

A prospective cohort study on orally administered heroin substitution for severely addicted opioid users.

Frick U; Rehm J; Kovacic S; Ammann J; Uchtenhagen A. *Addiction* 101(11): 1631-1639, 2006. (22 refs.)

Aims: To assess the efficacy and safety of orally administered heroin [diacetylmorphine (DAM)] tablets in substitution treatment of severely addicted opioid users. **Design:** An open-label, prospective cohort study with two non-randomly assigned treatment arms and historical controls: DAM tablets only versus DAM tablets combined with injected DAM and/or other opioids, with an observation period of 1 year. **Setting:** Twenty-one out-patient treatment centres of the Swiss heroin-assisted treatment programme. **Participants** A total of 128 patients received DAM tablets only, and 237 patients received a combination of orally and intravenously applied DAM and other opioids. **Measurements:** Retention rate after 1 year; number of serious adverse events; dosage of DAM over time; subjective tolerance of study medication. **Findings:** In the intention-to-treat analysis, 1-year retention rates after 1 year in the DAM tablets-only group [0.804, 95% confidence interval (CI) = 0.735-0.873] as well as in the subgroup combining oral application of DAM with intravenous application or other opioids (0.843, 95% CI = 0.797-0.889) were higher compared to historical controls (Swiss cohort of patients who had been substituted intravenously with DAM; 1-year retention rate = 0.70). Rates of serious adverse events under study medication (tablets only = 0.038 per application year; tablets in combination = 0.028 per application year) were comparable to the historical rate of the Swiss heroin-assisted treatment (0.043). **Conclusions:** DAM tablets seem to be an effective and safe application mode of heroin-assisted substitution treatment. Randomized clinical trials to compare its relative efficacy to other substances are necessary. Copyright 2006, Blackwell Publishing.

Abstinence and moderate use goals in the treatment of marijuana dependence.

Lozano BE; Stephens RS; Roffman RA. *Addiction* 101(11): 1589-1597, 2006. (42 refs.)

Aims The purpose of this study was to examine the influence of personal goals (abstinence or moderation) on treatment outcomes for marijuana use. **Hypotheses**

regarding self-efficacy for goal attainment were tested. **Design:** Adult marijuana users seeking treatment were assigned randomly to three treatment conditions: (1) cognitive-behavioral relapse prevention support group; (2) individualized brief motivational enhancement; and (3) delayed treatment control group. Follow-up assessments were conducted at 4, 7, 13 and 16 months. **Setting** University research offices. **Participants:** Participants were 291 adult marijuana users. **Measurements** Marijuana use, personal treatment goals and self-efficacy for achieving one's goal were assessed across the 16-month follow-up. **Findings:** Greater marijuana related problems and dependence symptoms were associated with an initial goal of abstinence. Participants were more likely to achieve outcomes consistent with their personal goals. Participants with abstinence goals reported greater self-efficacy for goal achievement than those with moderation goals after participating in the abstinence oriented treatment; self-efficacy for goal success predicted goal achievement for both moderate use and abstinence goals. **Conclusions:** Marijuana users approaching an abstinence-oriented treatment varied in the extent to which they were actively seeking abstinence as the outcome. Differences in goals were predictable from severity of problems related to use. Goal preference and self-efficacy for achieving goals predicted outcomes. Future research should incorporate personal goals into treatment and assess their effects on outcomes. Copyright 2006, Blackwell Publishing.

Comorbid schizophrenia and substance abuse: A review of epidemiology and course. (review).

Westermeyer J. *American Journal on Addictions* 15(5): 345-355, 2006. (99 refs.)

Over the last dozen years, our knowledge regarding comorbid schizophrenia (SCZ) and substance use disorder (SUD) has evolved in several ways. First, the rate of lifetime comorbid SCZ-SUD appears to have increased another 20-30%, so now about 70-80% of persons with SCZ have lifetime SUD. Second, early remission of SUD has become commonplace among patients with SCZ, perhaps outnumbering the number of SCZ-only patients as well as those with active SCZ-SUD. Third, sustained SUD remission is well demonstrated, though the rates may yet be low. Fourth,

research on comorbid SCZ-SUD is filling out our knowledge in many areas, including the characteristics of SCZ patients at risk for SUD, reasons SCZ patients seek out substances, effects of various substances on SCZ course and symptoms, and obstacles to SUD recovery in people with SCZ. The influence of SUD treatment and self-help on epidemiology and course has not been adequately evaluated. Primary prevention and early treatment of SUD in SCZ patients are still relatively neglected, though they offer our greatest hope for enhancing the lives of people with SCZ and improving the cost efficacy of care. Copyright 2006, American Academy of Psychiatrists in Alcoholism and Addictions.

Incapacitated rape and alcohol use: A prospective analysis.

Kaysen D; Neighbors C; Martell J; Fossos N; Larimer ME. *Addictive Behaviors* 31(10): 1820-1832, 2006. (62 refs.)

This study examined timing of alcohol-related sexual assaults (incapacitated rape) in relation to both alcohol consumption and alcohol-related negative consequences. The sample was drawn from a randomly selected pool of college students across three campuses (n = 1238) followed over a three year time period. 91% of students never experienced an incapacitated rape, 2% reported an incapacitated rape prior to the first assessment point (n = 30), and 6% reported one over the course of the study (n = 76). Results indicated that incapacitated rape was associated with higher alcohol use and more negative consequences in the years prior to the assault. Incapacitated rape was also associated with higher alcohol use and more negative consequences during the year in which the rape took place and subsequent years, with highest rates measured for the year of the rape. These results suggest alcohol use can function as both risk factor and consequence of sexual victimization. Copyright 2006, Elsevier Science.

Life with jib: A snapshot of street youth's use of crystal methamphetamine.

Bungay V; Malchy L; Buxton JA; Johnson J; Macpherson D; Rosenfeld T. *Addiction Research & Theory* 14(3): 235-251, 2006. (35 refs.)

Crystal methamphetamine (CM) is a psychoactive form of methamphetamine whose effects include euphoria, alertness, restlessness, feelings of endless energy, sleep deprivation, depression, paranoia, acute psychosis, and malnutrition. CM use among street-involved youth is high, yet little is known about their patterns of use, the side effects they experience, and the ways in which they manage their drug use and survive on the streets. We undertook a small

qualitative study among inner-city, street-involved youth to explore the social context of their CM use. Semi-structured interviews were conducted with twelve youth. Data were analyzed using thematic analysis and four key themes were identified: Patterns of Jib Use, Reasons for Using Jib, Downside of Using, and Managing Jib Use. Each theme revealed interrelationships between drug use and street-involvement. The youth used CM to stay awake to protect belongings, to enhance social interaction, to cope with negative emotions, and as an alternative to psychiatric medications. The negative consequences of CM use included deteriorating physical and mental health, exploitation, isolation, and physical harm. These youth were knowledgeable about their drug use and capable of creatively adapting to many of the related consequences. Social service agencies and health care professionals were not identified as helpful in managing their drug use and its side effects. Although the sample size was small, this data gives insight for policy and program planning aimed at providing treatment and support for street-involved youth using CM. Copyright 2006, Taylor & Francis.

Effectiveness of intensive case management for substance-dependent women receiving temporary assistance for needy families.

Morgenstern J; Blanchard KA; McCrady BS; McVeigh KH; Morgan TJ; Pandina RJ. *American Journal of Public Health* 96(11): 2016-2023, 2006. (34 refs.)

Objective. We tested the effectiveness of long-term coordinated care strategy-intensive case management (ICM)-compared with usual care (UC) among a group of substance-dependent women receiving Temporary Assistance for Needy Families (TANF). Methods. Substance-dependent women on TANF (N=302) were recruited from welfare offices. They were assessed and randomly assigned to ICM or UC; follow-up was at 3, 9, and 15 months. UC consisted of a health assessment at the welfare office and a referral to substance abuse treatment and TANF services. ICM clients received ICM services in addition to UC services. Results. ICM clients had significantly higher levels of substance abuse treatment initiation, engagement, and retention compared with UC clients. In some cases, ICM treatment attendance rates were double those of UC rates. Additionally, almost twice as many ICM clients were abstinent at the 15 month follow-up compared with UC clients (P <.0025). Conclusions. ICM is a promising intervention for managing the chronic nature of substance dependence among women receiving TANF. Future research should refine long-

term care strategies—such as ICM—that address the chronic nature of substance dependence among low-income populations. Copyright 2006, American Public Health Association.

Mindfulness meditation and substance use in an incarcerated population.

Bowen S; Witkiewitz K; Dillworth TM; Chawla N; Simpson TL; Ostafin BD et al. *Psychology of Addictive Behaviors* 20(3): 343-347, 2006. (26 refs.)
Despite the availability of various substance abuse treatments, alcohol and drug misuse and related negative consequences remain prevalent. Vipassana meditation (VM), a Buddhist mindfulness-based practice, provides an alternative for individuals who do not wish to attend or have not succeeded with traditional addiction treatments. In this study, the authors evaluated the effectiveness of a VM course on substance use and psychosocial outcomes in an incarcerated population. Results indicate that after release from jail, participants in the VM course, as compared with those in a treatment-as-usual control condition, showed significant reductions in alcohol, marijuana, and crack cocaine use. VM participants showed decreases in alcohol-related problems and psychiatric symptoms as well as increases in positive psychosocial outcomes. The utility of mindfulness-based treatments for substance use is discussed. Copyright 2006, American Psychological Association.

Is there epidemiological evidence to support the idea that a cocaine dependence syndrome emerges soon after onset of cocaine use?

Reboussin BA; Anthony JC.
Neuropsychopharmacology 31(9): 2055-2064, 2006. (32 refs.)

The present study uses latent class methods and multiple regression to shed light on hypothesized cocaine dependence syndromes experienced by community residents, who initiated cocaine use within 24 months of survey assessment, and explores possible variation in risk. Identified within public use data files from the United States National Household Surveys on Drug Abuse (NHSDA), and with assessments completed between 1995 and 1998, the study sample consists of 927 recent-onset cocaine users, defined as having initiated cocaine use no more than 24 months prior to assessment (approximate median elapsed time since onset of use similar to 12-13 months). The NHSDA included items to assess seven clinical features often associated with cocaine dependence, which were used in latent class modeling. Empirically derived latent classes, in conjunction with prior theory,

tend to support a three-class solution, according to which 4% of recent-onset users are members of a class that resembles the DSM-IV cocaine dependence syndrome (mean: 5.4 clinical features (CF)); 16% might be in a cocaine dependence prodrome (mean: 2.4 CF); 80% of recent-onset cocaine users had few or no clinical features (mean < 1 CF). Results from latent class regressions indicate that susceptibility to rapid transition from first cocaine use to onset of the LCA-assigned cocaine dependence syndrome might depend upon whether the user starts smoking crack-cocaine and, independently, age at first cocaine use. Copyright 2006, Nature Publishing Group.

Physical health as a motivator for substance abuse treatment among medically ill adults: Is it enough to keep them in treatment?

O'Toole TP; Pollini RA; Ford D; Bigelow G. *Journal of Substance Abuse Treatment* 31(2): 143-150, 2006. (33 refs.)

Substance-using adults often present at medical facilities for acute complications of their drug or alcohol use with transiently high motivation for addiction treatment. We studied a cohort of medically ill polysubstance-using adults admitted to a partial hospitalization/day-hospital program in an acute hospital, serially tracking their reasons for treatment motivation, pain and withdrawal scores, and readiness for change. Physical health concerns were the most frequently cited reason for wanting to enter substance abuse treatment at baseline (27.8%), yet individuals who cited this as their primary motivator were significantly less likely to complete the treatment program (14.8% vs. 40.7%, $p = .03$). However, 43% of respondents also recorded a shift in their motivation during treatment; 100% of those transitioning from an extrinsic motivator (e.g., physical health concerns) to an intrinsic motivator (e.g., wanting to do more with one's life) completed treatment, compared with only 38.4% of those whose extrinsic motivating factors were static. This suggests that medical illness represents a "treatable moment" to engage individuals in substance abuse treatment. Copyright 2006, Elsevier Science.

Reductions in heroin use are not associated with increases in other drug use: 2-year findings from the Australian Treatment Outcome Study.

Darke S; Williamson A; Ross J; Teesson M. *Drug and Alcohol Dependence* 84(2): 201-205, 2006. (27 refs.)
Aims: To determine whether reductions in frequency of heroin use were associated with reductions in the use of other drugs over a 24-month period. Design: Longitudinal cohort, with follow-up at 3, 12 and 24

months. Participants: Six hundred and fifteen heroin users recruited for the Australian Treatment Outcome Study. Setting: New South Wales, Australia. Findings: The proportion reporting weekly heroin use declined significantly at 3, 12 and 24 months. Reductions in heroin use were associated with longer periods in both residential rehabilitation (RR) and maintenance treatment (MT). Less frequent use of other opioids, cocaine, amphetamine, cannabis and benzodiazepines were noted over follow-up, with alcohol use remaining stable. Across follow-up, lower frequency heroin use was associated with reduced likelihood of frequent use of other opioids, cocaine, amphetamine and benzodiazepines. Alcohol and cannabis use were unrelated to heroin use. Longer periods spent in RR were associated with declines in the use of all other drug classes, with MT associated with declines in other opioid and alcohol use. Conclusions: There was no evidence for drug substitution in the face of reduced heroin use in this cohort of treatment seekers. The fear that a successful reduction in heroin use amongst treatment seekers will precipitate an increase in the use of other drugs appears ill-founded. Copyright 2006, Elsevier Science.

Response to overdose among injection drug users.

Pollini RA; McCall L; Mehta SH; Celentano DD; Vlahov D; Strathdee SA. *American Journal of Preventive Medicine* 31(3): 261-264, 2006. (16 refs.)

Background: Drug overdose is a leading cause of mortality among illicit drug users. This study characterizes responses to overdose among injection drug users (IDUs) in Baltimore, Maryland, and identifies factors associated with medically inappropriate response. Methods: A cross-sectional survey was administered to 924 IDUs in an ongoing cohort study between August 2003 and September 2004. Self-reported experiences of witnessing overdose were obtained by structured interview. Multiple logistic regression identified associations between overdose information sources and medically inappropriate responses. Results: Most IDUs (69.7%) reported ever witnessing an overdose. The most common responses were walking the victim around (70.8%), shaking them (64.9%), and inflicting pain (62.6%). One in four (25.8%) injected the victim with salt water. Two thirds (63.4%) called 911, but more than half delayed the call by 5 or more minutes. The most common reason cited for delaying or foregoing the 911 call was the belief that they could revive the

victim themselves, followed by fear of police involvement. Most IDUs had received information on how to prevent or respond to an overdose, but most (73.2%) received this information from friends or other drug users. IDUs who got overdose information solely from lay sources were less likely to call 911 (adjusted odds ratio [AOR]=0.66, 95% confidence interval [CI]=0.46-0.94) and more likely to inject the victim with salt water (AOR=2.06, 95% CI=1.36-3.13) than IDUs who received no information at all. Injection drug users who received information from medical and social services providers only were less likely to delay the 911 call (AOR=0.35, 95% CI=0.22-0.72). Conclusions: Inappropriate overdose responses are widespread among IDUs in Baltimore. Interventions that provide overdose education and reduce police response to overdose events may improve witness response and reduce mortality associated with drug overdose. Copyright 2006, Elsevier Science.

The association between alcohol misuse and suicidal behaviour.

Brady J. *Alcohol and Alcoholism* 41(5): 473-478, 2006. (84 refs.)

Aims: Despite recent small reductions in overall suicide rates, rates among those aged 25-44 have remained high. The aim of this paper was to examine the evidence for a link between alcohol misuse/consumption and suicidal behaviour, explore the reasons for this association, and consider the implications for reducing rates of suicidal behaviour. Methods: A medline search was performed to find relevant research evidence. Results: There is evidence to suggest alcohol misuse predisposes to suicidal behaviour through its depressogenic effects and promotion of adverse life events, and both behaviours may share a common genetic predisposition. Acute alcohol use can also precipitate suicidal behaviours through induction of negative affect and impairment of problem-solving skills, as well as aggravation of impulsive personality traits, possibly through effects on serotonergic neurotransmission. Conclusions: Effective interventions for problem drinking may help reduce suicide rates. At a public health level, reducing overall alcohol consumption may be beneficial, and the measures shown to be most effective in this regard are those that aim to restrict availability of alcohol. Copyright 2006, Oxford University Press.