Both early alcohol use and early intoxication can herald trouble for college students

August 15 2012

An early age at first drink (AFD) has been linked to later alcohol-related problems, which is one of the reasons behind the legal drinking age of 21 in the U.S. It is unclear, however, if increased risk is primarily due to initiation of any drinking, or initiation of heavier drinking. A comparison of the influence of these potential risk factors among college undergraduates found that both an early AFD as well as a quick progression from the first drink to drinking to intoxication independently predicted later problems.

Results will be published in the November 2012 issue of *Alcoholism: Clinical & Experimental Research* and are currently available at Early View.

"Many studies have found relationships between an early AFD and a range of negative alcohol-related outcomes later in life, including the development of alcohol use disorders, legal problems like DUI, and health problems like cirrhosis of the liver," said Meghan Rabbitt Morean, a postdoctoral fellow in the department of psychiatry at Yale University School of Medicine and corresponding author for the study. "There is also evidence that beginning to drink at an early age is associated with more immediate problems, such as compromised brain development and liver damage during adolescence, risky sexual behaviors, poor performance in school, and use of other substances like marijuana and cocaine."

Harriet de Wit, a professor in the department of psychiatry and

behavioral neuroscience at The University of Chicago, concurred. "While it is commonly believed that the earlier a person begins drinking alcohol, the more likely it is that he or she will develop problems with drinking, many factors potentially contribute to this relationship, and these factors can only be disentangled with systematic, longitudinal research."

While an early AFD is associated with many negative consequences, it is not clear that it directly causes heavy drinking or other negative outcomes, Morean added. "Prior research on early intoxication … suggested to us that making a distinction between the age at which an individual first has any alcohol and the age at which an individual first drinks to intoxication may have important implications for understanding the relative risk associated with starting to drink at an early age," she said.

Morean and her colleagues examined 1,160 freshman (766 females, 394 males) using data gathered from bi-annual assessments from the summer following high-school senior year through the fall of the fourth year of college (four years in total). Participants self-reported their age of drinking onset and age of first self-defined intoxication, as well as frequency of heavy drinking and alcohol-related problems. Analyses looked at the effects of AFD and the time from first use to first intoxication as predictors of heavy drinking and problems across the four years from high school through college.

"As expected, beginning to use alcohol at an earlier age was associated with heavier drinking and the experience of more negative consequences during senior year of college," said Morean. "Quickly progressing from first alcohol use to drinking to intoxication was also an important predictor of heavy drinking and the experience of alcohol related problems during senior year of college. For example, an adolescent who consumed his first drink at age 15 was at greater risk for heavy drinking

and problems than an adolescent who took his first drink at age 17. Further, an adolescent who took his first drink at age 15 and also drank to intoxication at age 15 was at greater risk for heavy drinking and problems than an adolescent who had his first drink at age 15 and did not drink to the point of intoxication until he was 17."

"The authors also found that impulsive personality and family history of alcoholism were related to age of first drink and future problems," added de Wit.

Both Morean and de Wit agreed that early drinking should be delayed, but if it occurs, these youth should be counseled to avoid drinking to intoxication.

"The best way to prevent heavy drinking and the experience of alcohol-related problems is to prevent alcohol use," said Morean. "Therefore, our first recommendation would be to delay the onset of any alcohol use as long as possible. However, despite valiant prevention efforts, the average American adolescent has his or her first alcoholic drink between the ages of 14 and 15 years."

"Furthermore," said de Wit, "it is unlikely that education will discourage high school and college students from drinking at all. However, education may help to make them aware of the potential for developing future problems, and modulate their drinking accordingly."

"It is important to speak to children and adolescents openly about the dangers of heavy drinking and provide them with correct information, for example, 'how many drinks does an average male/female need to drink to exceed the legal level for intoxication?,'" said Morean. "It is also extremely important to remember that heavy drinking during adolescence and early adulthood is not confined to college campuses. Most adolescents begin drinking during high school, a significant portion

of whom begin drinking heavily. To help address this, we suggest that new alcohol prevention and intervention efforts targeting high school students be developed with the goal of delaying onset of heavy drinking among those at increased risk due to an early onset of drinking."

Provided by Alcoholism: Clinical & Experimental Research