Parenting for Prevention

Student Assistance Services Corp., 660 White Plains Road, Tarrytown, New York, 10591, April, 2015

Alcohol Awareness Month, 2015



The goal of April being designated Alcohol Awareness Month

is to encourage everyone to dedicate this month to understanding how excessive drinking can affect their health and the health of their family.

This month the newsletter includes a reprint of a study just published this month by the National Institute on Alcohol Abuse and Alcoholism on their website about the behavioral effects of teen binge drinking. It is "hot off the press" and presents very interesting information.

There is also information about young children who take "sips" of alcohol from a parent's, older sibling or someone else's drink. New research indicates that a child who takes a sip is more likely to drink during their teen years.

Also included in the newsletter is the information on powdered alcohol, another product that could be attractive to teens as it is easier to hide and transport than the traditional containers of alcohol.

Editor: Patricia Murphy Warble, CPP, LMSW

Study Defines Brain and Behavioral Effects of Teen Binge Drinking

NIH-funded findings also point to possible treatments for harmful effects of adolescent alcohol exposure

"Adolescent binge drinking can disrupt gene regulation and brain development in ways that promote anxiety and excessive drinking behaviors that can persist into adulthood", according to a new study supported by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), part of the National Institutes of Health. A report of the study, conducted in animals by researchers at the University of Illinois at Chicago College of Medicine, appears online in the journal Neurobiology of Disease.

"These findings are an important contribution to our understanding of the alcohol-induced brain changes that make alcohol problems in adulthood more likely among young people who abuse alcohol," said NIAAA Director George F. Koob, Ph.D.

Previous studies have shown that people who start drinking before the age of 15 are four times more likely to meet the criteria for alcohol dependence at some point in their lives, and young people consume more than 90 percent of their alcohol by binge drinking.

Researchers led by Subhash C. Pandey, Ph.D., professor of psychiatry and director of neuroscience alcoholism research at the University of Illinois at Chicago and a Research Career Scientist at Jesse Brown Veteran Affairs Medical Center in Chicago, investigated the effects of intermittent binge alcohol exposure during the adolescent stage of development in rats. To model adolescent binge-drinking in humans, the researchers gave 28-day-old rats alcohol for two days in a row, followed by two days off, and repeated this pattern for 13 days. Some rats were followed into adulthood and observed for abnormal behaviors. They were offered both alcohol and water, and their alcoholdrinking behavior was monitored.

Rats exposed to alcohol during adolescence exhibited changes in behavior that lasted into adulthood, long after their adolescent binge exposure to alcohol had ended. For example, they showed increased anxiety-like behaviors and drank more alcohol in adulthood.

Parenting for Prevention

Prior research has implicated a brain structure known as the amygdala in anxiety and alcohol-drinking behaviors. When Dr. Pandey and his colleagues analyzed the amygdala of alcohol-exposed rats in their study, they found that the complex of DNA and histone proteins within the amygdala cell nuclei appeared to be tightly wrapped. They also found increased levels of a protein called HDAC2, which modifies histones in a way that causes DNA to be wound tighter around them. Collectively, these kinds of changes to DNA or its associated proteins that change its function but do not affect the DNA sequence are referred to as epigenetic changes.

"Genes that lie within DNA that is tightly wrapped around the histones are less active than they are if the DNA is loosely wrapped," explains Dr. Pandey. "The looser the DNA is coiled, the more accessible are the genes to the cellular machinery that makes relevant proteins."

Dr. Pandey and his team found that the epigenetic changes they observed in alcohol-exposed rats were linked to lowered expression of two genes – brain-derived neurotrophic factor and activity-regulated cytoskeleton-associated -- that nerve cells need to form new connections with each other. The diminished expression of the genes persisted in adulthood, even if alcohol exposure was stopped weeks before, and the researchers observed diminished nerve connectivity in the amygdala of these affected adult rats. But they then showed that a drug that blocks the activity of HDAC2 could loosen the coiling of DNA in amygdala cell nuclei of alcohol-exposed rats, and increased the expression of the gene needed for nerve cell connectivity in those animals. The animals then also exhibited less anxiety and reduced alcohol intake.

The researchers plan additional studies of this target and other epigenetic drugs to investigate their possible use in reversing the persistent harmful effects of adolescent alcohol exposure.



Powdered Alcohol

In 2012, Mark Phillips developed a powdered a form of alcohol that could be mixed with water. Mr Philips says that his inspiration for developing this product was a desire to have an "adult" beverage after a day of hiking. He added that when he was hiking, he did not want to carry an "adult" beverage with him.

Mr Phillips has come to the attention of state and federal lawmakers who want to ban the product. Concerned over the potential for abuse, six states have passed legislation to ban powdered alcohol outright, according to the National Conference of State Legislatures. Senator Charles Schumer introduced a bill last month that would ban its sale and manufacture nationwide.

Opponents of the powdered alcohol said that it could increase the chances of underage drinking as it is easier to transport and conceal. Senator Schumer referred to the product as "Kool-Aid."

In March, Maryland's comptroller, Peter Franchot, announced an agreement with alcohol industry trade groups to voluntarily refrain from distributing or selling powdered alcohol. He said consumers could create dangerous drinks by mixing multiple packets of "palcohol" into a single drink.

"The likelihood of widespread Palcohol abuse — particularly among underage consumers carries a real possibility of tragic consequences," Mr. Franchot said in a statement, "which is why I'm so pleased by the industry's unified response to protect the public from such a dangerous product."

Community Anti-Drug Coalition of America

Power to the Parent.org wins People's Choice award



In the late fall, in anticipation of our annual trip to Washington, DC to attend the Community Anti-Drug Coalition of America's (CADCA) annual conference, the Westchester Coalition for Drug and Alcohol Free Youth submitted a proposal to participate in the Idea's Fair at the conference where coalition initiatives are featured. Our powertotheparent.org proposal was accepted and under the guidance of Lauren Amsterdam, the graphic designer for this initiative, we designed a creative, eye-catching banner and handouts. The handouts and our business cards were put into red cups, the "iconic" symbol of underage drinking, and handed out to the people who came to our booth.

In order to involve the conference attendees, CADCA invites them to go to the Ideas Fair and then vote for their favorite booth. I am happy to report that powertotheparent.org won this People's Choice award and the above picture will be featured on the CADCA website during the coming year.

A large group of coalition leaders from Westchester County attended the conference and participated in Capital Hill Day. During this day leaders visit with elected officials and educate them about the value of supporting the Drug Free Communities (DFC) grant and other legislative initiatives that fund community substance abuse prevention efforts throughout the country. We are very lucky to have a significant number of DFC and other federally funded grants in Westchester County. While visitng with elected officials during Capital Hill Day leaders also thank our elected officials for their support as almost all have been very involved in these initiatives. Senator Schumer made an effort despite many pressing issues, to join the New York State meeting to thank all of the coalition leaders for the work that they do to improve the lives of the residents of New York State.



Coalition leaders gather on the steps of the Capital during Capital Hill Day at the CADCA Conference.

Everyone agrees that attending this conference is not only educational and enlightening but is also validating, energizing and empowering.

Kids Allowed Sips of Alcohol More Likely to Drink

A study published in the Journal of Studies on Alcohol and Drugs found that children who had sipped alcohol by the sixth grade were about five times more likely to have a full drink by the time they were in high school and four times more likely to binge drink or get drunk. The study surveyed 561 middle school children in Rhode Island.

Even when factoring out issues that encouraged problem drinking in the future, such as how much parents drink, a history of alcoholism in their family or having a risk taking personality, the students who sipped alcohol were more likely to be drinking in high school.

According to the results of the survey, twenty-six percent of the students who had sipped alcohol said they had a full

Student Assistance Services 660 White Plains Road Tarrytown, New York 10591 drink by the ninth grade versus under six percent for the students who had never sipped alcohol. Nine present said they had binged on alcohol or gotten drunk versus 2% of the nonsippers.

One of the co-authors of the study, Kristina Jackson, a research associate professor at Brown University's Center for Alcohol and Addiction Studies said, "I would say that it is advisable not to offer your child a sip of your beverage, as it may send the wrong message younger tweens and teens may be unable to understand the difference between drinking a sip and drinking one or more drinks."

Upcoming Events

April 297 to 8:30pmChasing It A DocumentaryLakeland High School1349 East Main Street, Shrub Oak

April 307:00pmNYS Joint Senate Task Force onHeroin and Opiod AddictionMildred E Strand Middle School2701 Crompond Road, Yorktown,

May 4th7 to 9pmAn Evening with Dr LevineAuthor of The Price of Privilegeand Teach Your Children WellArdsley High SchoolRegister atArdsleyCoalition@gmail.com

May 127 to 9pmKatonah-Lewisboro Family U

The Blessing of a B Minus Wendy Mogel John Jay High School <u>https://familyunight2015.eventbrite.com</u> Contact: 234-3227