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substance use
policy issues

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Hours and days of sale and density of alcohol outlets: Impacts on alcohol consumption and damage. A systematic review. (review).

Popova S; Giesbrecht N; Bekmuradov D; Patra J. *Alcohol and Alcoholism* 44(5): 500-516, 2009. (99 refs.)

Aims: The aim of this study was to examine recent research studies published from 2000 to 2008 focusing on availability of alcohol: hours and days of sale and density of alcohol outlets. **Methods:** Systematic review. **Results:** Forty-four studies on density of alcohol outlets and 15 studies on hours and days of sale were identified through a systematic literature search. The majority of studies reviewed found that alcohol outlet density and hours and days of sale had an impact on one or more of the three main outcome variables, such as overall alcohol consumption, drinking patterns and damage from alcohol. **Conclusions:** Restricting availability of alcohol is an effective measure to prevent alcohol-attributable harm. Copyright 2009, Oxford University Press.

Airline passengers' alcohol use and its safety implications.

Girasek DC; Olsen CH. *Journal of Travel Medicine* 16(5): 311-316, 2009. (33 refs.)

Background. This investigation was designed to identify individual and contextual factors associated with airline passengers' alcohol use, and to explore potentially dangerous in-flight alcohol consumption. **Methods.** Passengers waiting to board 24 domestic flights at an international airport in the South Atlantic United States were asked to complete an anonymous questionnaire. Eighty percent of those approached agreed to participate. Our findings are based upon the responses of 1,548 adults. **Results.** A majority (84%) of passengers indicated that they did not intend to consume alcoholic beverages on the plane they were waiting to board. Passengers who were more likely to report that they would drink were on longer flights, traveling with friends, and anticipating First or Business Class seating. Passengers who had already consumed alcohol that day and those who drank more often generally were also more likely to say that they intended to consume alcohol, as were people who thought that in-flight alcohol use was enjoyable,

acceptable, and unlikely to make jet lag worse. Eighty-nine percent of the passengers who said they intended to drink reported that they would purchase one to two drinks. **Conclusions.** Very few respondents reported intentions that would pose a risk to others. Future studies should validate alcohol consumption and sample passengers at multiple airports throughout the year. Copyright 2009, Wiley-Blackwell.

A preliminary report of knowledge translation: Lessons from taking screening and brief intervention techniques from the research setting into regional systems of care.

Bernstein E; Topp D; Shaw E; Girard C; Pressman K; Woolcock E et al. *Academic Emergency Medicine* 16(11): 1225-1233, 2009. (30 refs.)

This article describes a limited statewide dissemination of an evidence-based technology, screening, brief intervention, and referral to treatment (SBIRT), and evaluation of the effects on emergency department (ED) systems of care, utilizing the knowledge translation framework of reach, effectiveness, adoption, implementation, and maintenance (RE-AIM), using both quantitative and qualitative data sources. Screening and brief intervention (SBI) can detect high-risk and dependent alcohol and drug use in the medical setting, provide early intervention, facilitate access to specialty treatment when appropriate, and improve quality of care. Several meta-analyses demonstrate its effectiveness in primary care, and the federal government has developed a well-funded campaign to promote physician training and adoption of SBI. In the busy environment of the ED, with its competing priorities, researchers have tested a collaborative approach that relies on peer educators, with substance abuse treatment experience and broad community contact, as physician extenders. The ED-SBIRT model of care reflects clinician staff time constraints and resource limitations and is designed for the high rates of prevalence and increased acuity typical of ED patients. This report tracks services provided during dissemination of the ED-SBIRT extender model to seven EDs across a northeastern state, in urban, suburban, and rural community settings. Twelve health promotion advocates (HPAs) were hired, trained, and

integrated into seven ED teams. Over an 18-month start-up period, HPAs screened 15,383 patients; of those, 4,899 were positive for high risk or dependent drinking and/or drug use. Among the positive screens, 4,035 (82%) received a brief intervention, and 57% of all positives were referred to the substance abuse treatment system and other community resources. Standardized, confidential interviews were conducted by two interviewers external to the program with 24 informants, including HPAs and their supervisors, clinicians, nurse managers, and ED directors across five sites. A detailed semistructured format was followed, and results were coded for thematic material. Barriers, challenges, and successes are described in the respondents' own words to convey their experience of this demonstration of SBIRT knowledge translation. Five of seven sites were sustained through the second year of the program, despite cutbacks in state funding. The dissemination process provided a number of important lessons for a large rollout. Successful implementation of the ED-SBIRT HPA model depends on 1) external funding for start-up; 2) local ED staff acting as champions to support the HPA role, resolve territorial issues, and promote a cultural shift in the ED treatment of drug and alcohol misuse from "treat and street" to prevention, based on a knowledge of the science of addiction; 3) sustainability planning from the beginning involving administrators, the billing and information technology departments, medical records coders, community service providers, and government agencies; and 4) creation and maintenance of a robust referral network to facilitate patient acceptance and access to substance abuse services. Copyright 2009, Wiley-Blackwell.

Alcohol-related problems and enforcement at professional sports stadiums.

Lenk KM; Toomey TL; Erickson DJ. *Drugs: Education, Prevention and Policy* 16(5): 451-462, 2009. (8 refs.)

Aims: To assess types and levels of alcohol enforcement and alcohol-related problems at professional sports stadiums. Methods: We conducted a telephone survey in 2005-2006 of state alcohol beverage control and local police agencies in each of the cities and states in the USA that have a professional sports stadium (n = 98). Questions pertained to enforcement actions conducted at stadiums and complaints received about incidents at stadiums that are likely or certainly alcohol-related (e.g. fights, intoxicated patrons, property damage). Findings: We found that underage alcohol compliance checks were the most common type of enforcement

but just over 50% of agencies conducted these. The most common types of complaints received by local law enforcement agencies were fights occurring either inside or outside the stadium, with 74-80% of agencies receiving these types of complaints. Among state agencies, 65% received complaints about intoxicated patrons. Conclusions: Given the high profile of alcohol-related violent incidents at professional sports stadiums in recent years along with recent scientific evidence that enforcement of alcohol-related policies is both needed and effective, our results showing high rates of alcohol-related problems and fairly low levels of enforcement at stadiums are particularly timely and point to need for further interventions and research. Copyright 2009, Taylor & Francis.

Changes in per capita alcohol sales during the partial privatization of British Columbia's retail alcohol monopoly 2003-2008: A multi-level local area analysis.

Stockwell T; Zhao JH; Macdonald S; Pakula B; Gruenewald P; Holder H. *Addiction* 104(11): 1827-1836, 2009. (25 refs.)

Aim: To investigate the independent effects on liquor sales of an increase in (a) the density of liquor outlets and (b) the proportion of liquor stores in private rather than government ownership in British Columbia between 2003/4 and 2007/8. Design: The British Columbia Liquor Distribution Branch provided data on litres of ethanol sold through different types of outlets in 89 local health areas of the province by beverage type. Multi-level regression models were used to examine the relationship between per capita alcohol sales and outlet densities for different types of liquor outlet after adjusting for potential confounding social, economic and demographic factors as well as spatial and temporal autocorrelation. Setting: Liquor outlets in 89 local health areas of British Columbia, Canada. Findings: The number of private stores per 10 000 residents was associated significantly and positively with per capita sales of ethanol in beer, coolers, spirits and wine, while the reverse held for government liquor stores. Significant positive effects were also identified for the number of bars and restaurants per head of population. The percentage of liquor stores in private versus government ownership was also associated significantly with per capita alcohol sales when controlling for density of liquor stores and of on-premise outlets ($P < 0.01$). Conclusion: The trend towards privatisation of liquor outlets between 2003/04 and 2007/08 in British Columbia has contributed to increased per capita sales of alcohol and hence possibly also to increased

alcohol-related harm. Copyright 2009, Society for the Study of Addiction.

Cost-effectiveness of interventions to prevent alcohol-related disease and injury in Australia.

Cobiac L; Vos T; Doran C; Wallace A. *Addiction* 104(10): 1646-1655, 2009. (23 refs.)

Aims: To evaluate cost-effectiveness of eight interventions for reducing alcohol-attributable harm and determine the optimal intervention mix. Methods: Interventions include volumetric taxation, advertising bans, an increase in minimum legal drinking age, licensing controls on operating hours, brief intervention (with and without general practitioner telemarketing and support), drink driving campaigns, random breath testing and residential treatment for alcohol dependence (with and without naltrexone). Cost-effectiveness is modelled over the life-time of the Australian population in 2003, with all costs and health outcomes evaluated from an Australian health sector perspective. Each intervention is compared with current practice, and the most cost-effective options are then combined to determine the optimal intervention mix. Measurements: Cost-effectiveness is measured in 2003 Australian dollars per disability adjusted life year averted. Findings: Although current alcohol intervention in Australia (random breath testing) is cost-effective, if the current spending of \$71 million could be invested in a more cost-effective combination of interventions, more than 10 times the amount of health gain could be achieved. Taken as a package of interventions, all seven preventive interventions would be a cost-effective investment that could lead to substantial improvement in population health; only residential treatment is not cost-effective. Conclusions: Based on current evidence, interventions to reduce harm from alcohol are highly recommended. The potential reduction in costs of treating alcohol-related diseases and injuries mean that substantial improvements in population health can be achieved at a relatively low cost to the health sector. Copyright 2009, Society for the Study of Addiction.

Cross-border paid plasma donation among injection drug users in two Mexico-US border cities.

Volkow P; Brouwer KC; Loza O; Ramos R; Lozada R; Garfein RS et al. *International Journal of Drug Policy* 20(5): 409-412, 2009. (31 refs.)

Objective: Paid plasma donation has contributed to HIV epidemics in many countries. Eleven million liters of plasma are fractionated annually in the U.S., mainly from paid donors. Deferral of high-risk donors such as injection drug users (IDUs) is required for paid

donations. We studied circumstances surrounding paid plasma donation among IDUs in two Mexico-U.S. border cities. Methods: In 2005, IDUs ≥ 18 years old in Tijuana (N = 222) and Cd. Juarez (N = 206) who injected in the last month were recruited through respondent-driven sampling. Subjects underwent antibody testing for HIV and HCV and an interviewer-administered survey including questions on donating and selling whole blood and plasma. Results: Of 428 IDUs, HIV and HCV prevalence were 3% and 96%, respectively: 75 (17.5%) reported ever having donated/sold their blood or plasma, of whom 28 (37%) had sold their plasma for an average of \$16 USD. The majority of IDUs selling plasma were residents of Ciudad Juarez (82%); 93% had sold their plasma only in the U.S. The last time they sold their plasma, 65% of IDUs had been asked if they injected drugs. Although the median time since last selling plasma was 13 years ago, 3 had done so within the prior 2 years, one within the prior 6 months; of these 3 IDUs, 2 were from Cd. Juarez, one from Tijuana; all 3 had only sold their plasma in the U.S. Conclusions: Although selling plasma appears uncommon among IDUs in these two Mexican border cities, the majority sold plasma in the U.S. and only one-third were deferred as high-risk donors. Paying donors for plasma should be a matter of public inquiry to encourage strict compliance with regulations. Plasma clinics should defer donors not only on behavioral risks, but should specifically inspect for injection stigmata. Copyright 2009, Elsevier Science.

Disabusing cocaine: Pervasive myths and enduring realities of a globalised commodity. (editorial).

Davalos LM; Bejarano AC; Correa HL. *International Journal of Drug Policy* 20(5): 381-386, 2009. (32 refs.)

For more than 30 years Colombia has waged an internal War on Drugs with the support of the international community. During this time, the illegal economy has evolved toward integrating cultivation with processing and trafficking, making Colombia the largest grower of coca in the world. The environmental impact of coca production and processing is vast, accounting for large quantities of toxic chemicals directly dumped onto the soil and watersheds, as well as most deforestation since the 1990s. The policies pursued to stem the coca economy, however, are based on unfounded assumptions about the behaviour of coca growers in the context of international markets. Despite their unfounded premises, these assumptions have acquired a mythical stature. In this article we review the most persistent myths about coca production with a view to understanding its links to

environmental degradation. To this end, we present data on the economic and demographic background of coca growers, their impact on the environment, and their behaviour in the larger context of international markets and current eradication policies. Copyright 2009, Elsevier Science.

Effectiveness of mandatory alcohol testing programs in reducing alcohol involvement in fatal motor carrier crashes.

Brady JE; Baker SP; DiMaggio C; McCarthy ML; Rebok GW; Li GH. *American Journal of Epidemiology* 170(6): 775-782, 2009. (28 refs.)

Mandatory alcohol testing programs for motor carrier drivers were implemented in the United States in 1995 and have not been adequately evaluated. Using data from the Fatality Analysis Reporting System during 1982-2006, the authors assessed the effectiveness of mandatory alcohol testing programs in reducing alcohol involvement in fatal motor carrier crashes. The study sample consisted of 69,295 motor carrier drivers and 83,436 non-motor-carrier drivers who were involved in 66,138 fatal multivehicle crashes. Overall, 2.7% of the motor carrier drivers and 19.4% of the non-motor-carrier drivers had positive blood alcohol concentrations. During the study period, the prevalence of alcohol involvement in fatal crashes decreased by 80% among motor carrier drivers and 41% among non-motor-carrier drivers. With adjustment for driver age, sex, history of driving while intoxicated, and survival status, implementation of the mandatory alcohol testing programs was found to be associated with a 23% reduced risk of alcohol involvement in fatal crashes by motor carrier drivers (odds ratio = 0.77, 95% confidence interval: 0.62, 0.94). Results from this study indicate that mandatory alcohol testing programs may have contributed to a significant reduction in alcohol involvement in fatal motor carrier crashes. Copyright 2009, Oxford Press.

Ethical considerations for administering alcohol or alcohol cues to treatment-seeking alcoholics in a research setting: Can the benefits to society outweigh the risks to the individual? (review).

Enoch MA; Johnson K; George DT; Schumann G; Moss HB; Kranzler HR et al. *Alcoholism: Clinical and Experimental Research* 33(9): 1508-1512, 2009. (22 refs.)

The purpose of this commentary, distilled from ideas put forth at a roundtable at the 2008 RSA Annual Meeting, is to discuss whether the administration of alcohol to treatment-seeking alcoholics is ever justified. Can it ever be ethical to induce craving or

give alcohol to treatment seeking, abstinent alcoholics? Can the benefits to society outweigh the risks to the individual? Can these risks be reduced to acceptable levels? What safeguards are currently in place and what research is currently being done in this domain? Can this whole issue be avoided by conducting research on alcoholics who choose harm reduction (reduced alcohol consumption) rather than abstinence as a treatment goal? The issue of administering alcohol to treatment-seeking alcoholics has been raised periodically and indeed there are national guidelines. This commentary will examine the issues described above in the context of the National Advisory Guidelines. Copyright 2009, Research Society on Alcoholism.

How will alcohol sales in the UK be affected if drinkers follow government guidelines?

Baumberg B. *Alcohol and Alcoholism* 44(5): 523-528, 2009. (29 refs.)

Aims: The proportion of alcohol consumption that is above government guidelines ('risky drinking') has been estimated in several countries, suggesting that reductions in risky drinking would lead to significant declines in total alcohol consumption. However, this has not previously been conducted transparently in the UK. Furthermore, existing studies have under-explored the importance of several methodological decisions, as well as not closely examining the meaning of these figures for debates on 'corporate social responsibility' (CSR). Methods: Secondary analysis of the amount of alcohol consumption above various government guidelines in four British datasets for 2000-2002: the National Diet and Nutrition Survey; the General Household Survey; Smoking, Drinking and Drug Use among Young People; and the March 2002 ONS Omnibus Survey. Results: Risky drinking accounts for 55-82% of the total consumption by 18- to 64-year olds, depending on the definition of risky drinking used. If only alcohol above the government guidelines is counted, this falls to 22-47%. Consumption by underage drinkers accounts for 4.5% of the total consumption, while consumption by drink-drivers accounts for 0.5-8.0% depending on the assumptions made. Conclusions: Methodologically, the study shows that at least two decisions have considerable importance: the definition of risky drinking used and whether we count all drinking (as in most previous studies) or only drinking above guidelines. Substantively, these studies do not directly show that drink companies' profitability would be affected by declines in risky drinking. Nevertheless, they are valuable for present debate in themselves and

form the basis of a more complex analysis of alcohol CSR. Copyright 2009, Oxford University Press.

Informed consent in the treatment of drug-addiction.

Vicol MC; Bulgaru-Iliescu D; Astarastoe V. *Revista Romana de Bioetica* 7(3): 165-173, 2009. (18 refs.)

As a general rule of the medical therapy, no competent patient can be treated without being informed in prior on the diagnosis, on the development stage of disease with/without treatment, on complications, therapeutic alternatives, on the prognostic and before acquiring the patient's consent. Nevertheless, in the case of drug-addicted patients, this aspect faces several issues. Could drug-addicts be considered fully competent in order to authorize the commencement of a treatment? Is the subscription to a specialized drug-addiction treatment program fully voluntarily? Are coercive therapy methods ethical? This article aims at approaching the complexity of informed consent in drug-addiction treatment, starting from these dilemmas, by the presentation of a research made on drug addicts within a specific drug-addiction therapy program. Copyright 2009, Colegiul Medicilor Iasi.

Methods for comparing drug policies: The utility of composite Drug Harm Indexes. (editorial).

Ritter A. *International Journal of Drug Policy* 20(6, Special Issue): 475-479, 2009. (13 refs.)

One of the challenges for drug policy research is being able to compare policy options and outcomes. The development of indexes, such as the UK Drug Harm Index or the UNODC Illicit Drug Index is a way to systematically enable such comparisons. An Index is a single common metric that represents the diverse outcomes or consequences of drug use. An Index may be used for performance monitoring within one country/region over time; to establish societal benefit of drug policies as expressed in social costs saved; to compare countries or regions; or for comparative policy analysis. Clarity of purpose is important in how an Index is used. The consequences or outcomes that can be combined into a single Index include health consequences, crime consequences, public amenity, pain and suffering, labour market outcomes, and drug manufacture and trafficking activity. The choice of outcomes for inclusion is driven by the purpose but also often by practical considerations, such as data availability. The weighting of the consequences is an important consideration in translating the outcomes into a common metric. A monetary unit has a number of advantages: it is a unit that can be measured across diverse impacts; it gives implicit "weighting" of harms; and it is intuitive for policy makers and

community. On the other hand, it represents an economic perspective. No one Index will be regarded as suitable and appropriate by every stakeholder and ongoing research effort on Indexes is an important foundational research activity to advance illicit drug policy. Copyright 2009, Elsevier Science.

Regulating khat: Dilemmas and opportunities for the international drug control system.

Klein A; Beckerleg S; Hailu D. *International Journal of Drug Policy* 20(6, Special Issue): 509-513, 2009. (27 refs.)

Background: The regulation of khat, one of the most recent psychoactive drugs to become a globally traded commodity, remains hotly contested within different producer and consumer countries. As regimes vary, it has been possible to compare khat policies in Africa, Europe and North America from different disciplinary perspectives. Methods: Field research was conducted in East Africa and Europe, using a combination of semistructured interviews, participant observation and the analysis of trade statistics. Results: The research established the significance of khat for rural producers, regional economies, as a tax base and source of foreign exchange. At the same time, khat as a psychoactive substance is associated with health and public safety problems that in turn are met with often ill-informed legislative responses. Bans have in turn lead to the criminalisation of users and sellers and illegal drug markets. Conclusion: The empirical work from Africa provides a strong argument for promoting evidence-based approaches to khat regulation, harnessing the positive aspects of the khat economy to develop a control model that incorporates the voices and respects the needs of rural producers. Ultimately, the framework for khat may provide both a model and an opportunity for revising the international treaties governing the control of other plant psychoactive-based substances. Copyright 2009, Elsevier Science.

The spatial epidemiology of cocaine, methamphetamine and 3,4-methylenedioxy-methamphetamine (MDMA) use: A demonstration using a population measure of community drug load derived from municipal wastewater.

Banta-Green CJ; Field JA; Chiaia AC; Sudakin DL; Power L; de Montigny L. *Addiction* 104(11): 1874-1880, 2009. (27 refs.)

Aims: To determine the utility of community-wide drug testing with wastewater samples as a population measure of community drug use and to test the hypothesis that the association with urbanicity would vary for three different stimulant drugs of abuse. Design and participants: Single-day samples were

obtained from a convenience sample of 96 municipalities representing 65% of the population of the State of Oregon. Measurements: Chemical analysis of 24-hour composite influent samples for benzoylecgonine (BZE, a cocaine metabolite), methamphetamine and 3,4-methylenedioxy-methamphetamine (MDMA). The distribution of community index drug loads accounting for total wastewater flow (i.e. dilution) and population are reported. Findings: The distribution of wastewater-derived drug index loads was found to correspond with expected epidemiological drug patterns. Index loads of BZE were significantly higher in urban areas and below detection in many rural areas. Conversely, methamphetamine was present in all municipalities, with no significant differences in index loads by urbanicity. MDMA was at quantifiable levels in fewer than half the communities, with a significant trend towards higher index loads in more urban areas. Conclusion: This demonstration provides the first evidence of the utility of wastewater-derived community drug loads for spatial analyses. Such data have the potential to improve dramatically the measurement of the true level and distribution of a range of drugs. Drug index load data provide information for all people in a community and are potentially applicable to a much larger proportion of the total population than existing measures. Copyright 2009, Society for the Study of Addiction.

Health care utilization and morbidity associated with methadone and buprenorphine treatment. (review).

Bell J; Butler B. *Heroin Addiction and Related Clinical Problems* 10(2): 21-26, 2008

Background: Methadone and buprenorphine treatment reduce the high mortality associated with heroin addiction, but even in-treatment, Standardised Mortality Rates are high. Aim: This study investigates the nature of morbidity associated with methadone and buprenorphine treatment, and investigates predictors of health care utilization among people in a variety of treatment settings. Methods: Collation of data from earlier studies, and from published reports. Findings: In a recent study of an entry cohort, the SMR was 5.52 [4.62, 5.65]; suicide and overdose accounted for 2/3 of the mortality, but allowing for this, mortality rates remain elevated. Cancer, heart disease and respiratory disease were the three major contributors to mortality. Taken in conjunction with a recent study of medical co-morbidity, this suggests that alcohol, tobacco and other drug use represent the major factors contributing to serious illness in treated opioid addicts. In addition,

side-effects of treatment may themselves contribute to some morbidity. Lack of access to health care does not appear to be a contributing factor, as opioid users consult doctors at rates far higher than the general population. Predictors of doctor attendance "outside" doctors were psychological distress, and benzodiazepine use. Adjusting for this, we found that quality of methadone treatment was a significant predictor of doctor attendance, with better clinical care being associated with less outside doctor attendance. Conclusion: There is a paradox; heroin users have significant physical illness, but their attendance for health care tends to be driven by psychological distress, and can be improved by good care within treatment programs. The priority in addressing health problems of stabilised heroin users is dealing with alcohol and tobacco problems. Copyright 2008, European Opiate Addiction Treatment Association.

From pubs to scrubs: Alcohol misuse and health care use.

Balsa AI; French MT; Maclean JC; Norton EC. *Health Services Research* 44(5, Part 1): 1480-1503, 2009. (43 refs.)

Objective: To analyze the relationships between alcohol misuse and two types of acute health care use-hospital admissions and emergency room (ER) episodes. Data Sources/Study Setting: The first (2001/2002) and second (2004/2005) waves of the National Epidemiological Survey of Alcohol and Related Conditions (NESARC). Study Design: Longitudinal study using a group of adults (18-60 years in Wave 1, N=23,079). Gender-stratified regression analysis adjusted for a range of covariates associated with health care use. First-difference methods corrected for potential omitted variable bias. Data Collection" The target population of the NESARC was the civilian noninstitutionalized population aged 18 and in United States. The survey response rate was 81 percent in Wave 1 (N=43,093) and 65 percent in Wave 2 (N=34,653). Principal Findings: Frequent drinking to intoxication was positively associated with hospital admissions for both men and women and increased the likelihood of using ER services for women. Alcohol dependence and/or abuse was related to higher use of ER services for both genders and increased hospitalizations for men. Conclusions: These findings provide updated national estimates of the relationships between alcohol misuse and health care use, and they underscore the potential implications of alcohol misuse on health care expenditures. Copyright 2009, Wiley-Blackwell.