College student willingness for brief interventions in the emergency department

Robert Lipton, Ph.D., MPH and Nina Joyce, MPH

Official hospital of the **Boston Red Sox**

Harvard Affiliated Emergency Medicine Residency, Department of Emergency Medicine
Beth Israel Deaconess Medical Center, Boston, MA

rlipton@bidmc.harvard.edu

OBJECTIVE

To develop an effective emergency department (ED) structured brief intervention (SBI) for alcohol problems in a college student population we examined attitudes toward SBI and drinking behavior in a large Boston ED. This is a pilot study to assess feasibility of doing an actual SBI in a college student population. No brief intervention was given.

BACKGROUND

Alcohol related problems are one of the most common presenting complaints to the emergency department and between 1992 and 2000, rose by 18%.[1] In the Boston area there is a very high per capita number of college students. Often these students are new to drinking and a relatively unsupervised living situation. Alcohol consumption is a legal and readily available intoxicant that is part of college life for a segment of the student body. This is a vulnerable population that can easily get into a great deal of trouble with the acute effects of alcohol consumptions, such as alcohol poisoning, injury (auto accidents, falls, etc), violence, and rape. Further, some in this population may be predisposed towards problem and alcoholic drinking behavior. Problem drinking in college may allow for this predisposition to become manifest. In an effort to mitigate such problems we intend to develop a brief intervention for alcohol problems research program that also includes follow-up to the respective student health service for each student. In order to systematically develop this research we need to understand how students might respond in the BI ED to the possibility of being involved in such a program. This preliminary information will help assess participation as well as the details of how to identify and follow students who come into the ED with alcohol related problems.

[1] McDonald, M.J., et al. "US Emergency Department Visits for Alcohol-Related Diseases and Injuries Between 1992 and 2000" *Arch Intern Med.* 2004;164:531-537

METHODS

Using a convenience sample, a group of 28 undergraduate college students were surveyed (12 men, 18 women) presenting in the emergency department (ED) at a large urban hospital during a 3 month period in late 2008, early 2009. All students were 18 years old or older. Twelve of these students were "cases" presenting with alcohol related problems while 16 were controls presenting with non-alcohol related problems who had not consumed alcohol in the previous 24 hours. We collected information on willingness to participate in a brief intervention, what kind (person, computer), drinking behavior (quantity, frequency, binging), willingness to seek help for your self and others, and the AUDIT problem drinking scale.

RESULTS

Note: This is a pilot study with a small N, thus we are reporting our findings in a very descriptive manner, statistical significance is not possible given this sample size.

42 % of the total sample were cases, (average number of drinks before arriving to the ED was 3.9 (std. 3.8, max 10)

Cases were evenly divided between men and women, (n=6 for each)

The average age was 22.10 (std. 9.54) for cases and 18.50 (std. 5.53) for controls.

13 colleges and universities were represented in this sample, with Boston University and Northeastern have the highest percentage, 16.67% and 33.3 % respectively.

For those drinking 5-11 drinks at least once a month or more, there was no difference found between cases and controls, 27% of cases (3 of 11) and 31% (5 of 16) of controls reported such consumption.

For 11 drinks or more, 36.3% of cases (4 of 11) and 31% of controls (5 of 11) were reported, also, not significantly different.

Cases had an AUDIT score of 9.44 (std. 7.31), controls had a score of 8.57 (std. 4.75).

50% of cases reported interested in participating in a brief intervention, (6 of 12) and 56% of controls (9 of 16).

Virtually none of those reporting an interest in SBI, cases or controls, wanted a computer intervention, .08 % (1 out of 13).

46% of those showing an interest in SBI said they would participate in a follow-up.

63.6% of cases (7 of 11) and 53.3% of controls (8 of 15) reported that they knew somebody who avoided calling for medical assistance for severely intoxicated students because of fears of disciplinary actions.

63.3% of cases (7 of 11) and 60% of controls (9 of 15) reported that the threat of disciplinary action was somewhat or very important when seeking medical assistance for a friend who is severely intoxicated.

CONCLUSION

There were no significant differences found between cases and controls in regard to every level of alcohol consumption.

Nevertheless, for both cases and controls, high quantity drinking rates were markedly high, roughly 33% of the students in our sample reported drinking 11 or more drinks in a night, at least monthly.

The relatively small differences in AUDIT scores between cases and controls is also of interest. Even though the cases have not come into the ED for anything alcohol related their average AUDIT scores are within the range of problem drinking. There is the possibility that the cases might actually be at higher risk for coming to the ED due to some, unmeasured relationship to alcohol drinking or that the "baseline" for college student drinking in the area is very high.

Structured brief interventions were of moderate interest to both cases and controls, but interestingly, computer based SBI was only found to be of interest to one study participant. This finding, notwithstanding, the small sample, goes against perceived wisdom regarding young people and computer based interventions.

Follow-up is a very important component of any SB. About 50% of those open to doing SBI in our sample, cases and controls, thought they would participate in follow-up. Its not clear if this rate of intended participation is predictive of actual participation. We can, however, assume that actual rates would be lower.

Of great concern is our finding that 50-60% of the whole sample reported they knew somebody who avoided calling for assistance for a severely intoxicated student because of disciplinary fears. This finding combined with the finding that about 60% of cases and controls considered the threat of disciplinary actions personally either somewhat or very important when seeking medical assistance for a severely intoxicated friend is alarming. This reluctance to seek assistance given the high rates of heavy, episodic drinking in a college setting is troubling and should be the subject of campus and community efforts to change this. And, at the very least, such results should help to motivate further research on effective prevention efforts both in the emergency room and in the college setting (and/or efforts that combine the settings).

Clearly, this is just a pilot study, but the findings are quite suggestive for future research directions/questions:

- **are brief interventions useful**
- **what kind of interventions are useful**
- **how is the threat of disciplinary action to be dealt with**
- **more thoroughly study student alcohol consumption**