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## Alcohol, Other Drugs, and Health: Current Evidence

MAY-JUNE 2009

#### **INTERVENTIONS & ASSESSMENTS**

## Repeated Brief Counseling Decreases Recurrence of Alcohol-Related Pancreatitis

Alcohol-related acute pancreatitis commonly recurs, and continued alcohol use is associated with recurrence. Finnish investigators randomized patients hospitalized for alcohol-related acute pancreatitis to either a single 30-minute in-hospital session of brief counseling (n=61) or the same counseling session plus repeated counseling every 6 months in the gastroenterology outpatient clinic (n=59). Subjects were 84% men, and the median age for all participants was 47. Patient characteristics (demographics, alcohol use, and severity of disease) were similar between groups. At 2-year follow-up,

- 23 patients were rehospitalized for abdominal complaints (12% of the repeated intervention group and 26% of the single intervention group) (p=0.038).
- 18 patients developed recurrent acute pancreatitis (8% of the repeated intervention group and 21% of the single intervention group) (p=0.042).
- dependence symptoms decreased

significantly in the repeated intervention group, where a trend toward lower consumption was also observed.

Comments: This study strongly suggests the importance of ongoing brief counseling over time to maximize benefits. It further suggests that counseling should not be "relegated" to primary care physicians but can be useful for medical specialists like gastroenterologists who follow patients with pancreatitis and alcoholic liver disease. Future studies should examine whether brief interventions would similarly benefit patients with alcohol-related conditions seen by other specialists; e.g., holiday heart syndrome and alcoholic cardiomyopathy by cardiologists and alcohol-related seizures by neurologists.

Peter D. Friedmann, MD, MPH

Reference: Nordback I, Pelli H, Lappalainen Lehto R, et al. The recurrence of acute alcohol-associated pancreatitis can be reduced: a randomized controlled trial. Gastroenterology. 2009;136(3):848–855.

### Impact of Supportive Housing for Chronically Homeless People with High Use of Alcohol-related Crisis Services

Housing First supportive housing programs do not make admission contingent on sobriety or treatment attendance and target chronically homeless people who are high users of publicly funded health and criminal-justice resources. The goal of these programs is to reduce safety-net system costs while improving quality of life for chronically homeless individuals by

reducing acute care visits, hospital admissions, length of stay, incarceration, and shelter use and providing housing. Researchers studied the use and cost of services before and after program admission among 95 participants in a Housing First program in Seattle, Washington, and compared them with 39 wait-listed participants. All had severe alcohol problems.

(continued on page 2)

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#### Housing and Alcohol-related Services Use (continued from page 1)

- Monthly median costs among admitted participants decreased from \$4066 in the year before admission to \$1492 after 6 months in housing and \$958 after 12 months in housing.
- Even after accounting for housing program costs, total mean monthly spending on housed participants compared with wait-listed participants was \$2449 lower at 6 months.
- Both costs and crisis-services use decreased with longer time in housing.
- The number of drinks per day among housed participants decreased from 15.7 prior to housing to 14.0 at 6 months, 12.5 at 9 months, and 10.6 at 12 months.

Comments: Housing First program participation is associated with decreased crisis services use and costs and decreased alcohol use after program admission among chronically homeless people compared with wait-listed controls. It is difficult to conduct controlled experiments of basic needs, such as housing, due to ethical concerns. This study provides important support for future research and development of low-threshold service programs for high users of health and criminal justice resources.

Alexander Y. Walley, MD, MSc

Reference: Larimer ME, Malone DK, Garner MD, et al. Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems. JAMA. 2009; 301(13):1349–1357.

### **Quarterly Recovery Management Checkups to Treat Chronic Substance Use Disorders**

Regularly scheduled monitoring and counseling, the standard of care for chronic diseases like diabetes mellitus and hypertension, have been advocated for the treatment of addiction as a chronic relapsing disorder. Two clinical trials in Chicago randomized 894 adult chronic substance users who presented for publicly funded substance abuse treatment to usual care or recovery management checkups (RMCs). Checkups included quarterly monitoring, motivational interviewing, and early linkage to retreatment for participants who relapsed. On average, subjects were in their late thirties and female. More than 4/5ths were African-American, and most were cocaine dependent. Over 2-year follow-up,

- RMC subjects were significantly more likely than controls to return to treatment (60% versus 51% in study 1, and 55% versus 37% in study 2), and to return sooner (200 days earlier in study 1 and 384 days earlier in study 2).
- RMC subjects had a significantly greater proportion of days abstinent than controls in study 2 (70% versus 63%) but not in study 1.

 RMC subjects had fewer successive quarters of unmet need for treatment than controls in both studies.

Comments: Ongoing monitoring, feedback, and early reintervention are feasible and efficacious for the longitudinal management of addictive disorders. Recovery management checkups have obvious potential for reengineering the focus of formal addiction treatment away from episodic care and toward chronic care. However, only a small proportion of persons with substance use disorders have contact with formal treatment. An intriguing possibility is that RMC could be incorporated into other community service settings where substance-using persons already have longitudinal contact—primary care and the patient-centered medical home; community case management and social work; public-health and child-and-family services; and even probation and parole.

Peter D. Friedmann, MD, MPH

Reference: Scott CK, Dennis ML. Results from 2 randomized clinical trials evaluating the impact of quarterly recovery management checkups with adult chronic substance users. *Addiction*. 2009; 104(6):959–971.

#### Computer versus Therapist-delivered Treatment for Co-occurring Depression and Alcohol/ Cannabis Use

When depression and substance abuse occur together, as is common, either condition can hamper effective treatment of the other. Behavioral interventions that address both conditions have not been rigorously tested. Although delivering such interventions by computer holds promise for extending their reach, their effectiveness in treating these co-occurring disorders remains unknown. In a randomized trial, researchers measured the effectiveness of an intervention combining principles of motivational interviewing (MI) and cognitive behavioral therapy (CBT) in the treatment of depression and comorbid alcohol and/or cannabis use. After a single baseline brief-intervention session, 97 persons with co-occurring depression and heavy alcohol and/or cannabis use were randomized to receive either no further treatment (n=30) or nine I-hour sessions of MI/ CBT treatment delivered either by a therapist (n=35) or by computer (n=32). Sixty-seven patients completed the study. Depression and alcohol/cannabis use were assessed at 3, 6, and 12 months following treatment completion.

- Although the initial treatment session demonstrated modest efficacy for depression as well as alcohol and/ or cannabis use, outcomes across all 3 conditions were further improved among MI/CBT recipients.
- The proportion of participants with improved depres-

sive symptoms (Beck Depression Inventory score, <17) and with diminished alcohol and/or cannabis use (<50% as many hazardous use days per month) at 12 months did not differ significantly among recipients of therapist- or computer-delivered interventions.

Comments: These data provide clear evidence that combining interventions to target depression as well as alcohol and/or cannabis use can improve outcomes in both conditions, and that delivering such interventions by computer may be effective and reduce costs associated with therapist time. The results might have been less favorable had intent-to-treat analyses assumed that participants lost to follow-up had resumed drug use. In addition, the intensity of the intervention (10 hour-long sessions) raises questions about feasibility in typical practice settings. As computer-delivered interventions gain acceptance, further studies to define cost- effectiveness and completion rates outside of research settings are warranted.

Marc N. Gourevitch, MD, MPH

Reference: Kay-Lambkin FJ, Baker AL, Lewin TJ, et al. Computer-based psychological treatment for comorbid depression and problematic alcohol and/or cannabis use: a randomized controlled trial of clinical efficacy. *Addiction*. 2009; 104(3):378–388.

#### **HEALTH OUTCOMES**

#### Marijuana Associated with Testicular Cancer

Testicular cancer, generally classified as seminomatous (60%) and nonseminomatous (40%) with nonseminomatous being more aggressive and treatment resistant, is the most common cancer among American men ages 15 to 24 years, and its incidence has been increasing 3-6% per year over several decades. Prior research has demonstrated that chronic marijuana use impacts endogenous hormone levels in the endocrine and male reproductive systems. Researchers conducted a population-based case control trial to determine whether marijuana use is a risk factor for testicular cancer. Between 1999 and 2006, 369 cases of testicular cancer in men ages 18 to 44 years were identified from 3 counties in Washington State. These men, along with 979 age-matched controls, were surveyed about their lifetime marijuana use. Potential confounders in analytic models included age, alcohol use, current smoking, and history of cryptorchidism.

- Patients with testicular cancer were 1.7 times more likely to be current marijuana smokers than controls.
- This association occurred most frequently in patients

- with nonseminomatous tumors, who were 2.3 times more likely to be current marijuana smokers than controls.
- Patients with nonseminomatous tumors were also more likely to have started using marijuana at an earlier age (odds ratio [OR], 2.8), to have been using marijuana for 10 or more years (OR, 2.7), and to have a higher frequency of use (OR, 3.0).

Comments: Marijuana use at an earlier age, for more years, and with higher frequency is associated with nonseminomatous testicular cancer. Prospective studies controlling for confounders as well as basic scientific research to elucidate the potential biologic mechanisms behind this association are needed to determine whether marijuana use causes nonseminomatous testicular cancer.

Alexander Y. Walley, MD, MSc

Reference: Daling JR, Doody DR, Sun X, et al. Association of marijuana use and the incidence of testicular germ cell tumors. Cancer. 2009;115(6):1215–1223.

#### QT Prolongation and Mortality among Patients on Methadone

Methadone is associated with prolongation of the corrected QT interval (QT<sub>c</sub>) in some patients. Because QT<sub>c</sub> prolongation is a risk factor for torsade de pointes and sudden death, concerns have arisen over the cardiac safety of methadone and whether patients receiving it should undergo electrocardiography (ECG) screening. Estimates vary regarding the proportion of opioid agonist treatment (OAT) patients with clinically significant QT<sub>c</sub> prolongation, and population-level data on mortality attributable to methadone-associated cardiac disturbances are lacking. To better define the clinical significance of QT<sub>c</sub> prolongation in OAT patients, investigators in Norway used 2 approaches: ECGs among 200 of the country's OAT patients who agreed to voluntary screening, and matching of national death records with the register of all patients in Norway who received OAT from 1997-2003. Any death for which no other cause could be identified was attributed to possible methadone-associated cardiac arrhythmia. Among patients in the ECG sample,

- 28.9% of those receiving methadone had some QT<sub>c</sub> prolongation (>450 ms), and 4.6% had QT<sub>c</sub> prolongation of >500 ms (considered at significant risk for arrhythmia).
- A positive dose-dependent relationship was observed between methadone and QT<sub>c</sub> interval. The mean dose of methadone in the ECG sample was 111 mg per day. All patients with a QT<sub>c</sub> of >500 ms were on methadone doses of 120 mg per day or higher.
- No patient receiving buprenorphine (n=27) had a QT<sub>c</sub> of >450 ms.

Among patients in the OAT/mortality comparison sample,

- During the first month of methadone treatment (theoretically a period of higher risk), I death among 3850 methadone initiations was attributable to potential methadone-associated cardiac arrhythmia.
- In 6450 patient-years of observation, 4 deaths were identified in which QT<sub>c</sub> prolongation could not be excluded as the cause, for a maximum mortality rate of 0.06 per 100 patient-years.

Comments: These data suggest that, although methadone-associated  $QT_c$  prolongation does occur in a dose-dependent fashion, associated cardiac rhythm disturbances may be of limited clinical significance. Limitations include self-referral by participants for ECG evaluation, lack of baseline (pre-OAT)  $QT_c$  data, and no mention of methadone dose in the analyses linking OAT participation to mortality. More definitive data regarding cardiac outcomes in this population and the potential impact of ECG screening on total mortality are needed to define optimal management of this uncommon though worrisome side-effect of methadone.

Marc N. Gourevitch, MD, MPH

Reference: Anchersen K, Clausen T, Gossop M, et al. Prevalence and clinical relevance of corrected QT interval prolongation during methadone and buprenorphine treatment: a mortality assessment study. *Addiction*. 2009;104(6):993–999.

#### Outcomes in Patients Discharged from a Primary Care-based Opioid Prescribing Clinic

Prescribing opioids for chronic pain is a challenge for primary care physicians, especially in patients with a past substance use disorder or aberrant medication-related behavior (e.g., using more medication than is prescribed or using another person's medication). Clinicians at a US Department of Veterans Affairs hospital in Philadelphia set up a pharmacist-run Opioid Renewal Clinic (ORC) to provide ongoing oversight and care to primary care patients who needed additional monitoring. Patients receiving chronic opioid medications who demonstrated aberrant behaviors or were deemed at high risk for a substance use disorder were referred to the clinic. The pharmacist, working in concert with the primary care physician, established patient agreements, adjusted doses, and conducted urine toxicology tests. Medical records of all patients discharged from this service over a 22-month span (86 of the 401 patients referred to the clinic) were reviewed for outcomes 2 years after discharge.

- Fifty-nine percent of those discharged had a history of substance use disorders.
- Recurrent drug use was the most common reason for discharge,\* seen in 47% of patients.

 Of those discharged, only 17% received substance abuse treatment during the follow-up period.

\*Note: Patients with positive urine tests who engaged in substance abuse treatment were not discharged for drug use.

Comments: The challenge of prescribing controlled substances in primary care, especially to patients with a past substance use disorder and/or aberrant behavior, may be at least partially addressed by specialty programs such as this clinic. Of note, the majority of patients referred to the ORC continued to receive services over the 2-year study period. The high rate of ongoing illicit drug use and the low rate of engagement in substance abuse treatment in those discharged challenges the system to provide appropriate care for those with pain and ongoing substance abuse.

David A. Fiellin, MD

Reference: Becker WC, Meghani SH, Barth KS, et al. Characteristics and outcomes of patients discharged from the Opioid Renewal Clinic at the Philadelphia VA Medical Center. Am J Addict. 2009;18(2):135–139.

#### Alcohol and Cancer in Women: Results of a Large Prospective UK Study

A UK study based on a cohort of more than I million women related baseline alcohol intake to the relative risk (RR) of incident invasive cancer at 21 sites. A quarter of the cohort reported drinking no alcohol; 98% of those who drank consumed fewer than 21 drinks per week and had an average consumption of 10 g of alcohol per day (I standard drink as defined in this study). Only current drinkers were included in dose-response analyses; both lifetime abstainers and ex-drinkers were excluded. During an average of 7.2 years of follow-up, 68,775 invasive cancers occurred. Results included the following:

- Increased alcohol consumption was associated with increased risk of cancers of the oral cavity and pharynx (increase in RR per 10 g daily increase in alcohol intake, 29%), esophagus (22%), larynx (44%), rectum (10%), liver (24%), breast (12%), and total cancer (6%).
- For cancers of the upper aerodigestive tract, alcoholassociated risk was confined to current smokers, with little or no effect among never or past smokers.
- Increased alcohol consumption was associated with a decreased risk of thyroid cancer, non-Hodgkin lymphoma, and renal cell carcinoma.
- Trends were similar in women who drank wine exclusively compared with consumers of other types of alcohol.
- For every additional drink regularly consumed per day, the increase in incidence up to age 75 years per 1000

women in developed countries was estimated to be about 11 for breast cancer; I for cancers of the oral cavity and pharynx; I for cancer of the rectum; and 0.7 each for cancers of the esophagus, larynx, and liver.

Comments: The results of this study support what has been known for many decades: there is an association between alcohol intake, especially heavy intake, and upper aerodigestive cancers. Further, even moderate drinking may increase the risk of other cancers, including breast cancer. There are, however, a number of analytic problems with this paper: the authors were unable to compare results of current drinkers with lifetime abstainers and ex-drinkers separately; no data were provided on pattern of drinking (regular or binge); and only linear analysis was used, making it difficult to judge if the association between alcohol and these cancers was U-shaped, J-shaped, or showed a threshold effect. While it is important to emphasize that alcohol can be associated with cancer, it will be especially important for additional studies based on this large cohort to report the net effects of drinking on other diseases and on total mortality.

R. Curtis Ellison, MD

Reference: Allen NE, Beral V, Casabonne D, et al. Moderate alcohol intake and cancer incidence in women. *J Natl Cancer Inst.* 2009;101(5):296–305.

#### **Genetic Polymorphisms and Alcohol-Related Cancers**

Alcohol, responsible for 4% of cancer deaths worldwide, is metabolized by alcohol dehydrogenases (ADHs) to acetal-dehyde, which is then converted to acetate by aldehyde dehydrogenase (ALDH). Acetaldehyde is carcinogenic in animals. French investigators systematically searched Medline to find studies of the effects of alcohol and ADH and ALDH polymorphisms on cancer risk. The most consistent findings were for ADH1B and ALDH2 polymorphisms that code for less active forms of the enzymes.

- In both Asian and European populations, the ADHIB\*I allele was associated with greater risks for head and neck, pharyngeal, and esophageal cancers among moderate and heavy drinkers. In I study, moderate drinkers with the allele had 26 times the risk of esophageal cancer compared with nondrinkers with the ADHIB\*2/ADHIB\*2 genotype.
- Among Asians, moderate and heavy drinkers with the ALDH2\*2 allele were at higher risk for oropharyngeal and esophageal cancers than nondrinkers without the allele.

 Europeans with ALDH2 variants who drank moderate or heavy amounts were also at higher risk for upper aerodigestive tract cancers.

Comments: In the case of ALDH, the association with alcohol-related cancer seems to make sense: the risky allele allows a carcinogen to accumulate. For ADH, the risky allele (predominant in most populations) codes for a less active enzyme, leading to less acetaldehyde production. The authors speculate that such people do not flush when they drink and, therefore, might drink more frequently and heavily, increasing their vulnerability. This review included only retrospective case-control studies; prospective studies are needed to better understand the undoubtedly complex associations between alcohol and cancers.

Richard Saitz MD, MPH

Reference: Druesne-Pecollo N, Tehard B, Mallet Y, et al. Alcohol and genetic polymorphisms: effect on risk of alcohol-related cancer. *Lancet Oncol.* 2009;10(2):173–180.

#### **Antiretroviral Treatment Interruptions Are Common in Injection Drug Users**

Interruptions of highly active antiretroviral therapy (HAART) are not recommended, and long-term interruptions can lead to HIV disease progression. Injection drug

use can put people at risk for treatment interruptions. To characterize patterns of HAART use and identify characteristics associated with treatment interruptions (defined as (continued on page 6)

#### Antiretroviral Treatment Interruptions (continued from page 5)

any 6-month interval after HAART initiation in which no HAART use was reported), researchers evaluated data on 335 injection drug users from a large observational cohort who initiated HAART between 1996 and 2006 and were followed serially.

- Treatment interruptions were reported in 260 patients (78%).
- In multivariable analyses, being female, having a detectable level of HIV RNA, and reporting daily injection drug use were associated with a higher probability of having a treatment interruption.
- Treatment interruptions lasted longer in persons with higher levels of HIV RNA, in those who had been incarcerated, and in those who reported drinking alcohol.

Comments: Interruptions in HAART treatment were common, occurred in the setting of a modifiable behavior (injection drug use), and were longer in those who reported alcohol consumption. The association between treatment interruptions and drug and alcohol use highlights the need to address substance use in HIV-infected individuals. Treatment interruptions during incarceration would likely be amendable to policy solutions. These changes could improve HAART treatment adherence.

David A. Fiellin, MD

Reference: Kavasery R, Galai N, Astemborski J, et al. Non-structured treatment interruptions among injection drug users in Baltimore, MD. J Acquir Immune Defic Syndr. 2009; 50(4):360–366.

#### Does Light Drinking during Pregnancy Relate to Behavioral or Cognitive Problems in the Child?

Data from the first 2 sweeps of the nationally representative UK Millennium Cohort Study, a longitudinal birth cohort study begun in 2001, were used to relate drinking patterns during pregnancy with behavioral and cognitive outcomes in children at 3 years of age (n=12,495). Behavioral problems were indicated by scores above defined clinically relevant cutoffs on the parent-report version of the Strengths and Difficulties Questionnaire (SDQ). Cognitive ability was assessed using the Naming Vocabulary subscale from the British Ability Scale (BAS) and the Bracken School Readiness Assessment (BSRA).

- There was a J-shaped relationship between maternal drinking during pregnancy and the likelihood of scoring above the cutoff on the Total Difficulties Scale and the Conduct Problems, Hyperactivity, and Emotional Symptom subscales of the SDQ. Children born to light drinkers were less likely to score above the cutoff than children of abstinent mothers, while those born to heavy drinkers were more likely to score above the cutoff.
- Boys born to mothers who had up to I-2 drinks per week or per occasion were less likely to have conduct problems (odds ratio [OR], 0.59) or hyperactivity (OR, 0.71). These effects remained in fully adjusted models. Girls were less likely to have emotional symptoms (OR, 0.72) or peer problems (OR, 0.68) compared with those born to abstainers. These effects were attenuated in fully adjusted models.

 Boys born to light drinkers had higher cognitive-ability test scores compared with boys born to abstainers.
 The difference for the BAS was attenuated after adjusting for socioeconomic factors, while the difference for the BSRA remained statistically significant.

Comments: There were marked socioeconomic differences associated with women's drinking in this study (e.g., both abstainers and heavy drinkers tended to have lower education and social status and smoked more than light drinkers). Many of the purported "beneficial" effects of light drinking were not statistically significant when these factors were taken into consideration. Hence, I agree with the authors that social circumstances, rather than the direct impact of ethanol, may be responsible for the relatively low rates of behavioral difficulties and cognitive advantages in children whose mothers were light drinkers. Nevertheless, this analysis of data collected in children at 3 years of age does not support a number of studies and governmental guidelines saying that even very light drinking during pregnancy leads to later behavioral and cognitive problems in the child.

R. Curtis Ellison, MD

Reference: Kelly Y, Sacker A, Gray R, et al. Light drinking in pregnancy, a risk for behavioural problems and cognitive deficits at 3 years of age? *Int J Epidemiol.* 2009 Feb;38(1): 129–140.

#### Is There a Causal Link between Alcohol Abuse or Dependence and Depression?

There is known comorbidity between alcohol abuse or dependence (AAD) and major depression (MD). Nevertheless, it is unclear whether AAD increases the risk of MD or vice versa. Using data from a 25-year longitudinal study of a

birth cohort from New Zealand (1055 of 1265 subjects had follow-up data at ages 17–18, 20–21, and 24–25 years) and advanced statistical modeling techniques, the authors de
(continued on page 7)

#### Alcohol Abuse or Dependence and Depression (continued from page 6)

termined the association between AAD and MD and explored its causal direction.

- The prevalence of AAD and MD, respectively, was
  - 19.4% and 18.2% at age 17–18;
  - 22.4% and 18.2% at age 20–21; and
  - 13.6% and 13.8% at age 24–25.
- There was a significant association between AAD and MD at all ages and for both genders: subjects with AAD were 1.9 times more likely to also have MD.
- The association remained significant when adjusted (using advanced statistical techniques) for nonobserved genetic and environmental factors and for variables that change over time (e.g., stressful life events, cannabis use, illicit drug use, affiliation with deviant peers, unemployment, partner substance use, and criminal offending).

 Results suggested a unidirectional association from AAD to MD but no reverse effect on MD to AAD.

Comments: This study points out a possible cause and effect relationship in which AAD leads to MD. This is not consistent with previous studies. Even though the study is based on longitudinal data, results rely on the assumptions of advanced statistical modeling techniques that are not widely or easily understood. The question of the causal relationship between AAD and MD remains open, but these results do suggest that alcohol abuse or dependence may lead to major depression.

Nicolas Bertholet, MD, MSc

Reference: Fergusson DM, Boden JM, Horwood LJ. Tests of Causal Links Between Alcohol Abuse or Dependence and Major Depression. Arch Gen Psychiatry. 2009;66(3):260–266.

#### Do Racial and Ethnic Minority Drinkers Have More Alcohol Consequences than White Drinkers?

Researchers analyzed National Alcohol Survey data from 4080 current drinkers (69% white, 19% black, and 12% Hispanic) to assess racial differences in alcohol dependence symptoms and social consequences and to determine whether self-reported social disadvantages (e.g., poverty, unfair treatment, and racial/ethnic stigma) explained any observed racial differences. Heavy drinking\* was stratified into none/low (69%), moderate (21%), and high (10%).

- More black (11%) and Hispanic (12%) than white (6%) participants had 2 or more alcohol dependence symptoms.
- More black (13%) and Hispanic (15%) than white (9%) participants had 1 or more alcohol-related social consequences (accidents; arguments/fights; or health, legal, and workplace problems).
- In separate adjusted analyses, black and Hispanic participants were significantly more likely than white participants to have 2 or more alcohol dependence symptoms (if they reported "none/low" or "moderate" heavy drinking), and to have to have I or more alcohol-related social consequences (the "none/low" category only).

- Odds ratios for the higher drinking categories were also elevated but did not reach statistical significance.
- Adding social disadvantages to the models did not change the results.

\*In this study, a composite variable was used to define past-year heavy drinking based on 3 indicators: frequency of 5+ drinks in a single day, frequency of subjective drunkenness, and maximum number of standard drinks in a single day.

Comments: This study suggests that, among those with lower levels of heavy drinking, blacks and Hispanics are at greater risk for alcohol dependence symptoms and alcohol-related social consequences than whites. It is not clear if these findings represent a true difference between minorities and whites or if they are due to reporting or measurement error.

Kevin L. Kraemer, MD, MSc

Reference: Mulia N, Ye Y, Greenfield TK, et al. Disparities in alcohol-related problems among white, black, and Hispanic Americans. Alcohol Clin Exp Res. 2009;33(4):654–662.

#### RELATED RESOURCES

#### NIDA Launches Web-based Substance Use Tools for Physicians

The National Institute on Drug Abuse (NIDA) has launched its first Web-based Physicians' Outreach Initiative, NIDAMED, providing primary care physicians with tools and resources to screen and assess their patients for tobacco, alcohol, illicit drug, and nonmedical prescription drug use during routine office visits. Resources include an online screening tool adapted from the Alcohol, Smoking

and Substance Involvement Screening Test (ASSIST), a downloadable companion quick reference guide, and a comprehensive physician resource guide. Also included is a patient-tested postcard that encourages patients to "Tell Your Doctors About All the Drugs You Use" and offers Web links for further information. To access the new tools, visit www.drugabuse.gov/nidamed.

#### Australia Releases Revised Guidelines for Reducing Alcohol-Associated Health Risks

Australia's National Health and Medical Research Council has released a revised edition of *Guidelines to Reduce Health Risks from Drinking Alcohol*, which aims to establish the evidence base for future policy and patient education regarding alcohol-associated health risks. Changes from the last edition, published in 2001, include: 1) introducing the concept of progressively increasing risk of harm with the amount of alcohol consumed rather than specifying "risky" and "high-

risk" levels of drinking; 2) detailed separate guidelines for adults, children, teens, and pregnant or breastfeeding women; 3) looking beyond immediate risk of injury and cumulative risk of chronic disease to estimating overall risk of alcohol-related harm over a lifetime; and 4) providing updated advice for patients on lowering their risk of harm. The publication is available for download at www.nhmrc. gov.au/publications/synopses/\_files/ds10-alcohol.pdf.

## NIAAA's "Rethinking Drinking" Web Site Offers Tools to Assess Risky Drinking

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) has launched a new Web site to help people reduce their risk for alcohol problems. The Web site, entitled "Rethinking Drinking," presents evidence-based information about risky drinking patterns, alcohol content, and the signs of an alcohol problem along with informa-

tion about medications and other resources to help people cut back or quit drinking. The site also includes interactive tools, such as calculators to measure alcohol calories and drink sizes, and a free booklet containing information from the Web site that visitors can download and take with them. To access, go to http://rethinkingdrinking.niaaa.nih.gov/.

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Alcohol, Other Drugs, and Health:
Current Evidence
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