and support universities’ efforts to develop several programs and policies in order to respond to problems of excessive substance use on campus. The literature stresses that these campus policies and programs should be holistic and address the particular needs of each campus population. In their literature review on prevention strategies for college student drug prevention, Larimer et al. (2005) strongly recommend that campuses collaborate with the surrounding community/ies in order to implement efficient and effective individual and environmental preventive and interventionary strategies from which a collegiate population can benefit. The AADAC report (2005: 32) underlines that “the binge drinking environment encompasses the community surrounding the campus as well” and that is why it is important for campus administrators to collaborate and work with the community, to target, prevent and intervene in case of excessive use of alcohol among college students.

A very substantial American review process publishing its conclusions in 2002 remains a useful indicator of which sorts of initiatives carry the most evidential clout so far or hold the greatest promise (NIAAA, 2002; Saltz, 2004/2005). Among strategies directed at individuals, those combining cognitive behavioral skills training with motivational enhancement and norms clarification rated highest. More generally targeted environmental measures seeking better control of the overall campus and community context for consumption ranked next. Besides drawing on such findings the present review relates some subsequent judgments. It describes some policies/programs that have been implemented on campuses (mainly US contexts), but also records some of the scientific recommendations and suggestions of what might offer encouraging results in reducing harmful patterns of alcohol and substance use among college adults. These strategies include:

- Drawing attention to alcohol-related harms and to available helps to support health
- Providing opportunities for those who drink to measure their intake and receive feedback
- Regulating alcohol availability and promotion on campus
- Pursuing a larger community ethos active against negative effects from alcohol

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's effects 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, 2002b).

Whatever the moral imperative in providing rather than withholding accurate pertinent knowledge about alcohol's 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 some pitfalls to be avoided if information is to prove helpful.

Nor do the behavioural results improve when the educational effort involves clarification of values in which students are encouraged to examine their goals and make their decisions about using alcohol align with those larger objectives. Attempts to motivate change by highlighting a discrepancy between a

person's expressed ideal for themselves and their present practice have not shown appreciable impact (Larimer and Cronce, 2007).

Raising awareness of alcohol-related issues evidently has minimal value as an informational service that is supplied on some occasional or more regular basis but separately from other related initiatives. Its greatest utility comes when it is incorporated as an integral element within a more comprehensive and consistent health promotion that conveys a holistic concern for personal wellness. The message should also communicate the ready availability of a service that is eager to support those who can benefit from its assistance.

Curriculum infusion provides a means of incorporating prevention-related content within a wide range of accredited academic subjects, whether health education courses (e.g., Riley et al., 2005) or numerous other disciplines (e.g., anthropology, biology, chemistry, communications, criminology, economics, marketing, political science, psychology, sociology, etc.) where it can be included at various points as relevant for discussion, investigation and application (Ryan and DeJong, 2002; DeJong et al., 2007). With creative guidance from instructors, the course and class context can become one which invites and facilitates strong student participation vital for constructive education and significant toward any improvement in drinking practice via the informational-awareness front (Ziemelis et al., 2002).

Key Considerations

Awareness campaigns aiming to change collective consciousness through social norms marketing will be treated later under environmental initiatives. More conventional awareness campaigns seeking instead to sound an informative alert about alcohol hazards and harms in a postsecondary campus will also often employ a variety of media to reach the student body at large. The favourite less expensive means include the use of posters (on bulletin boards, in washrooms), billboards, handouts (flyers, leaflets, cards, especially distributed at display tables or kiosks), campus newspaper ads and columns, and student radio spots. Larger-scale events can be routinely scheduled which afford more interaction than the simple distribution of fact-laden materials.

Traditional intervention strategies are slowly being replaced on campuses by new '*education perceptual correction strategies*' that rely heavily on engagement techniques rather than passive delivery of information. This new approach is at an early stage but several campuses have started to test it. It has yet to be shown that such programs can indeed produce desired outcomes. For orientation to diverse attempts, an enumeration and detailed description of noteworthy programs as variously implemented on particular American campuses from 1995 through 2000 may be found on the Promising Practices: Campus Alcohol Strategies Sourcebook 2001 website at www.promprac.gmu.edu/2005/SBindex.htm. Among the sorts of programs that have registered responsiveness and seemed somewhat beneficial when well implemented on campuses are:

- Alcohol Awareness Week/Day/Month that offers opportunities for a wide variety of events designed for students to take place in a focused period of time
- Theme Weeks and Months—Safe Break Campaigns, Rape Awareness Weeks, Holistic Health Weeks with discussions on heavy drinking and on how alcohol affects personal and collective

lives; as well, information tables, a pledge, pictures of people affected by misuse 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, non-use, values, history and goals; they can also follow a much more informal route by playing on festivity themes and using humorous profiles to illustrate how a good time can be had at college without booze and pushing risky behaviour to an extreme

Although some of the programs presented above might promise results, more is needed than is presently available to confirm long-term effects and cost-effectiveness. Again, merely informational campus campaigns subjected to more rigorous criteria of assessment have not evidenced positive returns practice-wise. While such vehicles will succeed in varying degrees in gaining student attention, further questions concern content and tone or tenor of messaging as well as larger context.

There is a wide range of detrimental effects associated with intoxication. Health promotion and harm prevention messaging in regard to excessive episodic consumption of alcohol (so-called “binge drinking”) needs in part to aptly draw attention to these deleterious outcomes without assuming an alarmist posture that soon loses credibility by constantly conjuring up frightening images of worst case scenarios. Strong fear appeals forcefully convey both severity and susceptibility (i.e., magnitude and likelihood of a threat). Those that produce the greatest behavior change are coupled with high efficacy messages (affirming ability to perform recommended activity that will indeed work in averting or minimizing the threat). Conversely, strong fear appeals with low-efficacy messages produce the greatest levels of defensive responses (Witte and Allen, 2000). Messaging that tries to jar students out of naïve complacent indifference ought not by overkill to demonize and thereby ironically glamorize the substance and desensitize users again. Nor should it leave campus community members in ignorance or doubt over means by which they can readily access support and avoid hazards. Moreover, it should refer them as well to opportunities for gratifying social life that can be enjoyed without need of or interference from alcohol.

Beyond just promoting awareness of the consequences of alcohol use and besides commending the viability of alcohol-free activities that students may engage in as an alternative to drinking, alcohol education programs can offer more. They can provide resources on how individuals can develop solid social networks that will give stability to and enhance enjoyment of their collegiate experience. Alcohol awareness efforts can furnish students with counsel on personal protective behaviours they can adopt or commend to friends.

Awareness raising can seize the opportunity to make it clear that students are not just numbers, tuition fee payers, clients to be processed. Showing an evident interest in the total well-being of students,

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 allow to correct perceived social norms and encourage gravitation toward more modest consumption habits. Where possible, universities/colleges should conduct an annual survey of students' alcohol and drug use, knowledge and attitudes. These surveys will help 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 re-education (Larimer and Crounce, 2007). The agenda with such personalized feedback (in 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 college mates' actual intake and the person's own drinking pattern. Discovery that they have 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 moderate peers, though success needs further evaluation regarding longevity of impact and other factors (Neighbors et al., 2004, 2006).

Investigation is becoming increasingly refined as required in order to determine which subgroups of students are most likely to be substantially influenced by such "self-others discrepancies" and which specified referents are most likely to have that kind of positive assimilating pull on them (Lewis and Neighbors, 2006; Borsari and Carey, 2003; Carey et al., 2006). Misconceptions are expected to be most pronounced in regard to more distal referents (e.g., the typical student in one's country or the average student on campus) and most compelling in regard to more proximal parties with whom the student more directly connects. Hence inquiry is exploring the bearing (size and relevance) of disparities for members of subsets such as males/females, freshmen, athletes, campus residents and Greek societies (fraternities and sororities, significant in the U.S.). The relationship with close friends is too familiar to foster the misperception that normative correction seizes on. Evidence is accumulating on the preferability of gender-specific feedback for women which provides them a corrected reference point they can better identify with, the more so for those who attach greater importance to that female social identity (Lewis and Neighbors, 2007). Personalized normative feedback that is also freshman-specific shows promise (Lewis et al., 2007). There is nothing to show that abstinent or light drinkers situated

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 are of a “stand alone” sort not accompanied by in-person counselling and are exclusively confined to correcting perceived norms. When offered as part of a multi-component brief intervention (as also often happens) it becomes much more difficult to assess the degree to which normative re-education itself contributes to encouraging outcomes achieved. However, since personalized normative feedback shows utility on its own and in conjunction with other elements, it allows institutions to consider various options in application. The positive results achieved in computer-generated and delivered tailored feedback make that mode appealing with its economic advantage personnel-wise.

There is room for more elaboration through research of how pertinent particular normative feedback (or alternatives to it) can be for those who minimally identify with a group or who are less socially motivated in their drinking. More study needs to be undertaken on the relative impact of injunctive norms with their focus on discrepant attitudes over approval of alcohol, compared to the descriptive or behavioral norms more commonly featured in applications so far.

Key Considerations

Personalized feedback for simple re-education on descriptive norms with a view to lowering alcohol consumption relates information already obtained via questionnaire on drinking patterns (in specified terms involving quantity and frequency) and student perceptions of such patterns. Measurement models are accessible and adaptations, if deemed apropos, can rather easily be adapted for implementation. A credible survey device is crucial for a clarification that can carry clout for campus populations whose typically inflated impressions can naturally occasion initial skepticism over accuracy of reported norms.

While testing has focused on heavier drinking students (identified by advance screening), computer web-based applications raise the possibility of employing personalized normative feedback in a broader context where it can be incorporated into a multi-component brief intervention and made rather immediately accessible to students at large within an institution, some formats certainly facilitating comparison with smaller subgroups with whom the user would register identification. Such an initiative that can provide primary, secondary and tertiary intervention via a single mechanism responding to level of need entered by the reporting user is proving increasingly attractive to post-secondary institutions.

Relative to social norms marketing efforts, personalized normative feedback (PNF) initiatives have greater capacity to measure actual intervention occurrence in student access of the service. PNF provides more salient information by supplying individuals with opportunity to reflect on their own reported drinking practice and by featuring explicit differences. Messaging to the effect that most students (however further classified for a meaningful connection) “don’t drink as much as you think they do, nor as much as you yourself do” (or “aren’t as supportive of alcohol use as you suppose they are, nor

as favorable to it as you happen to be”) directly invites a shift in orientation. 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 held. 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 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 simply contrasting someone’s drinking behaviour with the real norms of their 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 to it, and if necessary they can be referred to available treatment/support resources.

Some universities have taken the initiative to implement scheduled formal screening sessions where students were offered perspective on their drinking habits compared to the entire student body. Where such counseling sessions were perceived as more supportive than confrontational and incriminating, an encouraging decrease in heavy drinking was registered (US Department of Education Report, 2002).

In the case of postsecondary students, concerns about habitual sustained drinking that would lead to or manifest dependence (as well as pose a threat to long term health) are not to be discarded. Yet the much more frequently demonstrated patterns of heavy episodic drinking in varying degrees of frequency constitute the major concern. Accordingly, screens like CAGE and MAST that major in detection of “alcoholism” are not so useful sensitivity-wise as are tests that confirm hazardous occasional drinking to intoxication and incurring of harms related to alcohol use. Tests such as YAAPST,

YAACQ, CAPS-r 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 those 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 (e.g., "In a typical week, how many days do you get drunk?", O'Brien et al., 2006; "How many times in the past year have you had ... 5 or more drinks in a day?" (for men) ... 4 or more drinks in a day?" (for women), NIAAA, 2005; cf. "When was the last time you had more than X drinks in 1 day?" where X=5 for men and 4 for women, Seale et 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: cost, clarifying how results will and will not be used, and gaining respondents' confident cooperation to ensure accurate entries and reporting. Screening that employs reputable instruments should be made 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 "non-treatment-seeking population" (Moyer et al., 2002 quoted in Saunders et al., 2004). The literature 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., 2007; White, 2006). While more work is required to further corroborate the relative value of particular pieces in the package, application of a motivational interviewing philosophy is advised (Miller and Rollnick, 2002). This applies even if the intervention takes the form of feedback in print only that as such does not afford opportunity for sustained reflective listening and careful ordering of strategic questions to assist clients in exploring and resolving their ambivalence about change. In short, with its empathic non-judgmental manner this approach avoids imposing blame when giving feedback and instead affirms responsibility and capacity for change while offering advice and options.

Motivational enhancement strategies have for some time been recognized as effective and efficient among adolescents and young adults (Larimer et al., 2005; AADAC, 2005; Larimer and Cronce, 2002; Miller and Rollnick, 2002 cited in Parks, 2006; Borsari and Carey, 2000; Marlatt et al., 1998; Baer et al., 1992). In-person brief interventions permit not only the most opportune interviews for supporting change, but also the most tailored inclusion of pertinent components in such areas as building skills and support networks. Perhaps the most formally examined and widely accredited example for delivering statistically significant reductions in alcohol use among college students is *BASICS* (Brief Alcohol Screening and Intervention for College Students). Aimed at frequent heavy drinkers, *BASICS* constitutes a skill training approach that promises to be one of the most cost-effective preventive methods experimented so far (Parks, 2006). In two 45-60 minute sessions, it first assesses a drinking pattern and attendant attitudes about alcohol use and readiness to change, and then offers feedback and suggested ways to achieve a more moderate practice. In the process it not only supplies information about alcohol effects and relevant risk factors of the participant, it also introduces specific cognitive and behavioural strategies to moderate drinking and exercise harm reduction techniques, all within the framework of a motivational enhancement strategy (Miller and Rollnick, 2002 cited in Parks, 2006).

One element within the standard agenda for brief intervention among college students that has perhaps weaker support of effectiveness than previously apparent is that of expectancy challenge. More recent study results have raised questions about the effectiveness of merely didactic challenges (without an experiential dimension of demonstration) and about the value of the exercise for women (Larimer and Cronce, 2007 in contrast to Larimer et al., 2005; Larimer and Cronce, 2002 after Darkes and Goldman, 1993, 1998). Conversely, evidence is beginning to indicate the value of personal protective strategies in mediating an intervention to outcomes in which consumption and negative consequences are lowered (Martens et al., 2004; Larimer et al., 2007).

It is recognized that the heaviest collegiate drinkers are least inclined to voluntarily present for assistance even in view of experiencing negative consequences. A policy that issues disciplinary sanctions for violations or infractions of alcohol-related rules provides opportunity for such adjudicated students to be mandated not only for education sessions but to undergo brief intervention of a more substantial nature involving motivational and skills support. Research is being increasingly applied to this set of subjects, despite difficulties that include smaller samples and limited use of control groups owing to ethical considerations on withholding treatment. It is not easy to ascertain whether desired effects are owing to an intervention or the impact of the individual having been sanctioned or having received

an assessment. Notwithstanding such hindrances to obtaining reliable results, indications 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 in-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, athletes and/or other “high-risk coerced groups.” 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-based programs can have added appeal beyond modest expense for institutions that contract to use them and more immediate responses for individual visitors. Web-based computer delivered service that offers the advantage of minimal non-intrusive contact preserving anonymity and confidentiality, while potentially allowing a user to get engaged in their own on-site interactive investigation of informative resources and interesting tools, encourages not only honest disclosure but also empowered initiative to adopt change. Initial evaluation of effectiveness for this medium of intervention is quite promising, with testing done especially, but not only, on e-CHUG and My Student Body (White, 2006; Walters et al., 2005ab, 2007; Chiauuzi et al., 2005; cf. Saitz et al., 2007; Kypri et al., 2004, 2008). CARBC’s own Alcohol Reality Check, a short self-screen at www.alcoholreality.ca, includes an assessment for risky drinking that threatens near-term health.

In person face-to-face interventions give the greatest opportunity for interaction with a counselor in the interest of motivational interviewing, but require substantial effort on the part of the service provider to gain student confidence and prompt voluntary access. Those regular or standing services available on

campus will need to continually foster a receptive and supportive profile, and practice efficient screening as an integral element of routine care in monitoring health.

Resources permitting, provision of treatment (including initial intervention) in an on campus clinical setting is advantageous (Martens et al., 2007). This more conventional service should complement rather than preclude screening and feedback initiatives not tied to the medical facility (Larimer and Cronce, 2002). A campus health centre is consonant with the effort of a campus administration to offer a comprehensive and effective alcohol policy. Where funding is insufficient to supply clinical services on campus, development of explicit well-advertised links with off-campus resources and treatment facilities is all the more important.

There has not been complete evidential consensus on various issues and items involved in brief intervention: e.g., what the word 'brief' actually amounts to (i.e., length of sessions, number of sessions), what questionnaires' questions should include, how long students who receive advice/treatment should be monitored for, etc. Some program comparable if not equivalent to *BASICS* would appear a worthy mechanism for use in more formal direct counselling contexts with indicated students, recognizing that dependent drinkers can be expected to require more support than those who are categorized as hazardous or at risk. Those responsible for the Alcohol Skills Training Program of which *BASICS* has become the most celebrated modality also have produced a *CHOICES* intervention of comparable brevity as a constructive exercise in universal or selective prevention. It is designed ideally for delivery in (though not restricted to) a facilitated group context (Parks, 2006).

One review has recommended institutions invest in an alcohol specialist within health/counselling services to coordinate diverse screening opportunities, enhance access and facilitate referral. A further suggestion is that campus administrations consider a stepped-care approach in which internet provided feedback would commence the intervention process and lead as needed to in-person sessions. Another proposal for such a further stage is inclusion of assessments concerning other drug use and mental or physical health symptoms to adequately contextualize a risk behaviour (Larimer et al., 2004/2005; cf. White, 2006).

ENVIRONMENTAL APPROACHES

Reviews treating (and commending some) individual-focused approaches at the same time acknowledge the need for appropriate environmental strategies if the challenge of undue alcohol use and related harms is to be adequately addressed (e.g., Larimer and Cronce 2002, 2007; Larimer et al., 2004/2005). The environmental framework may indeed provide the most telling lens through which to view the phenomenon (Brower, 2002; Keeling, 2002; Kapner, 2003). While heavier drinkers increase their risk for harm, the preponderant numbers of not so extreme consumers who still occasion alcohol-related harm generate the majority of it. Without invalidating the need for measures aimed at higher-risk students, this "prevention paradox" gives greater weight to environmental strategies that will also bear on the larger body of campus drinkers (Weitzman and Nelson, 2004; Saltz, 2004/2005).

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 either 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 correct 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 or a 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; cf. 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 (DeJong 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-scale indulgence and thereby unintentionally encourage unconscious movement in that direction regardless of publicized risk (e.g., Berkowitz, 2005). While a warning against sensationalizing and the 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 avoidable by less hazardous habits. Nor will social norms marketing suffice to render unnecessary other environmental measures of a more regulatory sort, as many of its practitioners readily acknowledge.

Key Considerations

Social norms marketing campaigns require credible collection of updated data to confirm the extent of misperceptions and furnish the content of pertinent, positively slanted messaging. Such messaging must be delivered in clear, concise, catchy and consistent form through a variety of vehicles in a sustained way to gain and retain the attention of the audience it addresses. The aim is to emphasize the normalcy or normality of protective behaviours (/attitudes) and so promote them in an inclusive, appealing manner which will implicitly invite identification with and conformity to that stance. The messaging is intended to have a liberating and empowering influence with strong visual reinforcement for simple, succinct text.

Campaigns need to be perpetuated not necessarily on a continuous basis but in a regularly renewed (rather than just repeated) fashion in order to make an accumulated impact that can be at all substantial. New complementary variants on the gist of the central message can be periodically introduced to reinforce the thrust and refresh its accent. The tenor, packaging and means of dissemination will have to continue to reflect the particularities of the campus context being addressed. Advocates have also directed norms marketing more selectively at student groups recognized as more at risk or even indicated for problematic use (Berkowitz, 2005). Since, however, those narrower contexts are conducive to tailored messaging, the question arises as to whether a specific, personalized feedback might well be more appropriate and productive in those settings than simply announcing to such audiences an illuminating collective statistic.

Social norms marketing exponents have been very concerned to make guidance resources available to those wishing to implement such campaigns. Among such U.S.-based storehouses are the Higher Education Center and the National Social Norms Resource Center, and in Canada the Canadian Centre for Social Norms Research.

Other means as yet formally untested also merit consideration in fostering a culture shift on campus away from the impression that alcohol is a normal feature of collegiate experience (DeJong and

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 of supply wherever feasible. Work with licensed campus establishments to ensure adherence to approved trading hours, proper staff training and responsible operations.

Prohibit alcohol discounts in any form (reduced prices, coupons, cheap specials) on campus. Regulate advertisement in on-campus radio and print media, including signs and posters. This stance should also cover promotion of events and establishments off campus. Limit if not reject sponsorship of campus events and products by alcoholic beverage producers and retailers.

Evidence Base

The Canadian Campus Survey (CCS, 2005) reports that “generally, frequent drinkers find the campus environment conducive to their drinking, and heavy drinkers believe that the alcohol policies on their campus are not enforced”. Worrisome statistical evidence pertaining to the Canadian context is reported by researchers in the CCS: in the month before the survey, 25.1% of students took advantage of low priced promotions at bars on campus, while 14.5% took advantage of happy hours, and 12.2% took advantage of special promotions by beer companies. Such findings again show the need for concrete enactment and enforcement to help prevent misuse and protect against adverse outcomes.

A staple feature of environmental approaches aimed at the broad public is restricting where, when, and how alcohol is sold and distributed. Limiting the availability of alcohol by reducing venues of access, holding the line on price rather than giving specials, and withholding alcohol from those who are ineligible due to minority or impairment status are among such measures. Greater outlet density and

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 harms 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 incurrence among students overall in these “dry” settings, the bans have not been shown the cause of such 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 prevalence of heavier drinking are associated with such housing arrangements, which a certain bracket of students indeed prefer (Weitzman et al., 2000; Wechsler et al., 2002; Toomey et al., 2007; CCS, 2005). Where alcohol is allowed in dormitory situations, it can still be somewhat controlled through prerequisites and other regulations for parties. Prohibition or at least registration of kegs has been a favored feature of such demands (Wechsler et al., 2000; Toomey and Wagenaar, 2002), though some data suggests groups might seek substitutes in liquor to get around banning of kegs (Toomey et al., 2007).

Other options are to restrict alcohol use to only certain locations on campus such as a pub or banquet rooms, or, if allowing more public sites for use, to clamp down to some degree if not fully on sales and use in situations which are often conducive to heavier drinking. One such focal point would be tailgate parties in parking lots and other areas around a stadium, and within the stadium itself particularly (though not only) in conjunction with a public sporting event there. Again, results from efforts along this line have not yet been conclusive, though they are encouraging (Toomey and Wagenaar, 2002; Toomey et al., 2007).

Schools that do permit the operations of a licensed establishment on campus can and should monitor to ensure operations honour contractual terms including obligations for responsible beverage service. Besides the need to adhere strictly to approved hours of business, a campus pub must be made to refrain from offering special discount sales including “happy hour” reduced prices. Alcohol consumption, including “binge drinking,” among students has continued to be price responsive, increased intake being associated with cheaper rates while decreased use has linked up with higher prices (Weitzman et al., 2003a; Williams et al., 2005; cf. already Chaloupka and Wechsler, 1996; Weitzman et al., 2000; Brower et al., 2003, cited in AADAC, 2005; Kuo et al., 2003).

Service must be denied to intoxicated individuals. Servings should be in personal orders rather than larger sized pitchers, with standard size glasses provided. There should be compliance checks to confirm proper training is not only being conducted but also applied in service, since studies show that, without such surveillance, management tends to not support continued maintenance of such standards (Toomey et al., 2007).

Besides taking up the role of watchdog, groups representing healthy alcohol program and policy action on campus can seek to build a rapport and basis for cooperation with a campus pub. A good working relationship could encourage safety considerations in facility conditions (e.g., good lighting, adequate space for smooth passage and exit, good vantage for observation, comfortable seating, proper ventilation, clean washrooms), beneficial practices (e.g., provision of food, promotion of alcohol-free drinks, low-alcohol options, positive entertainment) and conveyance of low-risk drinking messaging (e.g., using posters, handouts, coasters).

Key Considerations

Getting more restrictive policies adopted and applied can be a laborious process requiring considerable patience and persistence to bring about administrative persuasion. Major planks in the case for alcohol-free residences are (1) the reminder of priority in principle for items that facilitate a positive productive learning experience and (2) the expressed preference of students for such housing precisely because it not only provides more personal security but also affords a climate more conducive to unhindered study (cf. Finn, 1996 in Toomey and Wagenaar, 2002). This can even be couched in terms of student rights that would take precedence over opportunity to consume.

If alcohol is allowed, there are reasonable ways of seeking to reduce adverse outcomes. Regulations on parties in residence, requiring registration, putting limits on numbers of participants and a ceiling on consumption that also prohibits drinking games, along with various other conditions (e.g., re monitoring by a sober individual, supervised distribution instead of self-service, maximum duration, noise constraints, liability for damages) that have to be formally agreed to beforehand qualify here. Pre-party orientation sessions not only outlining requirements but also offering practical suggestions on how festivities may best be enjoyed (since excess alcohol can readily ruin the celebration) can assist in this effort.

Any policy that intends to be taken seriously, articulating inappropriate alcohol use and unacceptable behaviour related to it, must be accompanied by a likewise clear statement of a disciplinary process that will indeed be followed in dealing with offenders. Citations, notifications of parents, referrals for mandated interventions, and community service requirements are all elements to be considered, with suspension or expulsion reserved for rather repeated or more serious violations. To have any deterrent value, such policies must, before being consistently enforced, be well disseminated.

Though tradition may invest certain events with a conventional legitimacy, documentation of unwelcome attendant circumstances can undermine a customary status and support imposition of new conditions for holding such occasions. While a pub, especially one run by a student body, may claim some autonomy for operations, legal requirements and subservience to the *raison d'être* of the academic institution provide sufficient basis for holding it accountable. Collaborative effort is much to be preferred over adversarial relations for progress in ensuring appropriate service, and the potential for cooperation is greater with an establishment situated on campus and subject to institutional constraints than with outlets off the grounds.

Beyond proscribing special offers of more alcohol for less money lies the question of broader promotional efforts to entrench the notion of alcohol consumption as a normal fun-filled and problem-free activity. Publicity on campus featuring (or even mentioning) availability of alcohol at events and establishments could be prohibited as well. Research has been conducted on the force, especially among youth, of advertising that presents alcohol as acceptable and even socially advantageous for them; some constraints have been imposed on or accepted by the industry. The issue is more complicated in a Canadian collegiate context where (unlike the US) most students gain legal-drinking age (usually 19 as in BC, rather than 21) fairly soon after entrance into post-secondary education. Also figuring in the mix are issues of freedom of speech and degree of autonomy for student-funded and student-run media such as a campus newspaper and radio station (and, e.g., bulletin boards and kiosks for which students are responsible).

While collegiate administration (and personnel engaged in harm prevention) may not be in any position to decide what messaging is issued in and through those vehicles, it can at least make clear what tenor of communication it would encourage those channels to convey and can contribute its own submissions to lend its distinctive voice to their presentations on alcohol-related matters. If a campus community of practice (CoP) dedicated to the alcohol question is at all adequately comprised of student representation besides other stakeholders, those student members of the CoP can be strongly supported by their colleagues of concern to aptly express a wholesome perspective and constructively engage alternative viewpoints. Whereas industry is content in its promotions to occasionally append secondary appeals for consumers to drink moderately without spelling out what that entails, CoP personnel can fill in the picture. Of course, publicity points that remain under control of the school can be more regulated to counter an impression of alcohol being a necessary and typically harmless ingredient to entertainment.

Post-secondary institutions are a frequent object of industry interest in sponsorship, and need to reflect on the impressions left from acceptance of industry funding and from granting the industry to enjoy a positive presence and profile at festive campus events. Use of educational materials supplied by the industry without proper opportunity to challenge adequacy of such content is another matter deserving critical examination. If countenancing any self-promoting representation by industry at all, campuses ought not to enter into agreements or arrangements that undermine balanced messaging.

Recommendation 6

Build sustained partnerships with community groups to support reduction of alcohol-related harms from student consumption off campus.

Evidence Base

Regulations limiting the use of alcohol and militating against its adverse effects on campus do not go far enough to help protect students against potential harm from this drug, given that it will still be available to them outside school property. Studies show that greater density of outlets in close proximity to a campus translate into higher levels of student drinking and adverse consequences being suffered

(Weitzman et al., 2003a; Williams et al., 2004 in Toomey et al., 2007; cf. Zimmerman, 2004). Kuo et al.'s (2003) analysis of alcohol marketing influence on the drinking behaviour of American college students confirms that the greater the prevalence of liquor advertisements, 'special rates' and promotions in or around campus, the greater the incidence of harmful drinking patterns among students. This research complements Babor et al.'s (1978) findings of twice as much liquor consumption by individuals participating in experimental 'happy hour' scenarios as by those same individuals during non-promotional hours.

If licensed retailers in the surrounding area and especially the near neighbourhood are unwilling to abide by the sort of pricing constraints advised earlier for on-campus suppliers, the deterrent to excessive consumption and impairment-related injuries and other damages being incurred will be too confined. Harms, of course, may be experienced not only by overly indulging students but also others whom their impaired behaviour effects, including those who live and work outside university property.

A basic minimal goal would be to have existing licensed vendors in the vicinity of the campus, particularly those in near proximity, formally agree to forego marketing ploys that would promote and provide alcohol at reduced prices to students (cf. Kuo et al., 2003; Weitzman et al., 2003b; Williams et al., 2005 in Toomey et al., 2007). Such establishments should be prepared to reaffirm their commitment to meet legal obligations to refuse service to minors and to those already or close to becoming intoxicated. Desirous of securing eligible students as customers, they should be interested in providing an environment that would qualify as an outlet an institution could classify as acceptably safe for their students of age to visit. Cooperation on advertising standards and readiness to publicize low-risk guidelines and tips on their premises would be an added plus.

As welcome, whenever achievable, as such a willing accord with given distributors would be, a worthwhile larger-scale objective in any event would be to build a broader-reaching community coalition. Work together with civic officials and neighbourhood representatives could help ensure regular monitoring checks for service standard compliance by present vendors as well as dealing with issues of outlet density and impact of bar/tavern disturbances on local residents (Wechsler et al., 2002a). Such collaborative involvement could lead to passing of municipal regulations on hours, alcohol advertising and promotions as well as conditions of service (e.g., no self-service; trained servers; legal age confirmation) at public events in the community.

Research conducted thus far indicates headway in reducing student intake and occasioned harms through more extensive application of an environmental approach that involves campus and community collaboration (Gebhardt et al., 2000; Weitzman et al., 2004; Toomey et al., 2007). This is entirely in keeping with broader substantiation for the effect of wider initiatives to limit overindulgence in the larger public by regulating retail operations.

Evidence from broader contexts shows that extended open hours for on-premise drinking establishments permit more consumption and contribute to more alcohol-related problems (Doherty and Roche, 2003; Briscoe and Donnelly, 2001; Grover, n.d.). Increased rates of impaired driving and alcohol-related assaults, along with stress placed on police and emergency services, all correlate with

extended trading hours. Chikritzhs and Stockwell's (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 timing of motor vehicle accidents and between later hours and 'dramatic' increases in wholesale alcohol purchases (suggesting greater consumption and thus the potential for greater harm). Norström and Skog's (2003) research on Saturday openings of liquor outlets in Sweden corroborates reports on 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 students also, the more hours local establishments remain open, the greater the opportunity for trouble.

Measures against keeping prices for alcohol low do work among the greater population (Toomey and Wagenaar, 2002; cf. Chaloupka et al., 2002). Price rises can be linked more generally with significant drops in rates of cirrhosis mortality and liquor-associated deaths (Room et al., 2005), alcoholism (Farrell et al., 2003), impaired driving, liquor-related disease, crime and violence (Chaloupka et al., 2002; cf. Homel, 1993), and fewer vehicular fatalities (Cook, 1981) among other benefits. This doesn't mean they will necessarily have that same kind or degree of impact among students. However, making alcohol more available to them by keeping prices low, or making them lower yet at times, does translate into increased excessive intake by students and resultant harms. Militating against this does make a difference.

Key Considerations

Ideally a campus and community coalition would include, besides key personnel speaking for the collegiate institution's administration and alcohol concern group, representatives from neighbourhood residents, the local business community, public health care providers, substance use services, law enforcement, municipal government and other identified stakeholders. Resources on environmental management approaches including coalition building are available at the (U.S.) Higher Education Center website (e.g., DeJong et al., 1998; Zimmerman, 2004).

An educational institution-inspired community coalition can be interested not only in addressing concerns attached to licensed retail outlets in the area, but also the impact of student consumption in off-campus residential settings. Students attending or hosting local parties could be advised in advance about liability issues in relation to service to minors and those who leave intoxicated, about what neighbourhood standards are in regard to annoyance and grounds for complaint, and about procedures followed and possible sanctions issued in the event of behaviour that provokes complaint. A campus may see fit to make clear to its students and the surrounding community the extent to which it is committed to support area residents and exercise disciplinary jurisdiction over off-campus disturbances caused by students, under the influence or not (DeJong and Vehige, 2008).

A still further reach for a community coalition could be joint submissions to provincial and federal authorities on issues of taxation that would bear on student purchase and consumption patterns: e.g., increase in excise taxes; tax incentives for production and consumption of low-alcohol beers.

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