Alcohol, Other Drugs, and Health: Current Evidence

MARCH–APRIL 2012

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NEW IN THIS ISSUE!

The First in a Series of Feature Articles on the Responsible Conduct of Alcohol, Other Drugs, and Health Research (see p. 6)

Health Outcomes

Medical Inpatients with Substance Use Disorders Are More Likely to Have Acute Care Readmission than Those without Substance Use Disorders

Patients with substance use disorders (SUDs) are frequent users of acute medical care services (AMCS) (emergency department visits or hospitalizations). Hospital discharge provides an opportunity to reduce hospital readmission through linkage to specialized care, especially for patients with SUDs. This study assessed whether the diagnosis of an SUD during medical hospitalization was associated with recurrent AMCS use. The authors examined data from Project RED, a randomized trial of reengineered discharge services among 738 general medical inpatients at a single institution. The discharge intervention did not contain services specifically tailored to patients with SUDs. The main outcomes were rate and risk of AMCS use within 30 days of discharge as assessed by medical record review and self-report.

- Seventeen percent of patients had an SUD.
- Patients with an SUD had higher rate of AMCS use at 30 days (0.63 versus 0.32 events per patient) and had an increased risk of AMCS use (33% versus 22%).
- Subgroup analysis revealed that drug use disorders or a combination of drug and alcohol use disorders resulted in higher AMCS use than alcohol diagnoses alone.

Comments: Despite the inherent limitations of reliance on self-report, International Classification of Diseases (ICD-9) coding, and single institution data, these results support the hypothesis that SUDs place medical inpatients at higher risk for recurrent AMCS use. A discharge plan tailored to patients with SUDs may help reduce readmission rates.

Jeanette M. Tetrault, MD

Reference: Walley AY, Paasche-Orlow M, Lee EC, et al. Acute care hospital utilization among medical inpatients discharged with a substance use disorder diagnosis. *J Addict Med.* 2012;6(1):50–56.

Marijuana Use Is Associated with an Increased Risk of Motor Vehicle Accidents

This systematic review and meta-analysis examined the association between recent marijuana use and motor vehicle accidents (MVAs). Cohort studies with comparison groups and case-control studies published in any language were eligible for inclusion. The main outcome was fatal or nonfatal MVA. Recent cannabis use among drivers was determined by toxicological testing or self-report. Using a predefined search strategy, the authors identified 4 high-quality and 5 medium-quality studies using the Newcastle-Ottawa scale.

- Six of 9 studies found a positive association between recent marijuana use and MVAs, while 3 of 9 found no association.

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Marijuana Use and Motor Vehicle Accidents (continued from page 1)

- Odds ratios (ORs) for individual studies ranged from 0.82 to 7.2. The pooled OR for the association between recent marijuana use and MVAs was 1.9, but studies were heterogeneous.
- The OR was 2.2 for high-quality studies and 1.8 for medium-quality studies.
- The OR for fatal collisions was significant (2.1), but the OR for nonfatal collisions was not (1.7).

Comments: Overall, this study found an association between recent marijuana use and MVAs. Because of the heterogeneity of the studies, the pooled OR should not be considered a definitive estimate of risk. An additional limitation is the absence of data to assess a "dose" relationship between marijuana use and MVAs. Therefore, these results cannot offer guidance as to whether there is a safe threshold of marijuana use while driving.

Hillary Kunins, MD, MPH, MS

Reference: Asbridge M, Hayden JA, Cartwright JL. Acute cannabis consumption and motor vehicle collision risk: systematic review of observational studies and meta-analysis. *BMJ.* February 9, 2012;344:e536.

The Prevention Paradox Applies to Alcohol Use and Problems among Adolescents

The prevention paradox refers to the notion that individuals at highest risk for alcohol-related problems are responsible for a large number of such problems per person; but, because they are a small group, they account for only a small fraction of the total number. This gives support to targeting interventions to all drinkers—not only those with high-risk consumption. To investigate whether this paradox applies to adolescents, researchers in Sweden conducted a cross-sectional analysis of school-based survey results from 7288 alcohol-consuming adolescents aged 13–17. Alcohol-related problems* among adolescents whose annual alcohol intake was in the upper 10% (based on a quantity-frequency measure) were compared with those reported by the bottom 90%. Frequency of heavy episodic drinking** (HED) was also assessed.

- The bottom 90% of consumers accounted for the majority of alcohol-related problems among boys and girls at all ages (61–77%).
- At age 17, HED was frequent (89% among boys and 82% among girls).
- A large majority in the bottom 90% reported HED, and the share of problems accounted for by

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	Age 13 (n=817)	Age 17 (n=3355)
Mean past-year alcohol consumption (liters)		
Boys	0.7	7.8
Girls	0.8	4.5
Mean number of past-year alcohol-related problems		
Boys	1.5	4.0
Girls	2.2	4.6

*Defined in this study as arguments; fights; accidents; lost money or other valuables; destroyed clothes/other things; poor relationships with friends, parents or teachers; lower achievement at school; unwanted/unprotected sex; being robbed; being admitted to the hospital; and trouble with the police.
**Defined as drinking ≥1/2 bottle of spirits, 1 bottle of wine, 4 cans (50 cl) of strong beer, or 6 cans of medium-strong beer on a single occasion.

The Prevention Paradox and Adolescent Alcohol Use (continued from page 2)

monthly HED in this group increased with age (10% at age 13 to >50% at age 17).

Comments: Because group selection was based on annual alcohol intake in this study, the prevention paradox applied. Nevertheless, given the drinking profile in this population, annual alcohol intake may not be the best measure of adolescent drinking in terms of alcohol-related problems. The results show that the majority of problems were accounted for by HED, a highly prevalent drinking behavior among adolescents that should be targeted with population strategies as well as personalized interventions when possible.

Nicolas Bertholet, MD, MSc

Reference: Romelsjö A, Danielsson AK. Does the prevention paradox apply to various alcohol habits and problems among Swedish adolescents? *Eur J Public Health.* February 24, 2012 [Epub ahead of print]. doi: 10.1093/eurpub/ckr178.

Pattern and Timing of Prenatal Alcohol Exposure Is Associated with Specific Alcohol-Related Birth Defects and Growth Deficiencies

The association between pattern and timing of prenatal alcohol exposure and specific alcohol-related birth defects and growth deficiencies is uncertain. Researchers analyzed alcohol-consumption data from 992 pregnant women* enrolled between 1978–2005 in the California Teratogen Information Service and Clinical Research Program. Alcohol consumption quantity and frequency were assessed every 3 months during pregnancy. Live-born singleton infants underwent examination by a dysmorphologist who was blinded to prenatal exposures.

- In the second half of the first trimester, each 1-drink increase in average drinks per day was associated with an increased risk of 25% for smooth philtrum, 22% for thin vermillion border, 12% for microcephaly, 16% for low birth weight, and 18% for reduced birth length. Higher risk was also seen with more heavy drinking episodes** and a higher maximum number of drinks per occasion.
- In the second trimester, higher average drinks per day and number of heavy drinking episodes were associated with greater risk for smooth philtrum and reduced birth weight and length, and higher maximum drinks per occasion was associated with increased risk for smooth philtrum and reduced birth length.
- In the third trimester, higher average drinks per day was associated with reduced birth length, and higher maximum drinks per occasion was associated with greater risk for smooth philtrum and reduced birth length.
- Models (not included in the paper) did not show a lower alcohol use threshold of no risk.

*Mean age, 31 years; 54% were white, and the mean gestational age at enrollment was 13 weeks.
**Heavy drinking episode = ≥4 drinks per occasion in this study.

Comments: This study indicates greater risk for alcohol-related birth defects and growth deficiencies across a range of prenatal alcohol use patterns in all 3 trimesters. Although the study did not assess the neurobehavioral effects of prenatal alcohol exposure, which are more common than alcohol-related birth defects, the public health message remains that women of child-bearing age should not drink alcohol during pregnancy or when trying to conceive.

Kevin L. Kraemer, MD, MSc

Reference: Feldman HS, Jones KL, Lindsay S, et al. Prenatal alcohol exposure patterns and alcohol-related birth defects and growth deficiencies: a prospective study. *Alcohol Clin Exp Res.* 2012;36(4):670–676.

No Association between Moderate Alcohol Intake and Improved Cognitive Function Seen in a Large Cohort Study Using Innovative Methods

Most prospective observational studies have shown that moderate alcohol use is associated with slightly better cognitive function, but there is always concern about confounding from other lifestyle factors (i.e., the better function being a result of something unrelated to drinking). A "Mendelian randomization study" in a cohort of almost 7000 men aged 50+ in China used aldehyde dehydrogenase-2 (ALDH2) genotype as an "instrumental variable" to decrease the likelihood that the observed association between alcohol consumption* and cognitive function** would be due to some other factor (ALDH2 genotype would be expected to be related to drinking but not to cognitive function).

- Presence of the ALHD2 genotype was strongly associated with higher alcohol consumption but explained only 3% of the variance in use.

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*Consumption categories included never user, former user, occasional user (amount not defined but drinking on <1 day per week), moderate user (≤210 g per week), and heavy user (>210 g per week).
**Cognitive function was assessed via delayed 10-word recall score in 4707 participants and by Mini-Mental State Examination (MMSE) score in 2284 participants.

No Association between Alcohol Intake and Improved Cognitive Function (continued from page 3)

- Alcohol consumption (either from reported intake or genotype testing) was not associated with delayed 10-word recall score or MMSE score.

Comments: This study showed little effect of reported alcohol intake on cognitive function. It is unfortunate that the authors did not use measures of cognitive functioning shown to be more accurate (e.g., the Montreal Cognitive Assessment) or measures that adjust for education and socioeconomic status (e.g., the Wechsler Adult Intelligence Scale). In addition, the primary beverage consumed in the cohort was rice wine, which contains no polyphenols. Although Mendelian randomization techniques are designed to offer unbiased estimates of effect, the instrumental variable used should have a strong correlation with the outcome (i.e., alcohol consumption); in this study, it did not. As stated by the authors, causality should be verified in a variety of settings using different kinds of evidence, including experimental or genetic studies, rather than relying on observational studies.

R. Curtis Ellison, MD

Reference: Au Yeung SL, Jiang CQ, Cheng KK, et al. Evaluation of moderate alcohol use and cognitive function among men using a Mendelian randomization design in the Guangzhou Biobank Cohort Study. *Am J Epidemiol.* February 1, 2012 [Epub ahead of print]. doi:10.1093/aje/kwr462.

HIV and HCV

In the US, Deaths from HCV Now Exceed Those from HIV

Given that most individuals with hepatitis C virus (HCV) are middle-aged, and complications of HCV (e.g., cirrhosis, liver cancer) are known to occur after decades of infection, prior researchers hypothesized an increase in HCV-related mortality over time. This study examined US mortality rates for HCV and hepatitis B virus (HBV) from 1999–2007 and contrasted those trends with those for HIV. Death certificates from all US states and the District of Columbia were included in the analysis. Age-adjusted mortality rates were calculated using Poisson distribution.

- For HCV, the average annual age-adjusted mortality rate increased by 0.18 deaths per 100,000 persons per year (p=0.002), while the age-adjusted mortality rate for HBV remained relatively constant over time.
- For HIV, the average annual age-adjusted mortality rate decreased by 0.21 deaths per 100,000 persons per year (p=0.001).
- Before 2007, the number of deaths from HIV exceeded those from HCV and HBV. After 2007, the number of deaths from HCV (15,106) exceeded those from HIV (12,734) and HBV (1815).
- Most deaths from HCV were among people aged 45–65, with alcohol being the third most common comorbid condition for deaths from HCV (after chronic liver disease and HBV coinfection).

Comments: As of 2007, HCV superseded HIV as a cause of death in the US. Alcohol is an important co-factor for many HCV-related deaths, and injection drug use is a major risk factor for contracting HCV. Use of death-certificate data for cause of death was a limitation in this study; however, this is less of problem when analyzing trends since biases should be relatively constant over time.

Judith Tsui, MD, MPH

Reference: Ly KN, Xing J, Klevens RM. The Increasing Burden of Mortality From Viral Hepatitis in the United States Between 1999 and 2007. *Ann Intern Med.* 2012;156(4): 271–278.

Increased Risk of Overdose Death among People with HIV Infection

Injection drug use (IDU) and HIV infection are overlapping epidemics, and overdose is the most common cause of death among people with IDU. Some studies have indicated an increased risk of overdose death among people with HIV infection. Researchers conducted a meta-analysis and systematic review to assess the relationship between overdose and HIV infection. The literature search found 27 studies containing enough information to calculate the relative risk of overdose death by HIV infection status. Twenty-four of the studies determined HIV status via biological testing.

- For the meta-analysis, the pooled relative risk of overdose death for HIV-infected people (compared with those not infected) was 1.60 in all studies and 1.74 in the 24 studies with biological testing. For the 16 studies

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Risk of Overdose in People with HIV (continued from page 4)

including only people with IDU, the relative risk was 1.48.

- Potential causal mechanisms for overdose identified in the systematic review included reduced pulmonary function, reduced hepatic function, and high-risk behaviors. Protective factors included enrollment in opioid agonist treatment, while poverty and incarceration were associated with increased overdose risk.

Comments: Despite substantial heterogeneity in study designs, this meta-analysis confirmed that people with HIV infection have a higher risk of overdose death than those not infected with HIV. Because all overdoses are preventable, HIV care providers should educate patients with IDU on how to prevent, recognize, and respond to an overdose.

Alexander Y. Walley, MD, MSc

References: Green TC, McGowan SK, Yokell MA, et al. HIV infection and risk of overdose: a systematic review and meta-analysis. *AIDS.* 2012;26(4):403–417.

Knowledge of Positive HCV Status Reduced Alcohol Consumption in People with Injection Drug Use

Patients infected with hepatitis C virus (HCV) are encouraged to abstain from drinking, as heavy alcohol use increases the risk of end-stage liver disease and decreases the likelihood of response to HCV antiviral therapy. Investigators in Glasgow, Scotland, performed a cross-sectional survey to determine whether people with injection drug use (IDU) attending harm-reduction services adhered to lower risk drinking guidelines. Ninety-seven percent of respondents (n=780) provided an anonymous oral fluid sample for HCV detection.

- Of those who submitted fluid samples, 506 (65%) tested positive for HCV; 277 of those who tested positive were unaware of their HCV status or had self-reported as HCV-negative.
- Among participants who tested positive, 65% drank alcohol, and 29% drank risky amounts.*
- Among participants who tested negative, 61% drank alcohol, and 18% drank risky amounts.
- People with IDU who self-reported being infected with HCV were less likely to drink than those who self-reported as HCV negative or "status not known" (adjusted odd ratio, 0.70).
- The proportion of participants who drank any amount was lower than that in the Scottish general population; however, the proportion who drank risky amounts was similar to that in the general population among men and slightly higher among women.

*Defined in this study as >14 (8 g ethanol) units per week for women and >21 units per week for men.

Comments: This cross-sectional study found a high proportion of HCV-infected patients with IDU in Scotland not only drink but also drink risky amounts, putting themselves at increased risk for end-stage liver disease and death. Furthermore, many people with IDU were unaware of their HCV status, while those who were aware drank less than others. These results stress the need to implement measures aimed at detecting HCV infection in people with IDU and making those who are infected aware of the risks associated with alcohol consumption.

Daniel Fuster, MD, PhD,** & Richard Saitz, MD, MPH

Reference: O'Leary MC, Hutchinson SJ, Allen E, et al. The association between alcohol use and hepatitis C status among injecting drug users in Glasgow. *Drug Alcohol Depend.* November 30, 2011 [Epub ahead of print]. doi:10.1016/j.drugalcdep.2011.11.008

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Knowledge of Positive HCV Status Does Not Decrease Risky Behaviors in People Who Inject Drugs

In this secondary analysis of data from a trial comparing strategies to increase HIV testing, researchers investigated the association between self-reported awareness of HCV infection status and injection-drug risk behaviors. Subjects included 1281 people enrolled in substance abuse treatment who reported either unknown or negative HIV status at baseline. The 244 subjects who also reported injection drug use in the past 6 months were included in this analysis.

- Ninety-two subjects (38%) reported being HCV positive, 55 (23%) reported being HCV negative, and 97 (40%) reported their HCV status was unknown.
- Compared with those whose HCV status was negative or unknown, subjects who reported being HCV positive were older, more likely to be women, more likely to be enrolled in opioid agonist treatment, and less likely to have been recently incarcerated.
- More than one-third of subjects (39%) reported recent syringe/needle sharing.
- In adjusted analyses, HCV-positive subjects were more likely to have shared syringes/needles than subjects whose HCV status was negative or unknown (adjusted odds ratio, 2.37).

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HCV Infection Status and IDU Risk Behaviors (continued from page 5)

Comments: It is concerning that people who used injection drugs who knew they were HCV positive were more likely to engage in risky behaviors. It is likely that subjects who got tested and were infected with HCV engaged in more risky behaviors at baseline, and while they may well have reduced their risky behaviors after learning of their infection, they nevertheless had higher rates than those who were not infected or who do not know if they were infected. These results suggest that increased testing alone will not be sufficient to prevent new HCV infections.

Darius A. Rastegar, MD

Reference: Korthuis PT, Feaster DJ, Gomez ZL, et al. Injection behaviors among injection drug users in treatment: the role of hepatitis C awareness. *Addict Behav.* 2012;37(4):552–555.

Feature Article: Responsible Conduct of Alcohol, Other Drugs, and Health Research

Obtaining Informed Consent for Research from People with Alcohol and Other Drug Dependence

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Overview

Obtaining informed consent to conduct research on people with alcohol and other drug (AOD) dependence can be challenging. Factors to consider include study type and design, anticipated risks and benefits of participation, and the subject's capacity to consent. Although vulnerability of the study population must be considered in any research study, it is especially important in addiction research. Individuals with addictions are often socially marginalized and must be protected from any further stigmatization and social harm that might result from participating.[1] Potential subjects may also have comorbid psychiatric disorders, may be socioeconomically disadvantaged, and may be susceptible to therapeutic misconception (i.e., they may assume the intent of the study is to provide treatment).[1,2]

Although an addiction diagnosis does not automatically preclude obtaining informed consent, researchers should be aware of the complexities inherent in working with vulnerable populations where there is legitimate concern as to whether subjects do, in fact, have the capacity to consent. The intent of this article is to provide information and guidance on respect for autonomy, consent capacity, and the informed consent process in AOD addiction research.

Types of Addiction Research Studies

A variety of study designs are used in addiction research, including interviews and surveys, tissue-banking epigenetic studies, neuroimaging, and testing of care-delivery models and medications—even administration of the drug of addiction, as in the Swiss Heroin Study.[3,4] Although the latter help researchers understand the physiologic effects of addictive AOD, such studies present the most difficult ethical dilemmas.[5] They also often enroll nontreatment-seeking persons, while the former tend to enroll those seeking treatment. This article focuses on addiction research that does not include emergency care patients, who are likely to have compromised capacity to consent because of intoxication or withdrawal. Proxy consent may be required in such patients, involving complex ethical issues beyond the scope of this article. Similarly, consent for research assessing the effects of drugs of abuse, as in the Swiss Heroin Study, is reserved for a separate discussion.

Ethical Principles in Addiction Research

The Belmont Report,[6] which provides the foundation for current US human-subjects research regulations, defines the principle of "respect for persons" under which autonomy is captured. Autonomy means the actions of rational individuals must be respected, not interfered with, and decided upon without coercion or force.[7] In respecting autonomy, the following ethical principles must be considered:

- free and voluntary participation,
- protected privacy and confidentiality, and
- comprehensible presentation of the potential risks of participation.

These principles are not only important in their own right; there are compelling scientific arguments as to why they must be respected as well. Studies that fail to adequately address vulnerability, fail to stress that participation is

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Informed Consent in Alcohol and Other Drug Research (continued from page 6)

voluntary, or fail to ensure privacy and confidentiality protections have been enacted are less likely to produce reliable data.[7] These tenets are especially salient in addiction research. For example, to protect privacy and confidentiality, investigators should collect only the minimum necessary information from participants, code and store data securely and separately from a master-code key linked to identifiers, and guard against subpoena with a Certificate of Confidentiality.

Components of Valid Informed Consent

As outlined in the Nuremberg Code, potential research subjects "should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him to make an understanding and enlightened decision"[8] prior to enrolling. Yet, despite having undergone the informed-consent process, subjects frequently cannot report the risks or purpose of a study.[9] Comprehension may be limited by comorbid conditions or by complex research designs that are difficult for individuals with limited experience in medical environments to understand. Thus, for valid informed consent to occur, the researcher must ensure that, in addition to imparting information, subjects have an adequate understanding of what that information means for them; i.e., consent must be competent, voluntary, informed, and comprehensible.[10]

Components of Consent Capacity

Decision-making capacity is the ability to understand and appreciate the consequences of health-related decisions and to formulate and communicate those decisions.[11] When faced with a decision that is particularly complex (e.g., participation in research that involves a complicated study design or that carries potentially significant risks), a person may not be capable of making the decision.[12] With regard to research participation, capacity to consent consists of the following components[13–15]:

- Understanding: having the facts needed to make a decision.
- Appreciation: being able to associate those facts with the potential effects on the individual.
- Reasoning: being able to weigh risks and benefits.
- Choice: being able to make one's decision known.

Effects of Addiction on Consent Capacity

Appelbaum[16] made the case that a diagnosis that affects cognition (for example, Alzheimer Disease) is not necessarily predictive of incapacity to make medical decisions. Likewise, while use of AOD may impair cognitive ability, there is a range of severity associated with drug use and addiction, such that use of a drug, or the condition of being addicted to a drug, is not in and of itself predictive of incapacity. Further, assessment of capacity depends on the state of the individual at the time consent is signed; as Saks and Jeste[13] noted, the consent process is a "state," not a "trait." Capacity to consent may fluctuate over time.

Addiction researchers should recognize that potential subjects may be signing the consent form under the influence of substances of abuse; thus, cognition (and by extension, consent capacity) may be impaired. Tolerance to a substance may minimize a drug's effect on cognition, which is why testing for the presence or level of a substance cannot be the sole determinant of whether an individual has capacity or not. Alternatively, the judgment of potential subjects who have not taken a drug within their usual time frame could be impaired by withdrawal.

Recommendations for Informed Consent

The Nuremberg Code also states that "the duty and responsibility for ascertaining the quality of the consent rests upon each individual who initiates, directs, or engages in the experiment."[8] The researcher is responsible for assessing the decision-making capacity of potential subjects. A consent process that is properly supported can enable even those with diminished capacity to come to an autonomous decision regarding participation.[12]

The following is a compilation of best-practice recommendations to ensure a well-supported informed consent process.[1,17–20]

- Provide subjects with all the information they need to make a voluntary and informed decision.
- Use language that is understandable.
- Use audiovisual tools or simple summaries to increase comprehension and ease stress.
- Foster a noncoercive environment.
- Avoid therapeutic misconception by underscoring treatment versus research procedures.
- Provide multiple learning trials about particular aspects of the study (purpose, risks, benefits, alternatives, etc.); then provide corrected feedback.
- Use the teach-back method (i.e., the subject explains the study to the researcher).
- Implement an ongoing consent process throughout the study.
- Consider individual mental and physical conditions and motives and how they might affect consent capacity.
- In populations where diminished capacity may be

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prevalent, a simple query asking what the study is about, or administration of the Mini-Mental State Exam, could be used to determine the need for a more formal assessment of capacity. A brief 3-item questionnaire asking about study purpose, risks, and benefits could also be used.

- If questions remain about a potential subject's ability to give informed consent, a qualified independent clinician, ethical consultant, or uninvolved third party should be asked to make an independent evaluation.
- When a more formal test of capacity is needed, consider using the MacArthur Competence Assessment Tool for Clinical Research (MacCAT-CR),[20] a semistructured interview-based instrument.

Conclusion

Although including AOD-addicted individuals in research studies poses ethical challenges, it does not make the conduct of good, ethical research impossible. Attention to factors that support the consent process increases the likelihood that individuals with substance use disorders are able to provide meaningful valid consent. Tools are available to help investigators accurately assess a given individual's capacity to do so.

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Resource Alert

SIPS Study Findings on Alcohol Screening and Brief Intervention Released

Findings from the Screening and Intervention Programme for Sensible Drinking (SIPS), the largest multi-site alcohol screening and brief intervention (SBI) study ever conducted in the UK, were released in March 2012. Funded by the UK Department of Health, SIPS consisted of randomized controlled trials of different methods of SBI in 3 settings: emergency departments, primary care, and probation services. The goal of the study was to evaluate the effectiveness and feasibility of different methods of alcohol SBI in the typical practice setting. The main findings were that great challenges exist in implementing SBI, and there is a lack of significant effects of brief intervention or brief advice compared with leaflet. Results from the 3 trials are available for download at http://www.sips.iop.kcl.ac.uk/index.php.

Visit www.aodhealth.org to download these valuable teaching tools:

Helping Patients Who Drink Too Much

A free multimedia training curriculum on screening and brief intervention for unhealthy alcohol use
www.mdalcoholtraining.org

- Learn skills for addressing unhealthy alcohol use (e.g. screening, assessment, brief intervention, and referral) in primary care settings. Includes a free PowerPoint slide presentation, trainer notes, case-based training videos, and related curricula on health disparities/cultural competence and pharmacotherapy.

Prescription Drug Abuse Curriculum

A free downloadable PowerPoint presentation to address prescription drug abuse
www.bu.edu/aodhealth/presc_drug.html

- Framed within the clinical scenario of chronic pain management, this valuable teaching resource includes detailed lecture notes to expand on the information contained in each slide. Designed to last 2 hours, the material can be easily adapted to fit the 1-hour lecture slot typical of most training programs.

ADDICTION SCIENCE & CLINICAL PRACTICE

Call for Papers

Addiction Science & Clinical Practice (ASCP), founded in 2002 by the National Institute on Drug Abuse (NIDA) and now published by leading open-access publisher BioMed Central,* is seeking submissions of the following article types:

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The major journals regularly reviewed for the newsletter include:

Addiction
Addiction Science & Clinical Practice
Addictive Behaviors
AIDS
Alcohol
Alcohol & Alcoholism
Alcoologie et Addictologie
Alcoholism: Clinical & Experimental Research
American Journal of Drug & Alcohol Abuse
American Journal of Epidemiology
American Journal of Medicine
American Journal of Preventive Medicine
American Journal of Psychiatry
American Journal of Public Health
American Journal on Addictions
Annals of Internal Medicine
Archives of General Psychiatry
Archives of Internal Medicine
British Medical Journal
Drug & Alcohol Dependence
Epidemiology
European Addiction Research
European Journal of Public Health
European Psychiatry
Gastroenterology
Hepatology
Journal of Addiction Medicine
Journal of Addictive Diseases
Journal of AIDS
Journal of Behavioral Health Services & Research
Journal of General Internal Medicine
Journal of Hepatology
Journal of Infectious Diseases
Journal of Studies on Alcohol
Journal of Substance Abuse Treatment
Journal of the American Medical Association
Journal of Viral Hepatitis
Lancet
New England Journal of Medicine
Preventive Medicine
Psychiatric Services
Substance Abuse
Substance Use & Misuse

Many others periodically reviewed (see www.aodhealth.org).

Contact Information:

Alcohol, Other Drugs, and Health: Current Evidence
Boston University School of Medicine/Boston Medical Center
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Continuing Medical Education (CME) Accreditation Statements

Sponsored by Boston University School of Medicine

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of Boston University School of Medicine and Boston Medical Center. Boston University School of Medicine is accredited by the ACCME to provide continuing medical education for physicians (Course Code I.ACT1203). Boston University School of Medicine designates this enduring material for a maximum of 1.5 AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Target Audience

The target audience is generalist clinicians, many of whom have received limited training on detecting and treating substance abuse.

Educational Needs Addressed

Primary-care clinicians often miss the diagnosis of alcohol or drug problems and cannot stay abreast of the current substance-abuse literature in the context of a busy practice. Because of the effects of alcohol and drugs on adherence to care plans and physician-patient relationships, patients with alcohol or drug problems may receive suboptimal treatment for other conditions. Further, physicians sometimes perceive alcohol or drug dependence as less treatable than other medical conditions, and thus delegate responsibilities for screening and intervention to others. At the root of the screening and treatment gap is the inadequate provision of substance-abuse education in medical schools and mental-health fields. The newsletter addresses this not only by research dissemination but by providing free downloadable teaching tools for use by educators.

Educational Objectives

At the conclusion of this program, participants will be able to state the latest research findings on alcohol, illicit drugs, and health; incorporate the latest research findings on alcohol, illicit drugs, and health into their clinical practices, when appropriate; and recognize the importance of addressing alcohol and drug problems in primary care settings. In sum, the purpose of the newsletter is to raise the status of alcohol and drug problems in both academic and clinical culture to promote evidence-based screening and treatment and ultimately improve patient care.

Disclosure Statement

Boston University School of Medicine asks all individuals involved in the development and presentation of Continuing Medical Education/Continuing Education (CME/CE) activities to disclose all relationships with commercial interests. This information is disclosed to activity participants. Boston University School of Medicine has procedures to resolve apparent conflicts of interest. In addition, faculty members are asked to disclose when any unapproved use of pharmaceuticals and devices is being discussed.

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