

## TABLE OF CONTENTS

### INTERVENTIONS & ASSESSMENTS

Illicit-Drug Brief Intervention Reduced Risk Score among Some Patients in a Randomized Trial, 1

Brief Intervention Reduces Drinking among Emergency Department Patients with Nondependent Unhealthy Use, 1

Alcohol and Other Drug Discussions in Primary Care: Not Rare, but Numerous Challenges, 2

Naloxone Distribution Programs for Opioid Overdose Prevention: Time to Scale Up? 3

Naltrexone Implants Reduced Opioid Use in People with Co-occurring Heroin and Amphetamine Dependence, 3

Adding Telephone Support to Office-Based Buprenorphine Treatment for Opioid Dependence Has Modest Effects, 3

### HEALTH OUTCOMES

Ongoing Use of Analgesics after Low-Risk Surgery, 4

Severity of Alcohol Problems Predicts Recurrence and Persistence of Alcohol Dependence, 4

Change in Heavy Drinking among Alcohol-Dependent Individuals, 5

Light Alcohol Consumption Prior to and Following Myocardial Infarction Is Associated with Lower Risk of Mortality, 5

### HIV & HCV

Rates of HCV Reinfection Are Low among People with Injection Drug Use Who Receive HCV Treatment, 6

Availability of Viral Hepatitis Services in US Drug Treatment Programs, 6

Providing Directly Observed HCV Treatment at a Methadone Maintenance Program is Feasible and May Improve Treatment Outcomes, 7

People with Injection Drug Use Who Also Use Noninjecting Routes of Drug Administration Are Less Likely to Be HIV Positive, 7

### RESOURCE ALERT

BAP Releases New Guidelines on the Pharmacologic Management of Substance Use Disorders, 7

# Alcohol, Other Drugs, and Health: Current Evidence

MAY–JUNE 2012

## INTERVENTIONS & ASSESSMENTS

### Illicit-Drug Brief Intervention Reduced Risk Score among Some Patients in a Randomized Trial

The efficacy of brief intervention (BI) among patients with drug use identified by screening is largely unknown. Investigators randomized 731 patients from sexually-transmitted disease, dental, primary-care, and other outpatient clinics in 4 countries (India, Brazil, the US, and Australia) who scored positive for illicit drugs on the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) to a single brief motivational intervention or no intervention.

- Except in the US, where there was no significant effect of BI despite having the largest number of patients, BI was associated with larger reductions than no intervention on
  - a substance use risk score (by 7%).
  - a cannabis use risk score (by 8%) (not significant in India).
  - a stimulant risk score (by 14%) (not studied in India).
  - an opioid risk score (by 24%) in India (not studied elsewhere).

*Comments:* This study suggests BI for drug use in outpatient settings has some promise. Unfortunately, the results are difficult to interpret due to variable efficacy and the use of a “risk score” that has unclear mean-

ing; nor are the results widely applicable to primary care or to the US. The investigators speculate that lack of BI effects in the US were due to informed consent procedures, but many prior US BI studies using similar consent procedures found efficacy for alcohol BI. Finally, 2 major methodological problems limit the ability to draw conclusions: 1) patients who used too much or too little, or had too many or too few consequences (low or high risk), were excluded; and 2) staff who administered the BI were usually those who assessed the outcomes, making it possible, if not likely, that the benefit attributable to BI is really an artifact of patients in the BI group wanting to please their assessors. I continue to hope BI can work for drugs in primary care settings. Future studies will determine if that hope is supported by scientific evidence.

Richard Saitz, MD, MPH

*Reference:* Humeniuk R, Ali R, Babor T, et al. A randomized controlled trial of a brief intervention for illicit drugs linked to the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) in clients recruited from primary health-care settings in four countries. *Addiction*. 2012;107(5):957–966.

### Brief Intervention Reduces Drinking among Emergency Department Patients with Nondependent Unhealthy Use

The evidence for the efficacy of screening and brief intervention (BI) in the emergency department (ED) is decidedly mixed. Investigators now report the results of a randomized trial in which 899 adult ED patients drinking risky amounts\* were

assigned to either BI with a follow-up (booster) telephone BI a month later, a single BI, no BI, or no BI and no assessment. Patients with alcohol dependence were excluded.

- Brief intervention with or without booster was associated with significant decreases in alcohol consumption at 6 and 12 months:

(continued on page 2)

\*Risky drinking defined in this study as >4 drinks in a day or >14 in a week for men, and >3 drinks in a day or >7 in a week for women and those >65 years old.

## Editorial Board

### Editor

Richard Saitz, MD, MPH, FASAM, FACP

Professor of Medicine & Epidemiology  
Boston University Schools of Medicine & Public Health

### Co-Editor

David A. Fiellin, MD

Professor of Medicine and Public Health  
Yale University School of Medicine

### Associate Editors

Nicolas Bertholet, MD, MSc

Alcohol Treatment Center  
Clinical Epidemiology Center  
Lausanne University Hospital

R. Curtis Ellison, MD

Professor of Medicine & Public Health  
Boston University School of Medicine

Peter D. Friedmann, MD, MPH

Professor of Medicine & Community Health  
Warren Alpert Medical School of Brown University

Kevin L. Kraemer, MD, MSc

Associate Professor of Medicine and Health Policy & Management  
University of Pittsburgh Schools of Medicine & Public Health

Hillary Kunins, MD, MPH, MS

Associate Clinical Professor of Medicine and Psychiatry & Behavioral Sciences  
Albert Einstein College of Medicine

Darius A. Rastegar, MD

Assistant Professor of Medicine  
Johns Hopkins School of Medicine

Jeffrey H. Samet, MD, MA, MPH

Professor of Medicine & Social & Behavioral Sciences  
Boston University Schools of Medicine & Public Health

Jeanette M. Tetrault, MD

Assistant Professor of Internal Medicine  
Yale University School of Medicine

Judith Tsui, MD, MPH

Assistant Professor of Medicine  
Section of General Internal Medicine  
Boston Medical Center  
Boston University School of Medicine

Alexander Y. Walley, MD, MSc

Assistant Professor of Medicine  
Section of General Internal Medicine  
Boston Medical Center  
Boston University School of Medicine  
Medical Director, Narcotic Addiction Clinic  
Boston Public Health Commission

### Managing Editor

Donna M. Vaillancourt

Boston Medical Center

## BI Reduces Drinking in Nondependent ED Patients (continued from page 1)

- Drinks in the past 7 days decreased from 19–20 at baseline to 12–13 for BI with booster and 13–14 for BI alone, compared with 14–18 for no BI.
- Similarly, number of heavy drinking episodes in 28 days decreased from 7–8 at baseline to 4–5 for BI with booster and 5 for BI alone, compared with 6 for no BI.
- At 12 months, BI with or without a booster significantly decreased self-report of driving after drinking >3 drinks (38% to 29% and 39% to 31%, respectively).
- Brief intervention had no detectable effect on alcohol-problem scores or injuries. Assessment appeared to have no effect on drinking (an important observation for some researchers who have attributed negative BI study results as having been due to assessments).

*Comments:* A prior study in the same institution found no effect of BI, likely because it included those with lower risk use. Because about half of BI studies in EDs are negative, questions arise. It appears BI may have modest efficacy for a slice of the population identified by screening—those who drink enough to risk health consequences (but not too much) and who are not dependent—under certain circumstances (BI by trained ED clinicians). Clearly, more needs to be done to improve efficacy and to help patients who screen positive but whose use is either less or more severe than those enrolled in this trial.

Richard Saitz, MD, MPH

*Reference:* D'Onofrio G, Fiellin DA, Pantalon MV, et al. A brief intervention reduces hazardous and harmful drinking in emergency department patients. *Ann Emerg Med*. March 28, 2012 [Epub ahead of print]. doi:10.1016/j.annemergmed.2012.02.006

## Alcohol and Other Drug Discussions in Primary Care: Not Rare, but Numerous Challenges

With the current focus on routine integration of screening for alcohol and other drug (AOD) use in primary care, little is known about the content of physician-patient interactions when AOD conversations do occur. Investigators in New Zealand used 171 video-recorded patient visits with 15 general practitioners (GPs) and subsequent interviews with GPs to examine promoters and inhibitors of AOD discussions. Substances discussed included alcohol, tobacco, caffeine, anxiolytics, sleep aides, and analgesics.

- Topics related to AOD occurred in 56 visits (33%); more than a single question or comment occurred in 42 visits.
- Promoting factors included use of open-ended questions and nonverbal communication to encourage patient disclosure.
- Uncomfortable body language may have led patients to give defensive or socially acceptable answers.

- Acceptance of patient answers served as a “face-saving” strategy both for physicians and patients to avoid discussion of difficult topics.
- Interviews with GPs revealed time pressures and the desire to manage the presenting complaint as barriers to addressing AOD topics.

*Comments:* This qualitative study highlights the distance still left to travel in effectively using primary care as a vehicle to prevent and counsel patients about AOD use. Although routine screening for AOD use in primary care holds promise for case finding and prevention, stigma, competing priorities, and time pressures remain barriers to effective counseling about risky behaviors.

Hillary Kunins, MD, MPH, MS

*Reference:* Moriarty HJ, Stubbe MH, Chen L, et al. Challenges to alcohol and other drug discussions in the general practice consultation. *Fam Pract*. 2012; 29(2):213–222.

## Naloxone Distribution Programs for Opioid Overdose Prevention: Time to Scale Up?

The rate of overdose deaths continues to rise in the United States. Prevention programs that distribute naloxone to lay persons and train them in its use have been disseminated as a strategy to reduce overdose mortality. In this national survey, investigators queried 50 opioid overdose prevention programs regarding the number of persons trained to administer naloxone and the number of overdose reversals. Forty-eight programs provided data from 1996 (when naloxone distribution began) to 2010.

- The 48 programs that responded provided data for 188 local overdose prevention programs.
- More than 53,000 people were trained and received naloxone for potential distribution.
- More than 10,000 overdose reversals were reported to the responding programs.
- Three-quarters of states with overdose death rates above the median did not have opioid overdose prevention programs.

*Comments:* Based on this survey, opioid overdose prevention programs are feasible and provide the means to reverse overdoses, but they are not widely distributed. It cannot be determined from the data whether all reversals were life-saving or whether they were appropriately provided. Furthermore, this report did not provide surveillance on risks of treatment. However, the benefits are potentially significant and may provide a means to reduce overdose deaths. As one editorialist noted, harm-reduction and syringe-exchange programs have adopted naloxone distribution. As deaths from prescription opioids rise, health centers, physician offices, and pain clinics might be additional sites for naloxone distribution in order to reach a wider population at risk for overdose.

Hillary Kunins, MD, MS, MPH

*Reference:* Wheeler E, Davidson PJ, Jones TS, et al.: Community-based opioid overdose prevention programs providing naloxone—United States, 2010. *Morb Mortal Wkly Rep.* 2012;61(6):101–105.

## Naltrexone Implants Reduced Opioid Use in People with Co-occurring Heroin and Amphetamine Dependence

Long-acting naltrexone has been shown to reduce opioid use in opioid-dependent patients who have achieved abstinence, but its effect on patients with co-occurring opioid and stimulant dependence is not known. Researchers conducted a double-blind placebo-controlled randomized clinical trial of a 1000-mg naltrexone surgical implant among 100 subjects with co-occurring heroin and amphetamine dependence recruited in St. Petersburg. Psychosocial support and advice was provided to both groups. Prior to receiving the naltrexone or placebo implant, subjects were required to provide an opioid-negative urine test or tolerate a naloxone challenge test. At 10-week follow-up,

- the retention rate was 52% in the naltrexone group and 28% in the placebo group.
- 52% of subjects in the naltrexone group had opioid-negative urine tests versus 20% in the placebo group (missing urine samples were counted as positive).
- 40% of subjects in the naltrexone group had amphetamine-negative urine tests versus 24% in the placebo group (not significant).
- subjects in the naltrexone group were more likely to

have improved scores on the Clinical Global Impression Scale.

- among subjects who provided subjective ratings of amphetamine effects, 14% (3/22) in the naltrexone group reported full amphetamine effects versus 83% (15/18) in the placebo group.
- no severe adverse events were reported.

*Comments:* This trial had substantial losses to follow-up that were unbalanced between study groups, which limits the assessment of treatment effects. Despite this limitation, the study confirms that, in Russia, opioid abstinence can be maintained in subjects with both heroin and amphetamine dependence who receive long-acting naltrexone. Furthermore, the finding that long-acting naltrexone may also decrease co-occurring amphetamine use warrants further study in trials with more complete follow-up.

Alexander Y. Walley, MD, MSc

*Reference:* Tiihonen J, Krupitsky E, Verbitskaya E, et al. Naltrexone implant for the treatment of polydrug dependence: a randomized controlled trial. *Am J Psychiatry.* 2012;169(5):531–536.

## Adding Telephone Support to Office-Based Buprenorphine Treatment for Opioid Dependence Has Modest Effects

HereToHelp™ (HTH) is a telephonic support system for people with opioid dependence developed by Reckitt Benckiser, the manufacturer of Suboxone (buprenorphine/naloxone). For this study, 1426 patients new to buprenorphine treatment were recruited from 324 sites and ran-

domized to standard care or HTH (up to 8 coaching calls providing support in 3 areas: education about opioid dependence and treatment; assistance resolving challenges within treatment; and encouragement to stay in treatment).

(continued on page 4)

## Adding Telephone Support to Office-Based Buprenorphine Treatment (continued from page 3)

Outcomes were assessed for those who completed the 12-month follow-up survey (n=939; 66%). The main outcome was adherence, defined as taking buprenorphine as prescribed for at least 80% of the previous 28 days.

- Adherence was not significantly different between the 2 groups (55%), but those in the HTH group who accepted at least 3 calls reported better adherence (64%).
- Subjects in the HTH group were less likely to report using opioids in the previous month (12.9% versus 17.8%).
- There was no significant difference in Addiction Severity Index composite scores between groups.
- Subjects in the HTH group were more likely to re-

port attending a self-help group (34.2% versus 27.0%).

*Comments:* The authors emphasize the outcomes of those who participated in the support system and conclude that the intervention is effective. However, in reality, this study is consistent with others that found buprenorphine to be an effective treatment for opioid dependence, with the addition of adjunctive counseling (beyond standard medical management) having modest additional effects, if any.

Darius A. Rastegar, MD

*Reference:* Ruetsch C, Tkacz J, McPherson TL, et al. The effect of a telephonic patient support on treatment for opioid dependence: outcomes at one year follow-up. *Addict Behav.* 2012;37(5):686–689.

## HEALTH OUTCOMES

### Ongoing Use of Analgesics after Low-Risk Surgery

Opioid analgesics are sometimes initiated after common low-risk surgeries. In this study, researchers used a large administrative Canadian health database to identify opioid-naïve adults aged ≥66 years who received an opioid prescription within 7 days of a low-risk surgery (transurethral resection of the prostate, varicose vein stripping, cataract surgery, or laparoscopic cholecystectomy). Long-term use was assessed by prescription for opioids within 60 days of the 1-year anniversary of the surgery. A similar analysis was conducted for nonsteroidal anti-inflammatory drugs (NSAIDs).

- Seven percent of opioid-naïve patients (26,636 of 391,139) received an opioid prescription within 7 days of low-risk surgery. Opioid use ranged from 5% after cataract surgery to 65% after laparoscopic cholecystectomy. Codeine was the most commonly prescribed opioid.
- Ten percent of patients who received opioids after

surgery (2857 of 26,636) continued to use opioids 1 year later.

- In adjusted analyses, patients who received opioids after surgery were 44% more likely to be using opioids 1 year later.
- Only 0.3% of NSAID-naïve patients received an NSAID prescription within 7 days of surgery; however, in adjusted analyses, these patients were 4 times more likely to have an NSAID prescription 1 year after surgery.

*Comments:* This study shows that patients who received opioids or NSAIDs after low-risk surgery are more likely to still be using these drugs 1 year later. Clinicians should be cautious to prescribe opioids only when indicated after low-risk surgery and to carefully assess the need for continued use.

Kevin L. Kraemer, MD, MSC

*Reference:* Alam A, Gomes T, Zheng H, et al. Long-term analgesic use after low-risk surgery: a retrospective cohort study. *Arch Intern Med.* 2012;172(5):425-30.

### Severity of Alcohol Problems Predicts Recurrence and Persistence of Alcohol Dependence

This prospective cohort study in the Netherlands enrolled patients with remitted alcohol dependence (AD) (n=253) and current AD (n=135) and followed them for 2 years to identify independent risk factors for AD recurrence and persistence.

- Alcohol dependence recurred in 15% of those with remitted AD and persisted in 41% of those with current AD.
- Past-year total score on the Alcohol Use Disorders

Identification Test (AUDIT) at baseline was predictive of AD recurrence and persistence (odds ratio per 5-point increase, 3.6 and 2.1, respectively).

- More severe depressive and anxiety symptoms predicted recurrent AD; however, the great majority of patients reported these symptoms.
- Male gender and high educational attainment predicted persistence of AD.

*Comments:* Not surprisingly, greater severity of alcohol de-  
(continued on page 5)



## Severity of Alcohol Problems and Persistence of Dependence (continued from page 4)

pendence correlated with less stable recovery. For clinicians who use the AUDIT, this study demonstrates the predictive validity of this screening tool for longer-term risk of recurrence. It also reinforces the importance of anxiety and depression, both exceedingly common in recovery, as harbingers of relapse. We know from other clinical studies that treatment of these co-occurring

conditions can reduce recurrence of alcohol dependence.

Peter D. Friedmann, MD, MPH

*Reference:* Boschloo L, Vogelzangs N, van den Brink W, et al. Predictors of the 2-year recurrence and persistence of alcohol dependence. *Addiction*. April 17, 2012 [Epub ahead of print]. doi:10.1111/j.1360-0443.2012.03860.x

## Change in Heavy Drinking among Alcohol-Dependent Individuals

Heavy drinking\* is predictive of the development of alcohol use disorders and is associated with adverse health outcomes; nevertheless, its natural history among individuals with dependence is not well known. This study analyzed National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) data to capture the natural history of heavy drinking and factors associated with change over time. Individuals meeting DSM-IV criteria for alcohol dependence (AD) at baseline were included in the study (n=1484). Those who provided data 3 years later (n=1123) (76%) comprised the study sample.

- Mean number of heavy drinking days (HDD) per year decreased from 119 to 83 over the 3-year period. In multivariable models, this reduction was independently associated with the following:
  - smoking (mean reduction of 15 versus 28 HDD among nonsmokers).
  - alcohol tolerance (mean reduction of 13 versus 29 HDD for those without tolerance).

- no longer meeting AD criteria (mean reduction of 44 HDD versus those who still met AD criteria, who had a mean increase of 1 HDD).

- Resolution of depression/dysthymia, sex, education, family history of AD, drug use, and bipolar disorder were not associated with HDD reductions in fully adjusted models.

*Comments:* This exploratory study provides insight on the natural history of heavy drinking among individuals with dependence and indicates significant reductions in HDD over time. Smoking and alcohol tolerance appear to have a negative impact on heavy drinking in the long-term for patients with dependence. The fact that smoking is associated with less reduction in HDD should encourage clinicians to target it in individualized interventions.

Nicolas Bertholet, MD, MSc

*Reference:* Sarsour K, Johnston JA, Milton DR, et al. Factors predicting change in frequency of heavy drinking days among alcohol-dependent participants in the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). *Alcohol Alcohol*. 2012;47(4):443–450.

\*Defined as  $\geq 5$  drinks in a day for men and  $\geq 4$  drinks in a day for women in this study.

## Light Alcohol Consumption Prior to and Following Myocardial Infarction Is Associated with Lower Risk of Mortality

This study examined the association between long-term alcohol consumption, consumption before and after myocardial infarction (MI), and all-cause and cardiovascular mortality among participants in the Health Professionals Follow-up Study (HPFS). Of the >51,000 men in the study, 1818 experienced incident nonfatal MI during  $\geq 20$  years of follow-up. Among MI survivors, 468 died during follow-up. Reports of alcohol consumption were obtained throughout the course of the study and were used to calculate average consumption prior to and following MI.

- Overall, compared with no alcohol consumption, pre-MI and post-MI intake of very light\* to light\*\* amounts of alcohol was associated with lower risk of all-cause mortality and cardiovascular mortality.
- The reductions in all-cause mortality risk (compared with nondrinkers, 22% lower among those consuming very light amounts and 34% lower among those

consuming light amounts) were no longer present in men who consumed  $\geq 30$  g per day. For this highest consumption group, the adjusted hazard ratio was 0.87 (95% CI, 0.61–1.25).

*Comments:* Interestingly, although alcohol exposure may differ before and after a cardiovascular event, in this study the reductions in risk were almost the same; i.e., both prior to an MI and after a nonfatal MI, the risk of mortality was about 30% lower for light drinkers than it was for abstainers. This suggests that, in terms of reducing cardiovascular disease, alcohol may have relatively short-term effects. Regular consumption of light amounts may result in the best health outcomes.

R. Curtis Ellison, MD

*Reference:* Pai JK, Mukamal KJ, Rimm EB. Long-term alcohol consumption in relation to all-cause and cardiovascular mortality among survivors of myocardial infarction: the Health Professionals Follow-up Study. *Eur Heart J*. March 27, 2012 [Epub ahead of print]. doi:10.1093/eurheartj/ehs047

\*In this study, very light drinking = 0.1–9.9 g per day of alcohol (<1 standard drink), while \*\*light drinking = 10.0–29.9 g per day (2–2½ standard drinks).

## HIV AND HCV

### Rates of HCV Reinfection Are Low among People with Injection Drug Use Who Receive HCV Treatment

Although reinfection is cited as a reason not to offer HCV treatment to people with injection drug use (IDU), rates of reinfection after treatment are unclear. Researchers examined HCV reinfection\* rates using data from a prospective cohort study\*\* of individuals with recently acquired HCV. Those who did not achieve spontaneous virologic suppression were offered 24 weeks of HCV treatment. Of 163 participants enrolled, 76% reported IDU. Less than one-third (31%) were coinfecting with HIV. Participants with treatment-induced virologic suppression were followed for a mean of 1.2 years (range, 0–2 years). Those with spontaneous virologic suppression were followed for a similar amount of time. Rates of HCV reinfection were calculated using Poisson distribution. Multivariable logistic regression was used to identify factors associated with reinfection.

- Of the 111 eligible participants who enrolled in treatment, 79% achieved virologic suppression by the end of treatment.
- Among successfully treated participants, 5 cases of

\*Detection of an HCV strain distinct from the primary infecting strain among participants with either spontaneous or treatment-induced HCV virologic suppression. \*\*Australian Trial in Acute Hepatitis C (ATAHC).

reinfection occurred, which translated into an incidence of 4.7 cases per 100 person-years (95% confidence interval [CI]: 1.9, 11.2). Among untreated participants who had spontaneous suppression, the reinfection rate was 6.1 per 100 person-years (95% CI: 1.5, 24.6).

- Factors independently associated with reinfection (n=13) were poor social functioning at enrollment and IDU during follow-up.

*Comments:* The rate of HCV reinfection after treatment in this study was slightly higher than that reported in prior studies, but still relatively low. Although the study is limited by short follow-up and infrequent sampling for HCV RNA, it is the largest study of reinfection to date. These results do not support withholding HCV treatment from people with IDU; however, education and support for substance abuse treatment to reduce the risks of reinfection should be included as part of treatment.

Judith Tsui, MD, MPH

*Reference:* Grebely J, Pham ST, Matthews GV, et al. Hepatitis C virus reinfection and superinfection among treated and untreated participants with recent infection. *Hepatology*. 2012;55(4):1058–1069.

### Availability of Viral Hepatitis Services in US Drug Treatment Programs

The prevalence of hepatitis B virus (HBV) and hepatitis C virus (HCV) is disproportionately high among individuals in US drug treatment programs. Therefore, such programs are ideal settings for the provision of services targeting viral hepatitis, including screening, education, vaccine prevention, and treatment. This National Institute of Drug Abuse Clinical Trials Network (NIDA-CTN) study assessed the availability and comprehensiveness of viral hepatitis services within US drug treatment programs. Administrators from 319 drug treatment programs within the NIDA-CTN were invited to participate via survey, and 84% responded. Data were compared between programs that provided methadone (n=89) and those that did not (n=180). Most programs were private, not-for-profit, free-standing facilities but varied in most other aspects (e.g., geographic location, program size, and medical versus nonmedical staffing).

- Testing for HCV-antibody was performed in 28% of programs and was more likely to be offered at methadone programs (55%) compared with programs that did not provide methadone (15%).
- Vaccination for hepatitis A virus and HBV were offered either on-site or through contractual agreement with another provider in 68% of programs.
- For all substance abuse treatment programs, HCV-related treatment was provided either on-site or

through contractual agreement at 29% of programs and was more common in programs providing methadone than in programs that did not provide methadone (48% versus 22%, respectively). Fifteen percent of programs offered on-site HCV treatment, 3.5% offered treatment through contractual agreement with another provider, 67% referred patients to a community resource, and 15% did not offer treatment at all.

*Comments:* Less than one-third of drug treatment facilities offered HCV-antibody testing or HCV treatment either on-site or through contractual agreement with another provider. Programs that provided methadone were more likely to provide these services than programs that did not provide methadone. These data are likely biased in that they reflect programs enrolled in the NIDA-CTN, a group of programs that may be more likely to provide such services, and are limited by their self-report nature. The findings suggest a need to improve access to HBV and HCV screening and treatment at drug treatment programs to address this public health agenda.

Jeanette M. Tetrault, MD

*Reference:* Bini EJ, Kritz S, Brown LS Jr, et al. Hepatitis B virus and hepatitis C virus services offered by substance abuse treatment programs in the United States. *J Subst Abuse Treat*. 2012;42(4):438–445.

## Providing Directly Observed HCV Treatment at a Methadone Maintenance Program is Feasible and May Improve Treatment Outcomes

In this pilot study, subjects in a methadone maintenance program who met criteria for treatment of HCV were randomized to receive self-administered treatment through a hepatitis clinic (SAT) or directly observed treatment at the methadone maintenance program (mDOT). Over a 3-year period, 21 subjects were recruited. Preliminary outcomes were as follows:

Outcome	SAT (n=9)	mDOT (n=12)
Initiated HCV treatment	4	12
Early virologic response at week 12	3	10
Sustained virologic response	1	6

*Comments:* Although the numbers are too small to draw definitive conclusions, this study shows that directly observed

HCV treatment can be provided in a methadone maintenance clinic and may improve treatment outcomes for a very select group of patients. The investigators were only able to recruit 7 subjects per year, and they do not tell us how many patients were not considered to be good candidates or declined treatment. Aside from patient factors, another barrier to implementation of programs like this is the need for additional training and time demands on staff.

Darius A. Rastegar, MD

*Reference:* Bruce RD, Eiserman J, Acosta A, et al. Developing a modified directly observed therapy intervention for hepatitis C treatment in a methadone maintenance program: implications for program replication. *Am J Drug Alcohol Abuse*. 2012;38(3):206–212.

## People with Injection Drug Use Who Also Use Noninjecting Routes of Drug Administration Are Less Likely to Be HIV Positive

Injection drug use (IDU) remains a major public health threat for HIV transmission internationally. Several Eastern European countries face HIV epidemics stemming primarily from IDU. However, the impact of noninjecting practices on HIV transmission risk among people with IDU has not been explored. This cross-sectional study examined routes of drug administration and HIV serostatus as well as sexual risk behaviors among 350 people in Estonia with current IDU.

- Eighty-six percent of participants reported administering illicit drugs solely by injection within the last 6 months.
- Those who also used noninjecting routes of drug administration
  - were less likely to be HIV-infected than exclusive injectors (35% versus 59%; adjusted odds ratio [AOR], 0.49);

- were more likely to have more than one sexual partner (59% versus 43%; AOR, 1.9); and
- were more likely to report a past sexually transmitted infection (20% versus 9%; AOR, 2.38).

*Comments:* Only a small subset of people with current IDU in this study reported other routes of drug administration, which may limit the strength of associations. Also, the cross-sectional nature of the study limits causal inference, and the single study site in Estonia may limit generalizability. Nevertheless, the results may inform HIV prevention efforts.

Jeanette M. Tetrault MD

*Reference:* Vorobjov S, Uusküla A, Des Jarlais DC, et al. Multiple routes of drug administration and HIV risk among injecting drug users. *J Subst Abuse Treat*. 2012;42(4):413–420.

## Resource Alert: BAP Releases New Guidelines on the Pharmacologic Management of Substance Use Disorders

In May, the British Association for Psychopharmacology (BAP) released comprehensive new evidence-based guidelines on the pharmacologic management of substance use disorders. Topics covered include management of withdrawal, opioid agonist therapy, maintaining abstinence,

management of substance use disorders in pregnancy, comorbid conditions, and treatment approaches with younger and older people, among others. The guidelines are available for download on the BAP website at [www.bap.org.uk/pdfs/BAPaddictionEBG\\_2012.pdf](http://www.bap.org.uk/pdfs/BAPaddictionEBG_2012.pdf).

Visit

[www.aodhealth.org](http://www.aodhealth.org)

to view the newsletter online, sign up for a free subscription, and access additional features including downloadable training presentations, free CME credits, and much more!

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](http://www.aodhealth.org)).

### Contact Information:

*Alcohol, Other Drugs, and Health:  
Current Evidence*  
Boston University School of  
Medicine/Boston Medical Center  
801 Massachusetts Ave., 2nd floor  
Boston, MA 02118



## 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.ACT1205). Boston University School of Medicine designates this enduring material for a maximum of 1.5 AMA PRA Category 1 Credit(s)<sup>™</sup>. 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.

### Course Faculty

Richard Saitz, MD, MPH, FASAM, FACP  
Course Director

Professor of Medicine and Epidemiology

Boston University Schools of Medicine and Public Health

Faculty member has nothing to disclose in regards to commercial support and does not discuss unlabeled/investigational uses of a commercial product.

David A. Fiellin, MD

Professor of Medicine

Yale University School of Medicine

Faculty member has nothing to disclose in regards to commercial support and does not discuss unlabeled/investigational uses of a commercial product.

Nicolas Bertholet, MD, MSc

Department of Medicine and Public Health

Lausanne University, Switzerland

Faculty member has nothing to disclose in regards to commercial support and does not discuss unlabeled/investigational uses of a commercial product.

R. Curtis Ellison, MD

Professor of Medicine and Public Health

Boston University School of Medicine

Faculty member is the Director of the Institute on Lifestyle and Health, which receives various donations from individuals and companies in the alcohol beverage industry, given as "unrestricted educational gifts." Funds are not given for specific research projects and donors have no prior information on, or input into, the surveillance being carried out or critiques published by the Institute or the Section. Faculty member does not discuss unlabeled/investigational uses of a commercial product.

Peter D. Friedmann, MD, MPH

Professor of Medicine and Community Health

Warren Alpert Medical School of Brown University

Faculty member has served as a consultant for Clinical Tools, Inc., is a member of the speakers bureau for Reckitt Benckiser Pharmaceuticals, and is a stockholder in Alkermes, Inc. Faculty member does not discuss unlabeled/investigational uses of a commercial product.

Kevin L. Kraemer, MD, MSc

Associate Professor of Medicine and Health Policy and Management

University of Pittsburgh Schools of Medicine and Public Health

Faculty member has nothing to disclose in regards to commercial support and does not discuss unlabeled/investigational uses of a commercial product.

Hillary Kunins, MD, MPH, MS

Associate Clinical Professor of Medicine and

Psychiatry & Behavioral Sciences

Albert Einstein College of Medicine

Faculty member is a stockholder in Pfizer, and her daughter is a stockholder in Abbott Laboratories, Johnson & Johnson, and Medtronic, Inc. Faculty member does not discuss unlabeled/investigational uses of a commercial product.

Darius A. Rastegar, MD

Assistant Professor of Medicine

Johns Hopkins School of Medicine

Faculty member has nothing to disclose in regards to commercial support and does not discuss unlabeled/investigational uses of a commercial product.

Jeffrey H. Samet, MD, MA, MPH

Professor of Medicine and Social and Behavioral Sciences

Boston University Schools of Medicine and Public Health

Faculty member has nothing to disclose in regards to commercial support and does not discuss unlabeled/investigational uses of a commercial product.

Jeanette M. Tetrault, MD

Assistant Professor of Internal Medicine

Yale University School of Medicine

Faculty member has nothing to disclose in regards to commercial support and does not discuss unlabeled/investigational uses of a commercial product.

Alexander Y. Walley, MD, MSc

Assistant Professor of Medicine

Boston University School of Medicine

Faculty member has nothing to disclose in regards to commercial support and does not discuss unlabeled/investigational uses of a commercial product.

Donna Vaillancourt

Managing Editor

Alcohol, Other Drugs, and Health: Current Evidence

Boston Medical Center

Ms. Vaillancourt has nothing to disclose in regards to commercial support.

Jody Walker, MS

Boston University School of Medicine

CME Program Manager

Ms. Walker has nothing to disclose in regards to commercial support.

### Disclaimer

THESE MATERIALS AND ALL OTHER MATERIALS PROVIDED IN CONJUNCTION WITH CONTINUING MEDICAL EDUCATION ACTIVITIES ARE INTENDED SOLELY FOR PURPOSES OF SUPPLEMENTING CONTINUING MEDICAL EDUCATION PROGRAMS FOR QUALIFIED HEALTH CARE PROFESSIONALS. ANYONE USING THE MATERIALS ASSUMES FULL RESPONSIBILITY AND ALL RISK FOR THEIR APPROPRIATE USE. TRUSTEES OF BOSTON UNIVERSITY MAKES NO WARRANTIES OR REPRESENTATIONS WHATSOEVER REGARDING THE ACCURACY, COMPLETENESS, CURRENTNESS, NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE MATERIALS. IN NO EVENT WILL TRUSTEES OF BOSTON UNIVERSITY BE LIABLE TO ANYONE FOR ANY DECISION MADE OR ACTION TAKEN IN RELIANCE ON THE MATERIALS. IN NO EVENT SHOULD THE INFORMATION IN THE MATERIALS BE USED AS A SUBSTITUTE FOR PROFESSIONAL CARE.

Date of original release: June 1, 2012.

Date of expiration: May 31, 2013.

CME Course Code I.ACT1205.