

### **Examining treatment use among alcohol-dependent individuals from a population perspective.**

Cunningham JA; Blomqvist J. *Alcohol and Alcoholism* 41(6): 632-635, 2006. (19 refs.)

**Aims:** To assess the prevalence of treatment use in lifetime and past year alcohol dependent respondents. To establish the proportion of problem drinkers who use alcohol treatment that just go to one treatment versus attending multiple different types of treatment in the same year. To explore what treatments are most likely to form part of a multiple treatment package. **Method:** Analysis of the 2001-2002 National Epidemiologic Survey of Alcohol and Related Conditions, a large (N = 43 039), representative survey of the non-institutionalized adult population of the USA. There were 4781 respondents who met criteria for a lifetime definition of alcohol dependence and 1484 respondents who met criteria for past year alcohol dependence. **Results:** Prevalence of lifetime use of alcohol treatment was 25% among those with a lifetime diagnosis of alcohol dependence. Prevalence of past year use of alcohol treatment was 12% among respondents with past year alcohol dependence. Only one-third of past year treatment users had accessed just one type of alcohol treatment. **Conclusions:** While treatment services are only used by the minority of people with alcohol dependence, those people who do access alcohol treatment are likely to use several different alcohol treatment services in the same year. Copyright 2006, Medical Council on Alcohol.

### **Exploring the structure of the illegal market for cannabis.**

Wilkins C; Sweetsur P. *De Economist* 154(4): 547-562, 2006. (29 refs.)

This paper explores the middle and retail levels of the illegal market for cannabis in New Zealand using national household drug survey data. Those who reported purchasing half or full ounces of cannabis were defined as middle level market participants, while those who purchased smaller weights or merely used cannabis were defined as retail level participants. Those who had purchased cannabis were then further categorised as either cannabis

'buyers' (i.e. those who only purchased sufficient cannabis for their own consumption needs) or cannabis 'dealers' based on whether the surplus of cannabis they had, after their own personal consumption was deducted, exceeded the legal definition of cannabis dealing (i.e. possession of 28 g of cannabis or more). Nine per cent of those who had purchased cannabis in the previous year were categorised as middle level participants with 69% of these defined as middle level dealers and 31% as middle level buyers. Middle level cannabis dealers were projected to earn, on average, \$2927 (NZD) net annual profit from selling surplus (rate of return of 34%). There was a wide variation in the projected net earnings of the middle level cannabis dealers with the majority earning only modest incomes (bottom 50% - \$260 per year, top 10% - \$25000 per year). Participants at all levels of the market commonly reported receiving cannabis for 'free' and this is likely to reflect the social sharing of cannabis during group consumption and non-cash payments for cannabis. This barter and gift giving tradition may provide cannabis users with a degree of insulation from any price increases for cannabis brought about by law enforcement activity. Cannabis selling creates a convenient source of income for heavy cannabis users to finance their own personal cannabis consumption, which may also dampen the impact of any rise in price brought about by law enforcement success. Copyright 2006, Nederlandsch Economisch Instituut.

### **How safe are federal regulations on occupational alcohol use?**

Howland J; Almeida A; Rohsenow D; Minsky S; Greece J. *Journal of Public Health Policy* 27(4): 389-404, 2006. (52 refs.)

Current US federal regulations on occupational alcohol use for safety-sensitive jobs do not account for impairment from low doses of alcohol and next day effects of heavy drinking. Research on the effects of low doses of alcohol on neurocognitive and simulated occupational tasks suggests that the current per se level of these regulations is set too high. Research on the effects of heavy drinking on next-day neuro-cognitive and simulated occupational performance is mixed and suggests that further

research is needed to determine the safety of current "bottle-to-throttle" times. Although low-dose and residual drinking effects may pose low relative risk for occupational error, the aggregate contribution of these exposures to workplace problems may be substantial, given the number of people exposed. Copyright 2006, Palgrave MacMillan Ltd.

**Summary of findings from the evaluation of a pilot medically supervised safer injecting facility. (review).**

Wood E; Tyndall MW; Montaner JS; Kerr T. *Canadian Medical Association Journal* 175(11): 1399-1404, 2006. (49 refs.)

In many cities, infectious disease and overdose epidemics are occurring among illicit injection drug users (IDUs). To reduce these concerns, Vancouver opened a supervised safer injecting facility in September 2003. Within the facility, people inject pre-obtained illicit drugs under the supervision of medical staff. The program was granted a legal exemption by the Canadian government on the condition that a 3-year scientific evaluation of its impacts be conducted. In this review, we summarize the findings from evaluations in those 3 years, including characteristics of IDUs at the facility, public injection drug use and publicly discarded syringes, HIV risk behaviour, use of addiction treatment services and other community resources, and drug-related crime rates. Vancouver's safer injecting facility has been associated with an array of community and public health benefits without evidence of adverse impacts. These findings should be useful to other cities considering supervised injecting facilities and to governments considering regulating their use. Copyright 2006, Canadian Medical Association.

**The global economic burden of alcohol: A review and some suggestions. (review).**

Baumberg B. *Drug and Alcohol Review* 25(6): 537-551, 2006. (109 refs.)

Economic arguments for acting for health are increasingly important for policymakers, yet to date there has been no consideration of the likely economic burden of alcohol on the global level. A review of existing cost estimates was conducted, with each study disaggregated into different cost areas and the methodology of each element evaluated. The range of figures produced from more robust studies was then applied tentatively on the global level. The reviewed studies suggested a range of estimates of 1.3-3.3% of total health costs, 6.4-14.4% of total public order and safety costs, 0.3-1.4 parts per thousand of GDP for criminal damage

costs, 1.0-1.7 parts per thousand of GDP for drink-driving costs, and 2.7-10.9 parts per thousand of GDP for work-place costs (absenteeism, unemployment and premature mortality). On a global level, this suggests costs in the range of \$ 210-665 billion in 2002. These figures cannot be understood without considering simultaneously six key problems: (i) the methods used by each study; (ii) who pays these costs; (iii) the 'economic benefits' of premature deaths; (iv) establishing causality; (v) omitted costs; and (vi) the applicability of developed country estimates to developing countries. Alcohol exerts a considerable economic burden worldwide, although the exact level of this burden is a matter of debate and further research. Policymakers should consider economic issues alongside evidence of the cost-effectiveness of particular policy options in improving health, such as in the WHO's CHOICE project. Copyright 2006, Taylor & Francis.

**The legal status of medical marijuana.**

Seamon MJ. *Annals of Pharmacotherapy* 40(12): 2211-2215, 2006. (14 refs.)

OBJECTIVE: To review the legal status of medical marijuana in the US. DATA SOURCES: Relevant publications were located using LexisNexis (1982-October 2006), WestLaw (1996-October 2006), BNA Health Law Reporter (1996-October 2006), MEDLINE (1996-October 2006), EMBASE (1980-October 2006), International Pharmaceutical Abstracts (1970-October 2006), and an Internet search targeting government sites using the key words medical marijuana. STUDY SELECTION AND DATA EXTRACTION: Federal and state medical marijuana laws were examined. Relevant cannabinoid-based drug products were reviewed. Federal and State Supreme Court and Appeal level cases involving medical marijuana were evaluated. DATA SYNTHESIS: Marijuana is regulated as a Schedule I controlled substance and its use is prohibited under federal law. Dronabinol and nabilone are synthetic cannabinoids approved by the Food and Drug Administration and Sativex is a cannabis-based extract being evaluated in Phase III trials. The federal government sponsors a single patient compassionate use Investigational New Drug Application program providing medical marijuana for a small number of patients. Eleven states permit marijuana use for medical purposes and one state provides a defense of medical necessity. Employers do not have to provide workplace accommodations for employees using medical marijuana and can terminate them at will. Healthcare providers have First Amendment constitutional protections that

allow them to discuss marijuana with patients. CONCLUSIONS: Until the Supreme Court rules directly on the constitutionality of state medical marijuana laws, a conflict remains. Marijuana use remains illegal under federal law and states assume their medical marijuana laws to be constitutional. Copyright 2006, Harvey Whitney Books.

### **Underage drinking: Does current policy make sense?**

McMullen JG. *Lewis & Clark Law Review* 10(Summer): 333-365, 2006. (215 legal refs.)

This Article examines the history of laws and policies regulating consumption of alcoholic beverages by young people in the United States, and examines youth drinking patterns that have emerged over time. Currently, all 50 states have a minimum drinking age of 21. Various rationales are offered for the 21 drinking age, such as the claim that earlier drinking hinders cognitive functions and the claim that earlier drinking increases the lifetime risk of becoming an alcoholic. While there is sufficient evidence to support the claim that it would be better for adolescents and young adults if they did not drink prior to age 21, research shows that vast numbers of underage persons consume alcoholic beverages, often in large quantities. The Article discusses the question of why underage drinking laws have not been able to effectively stop underage drinking. Normally, discussions of underage drinking focus on persons under age 21 as one group. This Article breaks underage drinkers into two groups: minors (drinkers under the age of 18) and young adults (drinkers between the ages of 18 and 21). The Article goes on to separately analyze the two groups' drinking patterns and reasons for drinking. The Article concludes that prohibitions on drinking by minors could be made more effective because restrictions on activities by minors are expected and normally honored by parents, law, and society. The Article also concludes, however, that the enforcement of a drinking prohibition for young adults between the ages of 18 and 21 is doomed to remain largely ineffective because the drinking ban is wholly inconsistent with other legal policies aimed at that age group. The Article discusses three areas (health care decisions, educational decisions, and smoking) where persons over the age of 18 have virtually unfettered personal discretion, and applies the reasoning of those situations to the decision about whether to consume alcoholic beverages. The Article also compares the total drinking ban for young adults with the graduated privilege policies applied to drivers' licensing. The Article concludes

that the total prohibition of alcohol consumption for young adults is inconsistent with other policies affecting young adults, and this inconsistency, coupled with harms that may come from the 21 drinking age; make the current policies ineffective and ill-advised for young adults between the ages of 18 and 21. Copyright 2006 Northwestern School of Law of Lewis & Clark College.

### **Alcohol and environmental justice: The density of liquor stores and bars in urban neighborhoods in the United States.**

Romley JA; Cohen D; Ringel J; Sturm R. *Journal of Studies on Alcohol* 68(1): 48-55, 2007. (37 refs.)

Objective: This study had two purposes: (1) to characterize the density of liquor stores and bars that individuals face according to race, economic status, and age in the urban United States and (2) to assess alternative measures of retailer density based on the road network and population. Method: We used census data on business counts and socio-demographic characteristics to compute the densities facing individuals in 9,361 urban zip codes. Results: Blacks face higher densities of liquor stores than do whites. The density of liquor stores is greater among nonwhites in lower-income areas than among whites in lower- and higher-income areas and nonwhites in higher-income areas. Nonwhite youths face higher densities of liquor stores than white youths. The density of liquor stores and bars is lower in higher-income areas, especially for nonwhites. Conclusions: Mismatches between alcohol demand and the supply of liquor stores within urban neighborhoods constitute an environmental injustice for minorities and lower-income persons, with potential adverse consequences for drinking behavior and other social ills. Our results for bars are sensitive to the measure of outlet density as well as population density. Although neither measure is clearly superior, a measure that accounts for roadway miles may reflect proximity to alcohol retailers and thus serve as a useful refinement to the per-capita measure. If so, alcohol policy might also focus on density per roadway mile. Further research on the existence, causes, and consequences of environmental injustice in alcohol retailing is warranted. Copyright 2007, Alcohol Research Documentation.

### **Alcohol and the intensive care unit: It's not just an antiseptic. (editorial).**

Gentilello LM. *Critical Care Medicine* 35(2): 627-628, 2006. (10 refs.)

All patients admitted to the intensive care unit (ICU) undergo a complete medical history that includes drugs taken, dosages, and dosing frequency. For a

large segment of the ICU population, the most commonly used drug is alcohol. However, there are more publications in the recent intensive care literature on alcohol as a hand-washing disinfectant than as a drug that may influence complications and overall outcome. This editorial emphasizes the importance of being informed about complications associated with chronic use. It comments upon an article in this issue by O'Brien that documents a strong association between alcohol dependence and sepsis, septic shock, and mortality. It is also emphasized that while dependent patients have the highest risk of medical complications, most alcohol-related problems occur in patients who are not dependent, since such patients make up the largest portion of the problem drinking population. A large number of people at moderate risk give rise to more health problems than a small number of patients who are at high risk. For example, more coronary artery disease is caused by cholesterol levels between 200 and 250 mg/dL than by levels higher than 300 mg/dL because levels between 200 and 250 mg/dL are more common. Similarly, alcohol-related medical conditions in ICU patients are more likely to be associated with drinkers who do not meet criteria for dependence. By restricting the analysis of alcohol-related complications to dependent patients, this study probably underestimated the magnitude of the effect of alcohol on complication rates. Copyright 2006, Lippincott, Williams & Wilkins.

**Alcohol-attributable morbidity and resulting health care costs in Canada in 2002:**

**Recommendations for policy and prevention.**

Taylor B; Rehm J; Patra J; Popova S; Baliunas D. *Journal of Studies on Alcohol* 68(1): 36-47, 2007. (46 refs.)

Objective: Alcohol is one of the most important risk factors for burden of disease, particularly in high-income countries such as Canada. The purpose of this article was to estimate the number of hospitalizations, hospital days, and the resulting costs attributable to alcohol for Canada in 2002. Method: Exposure distribution was taken from the Canadian Addiction Survey and corrected for per capita consumption from production and sales. For chronic disease, risk relations were taken from the published literature and combined with exposure to calculate age- and gender-specific alcohol-attributable fractions. For injury, alcohol-attributable fractions were taken directly from available statistics. Data on the most responsible diagnosis, length of stay for hospitalizations, and costs were obtained from the national Canadian databases.

Results: For Canada in 2002, there were 195,970 alcohol-related diagnoses among acute care hospitalizations, 2,058 alcohol-attributable psychiatric hospitalizations, and 183,589 alcohol-attributable admissions to specialized treatment centers. These accounted for 1,246,945 hospital days in acute care facilities, 54,114 hospital days in psychiatric hospitals, and 3,018,688 hospital days in specialized treatment centers (inpatient and outpatient). The main causes of alcohol-attributable morbidity were neuropsychiatric conditions, cardiovascular disease, and unintentional injuries. In total, Can. \$2.29 billion were spent on alcohol-related health care. Conclusions: Alcohol poses a heavy burden of disease as well as a financial strain on Canadian society. However, there are evidence-based effective and cost-effective policy and legislative interventions as well as measures to better enforce these laws. Copyright 2007, Alcohol Research Documentation.

**Alcohol and environmental justice: The density of liquor stores and bars in urban neighborhoods in the United States.**

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**Brief interventions for at-risk drinking: Patient outcomes and cost-effectiveness in managed care organizations.**

Babor TF; Higgins-Biddle JC; Dauser D; Bursleson JA; Zarkin GA; Bray J. *Alcohol and Alcoholism* 41(6): 624-631, 2006. (23 refs.)

**Aims:** Evaluate effectiveness and costs of brief interventions for patients screening positive for at-risk drinking in managed health care organizations (MCOs). **Methods:** A pre-post, quasi-experimental, multi-site evaluation conducted at 15 clinic sites within five MCO settings. At-risk drinkers (N = 1329) received either: (i) brief intervention delivered by licensed practitioners; or (ii) brief intervention delivered by mid-level professional specialists (nurses); or (iii) usual care (comparison condition). Clinics were randomly assigned to three study conditions. Data were collected on the cost of screening and brief intervention. Follow-up interviews were conducted at 3 and 12 months. **Results:** Participants in all three study conditions were drinking significantly less at 3-month follow-up, but the decline was significantly greater in the two intervention groups than in the control group. There were no significant differences between the two intervention conditions. Of the patients in the intervention conditions 60% reduced their alcohol consumption by  $\geq 1$  drink per week, compared with 53% of those in the control condition. No differences were found on a measure of the quality of life. Differential reductions in weekly alcohol consumption between intervention and control groups were significant at 12-month follow-up. Average incremental costs of the interventions were \$4.16 USD per patient using licensed practitioners and \$2.82 USD using mid-level specialists. **Conclusion:** Alcohol screening and brief intervention when implemented in managed care organizations produces modest, statistically significant reductions in at-risk drinking. Interventions delivered to a common protocol by

mid-level specialists are as effective as those delivered by licensed practitioners at about two-thirds the cost. Copyright 2006, Medical Council on Alcohol.

**Comparative cost-effectiveness of policy instruments for reducing the global burden of alcohol, tobacco and illicit drug use. (review).**

Chisholm D; Doran C; Shibuya K; Rehm J. *Drug and Alcohol Review* 25(6): 553-565, 2006. (48 refs.) Alcohol, tobacco and illicit drug use together pose a formidable challenge to international public health. Building on earlier estimates of the demonstrated burden of alcohol, tobacco and illicit drug use at the global level, this review aims to consider the comparative cost-effectiveness of evidence-based interventions for reducing the global burden of disease from these three risk factors. Although the number of published cost-effectiveness studies in the addictions field is now extensive (reviewed briefly here) there are a series of practical problems in using them for sector-wide decision making, including methodological heterogeneity, differences in analytical reference point and the specificity of findings to a particular context. In response to these limitations, a more generalised form of cost-effectiveness analysis (CEA) is proposed, which enables like-with-like comparisons of the relative efficiency of preventive or individual-based strategies to be made, not only within but also across diseases or their risk factors. The application of generalised CEA to a range of personal and non-personal interventions for reducing the burden of addictive substances is described. While such a development avoids many of the obstacles that have plagued earlier attempts and in so doing opens up new opportunities to address important policy questions, there remain a number of caveats to population-level analysis of this kind, particularly when conducted at the global level. These issues are the subject of the final section of this review. Copyright 2006, Taylor & Francis.