

Drugs Facilitate Sexual Assault

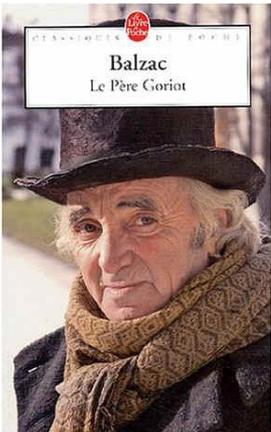
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[Criminal Poisoning]

- The secret of great fortunes for which you are at a loss to account is a crime that has never been found out, because it was properly executed.

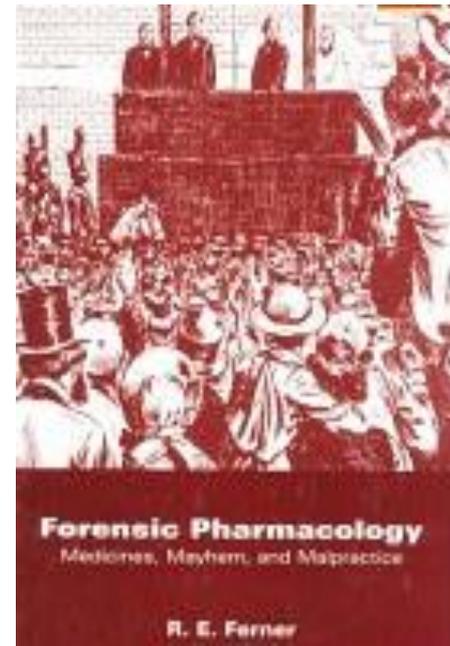
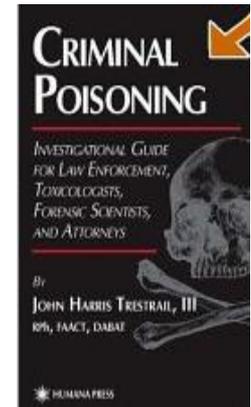
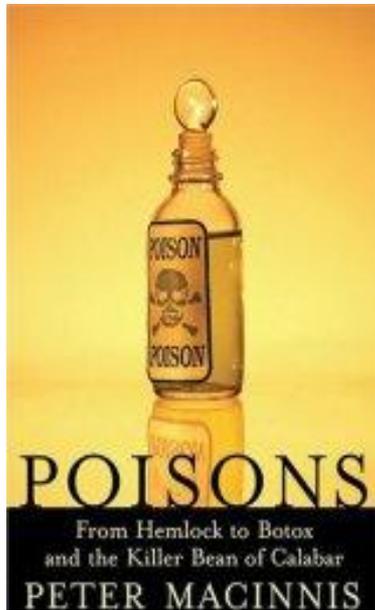


- Honore' de Balzac, Le Pere Goriot, 1835

[What makes a good poison?]

- Non-specific clinical effects
- Basic laboratory findings do not clue into the diagnosis
- Unusual agents
- Difficult or impossible to detect
 - Rapidly metabolized
 - Not part of typical testing

Perpetrators are researching



[Definition]

- Drug Facilitated Sexual Assault (DFSA)
 - Definition
 - The use of a chemical agent to facilitate sexual assault

[Epidemiology – DFSA]

- One multicenter study found that 4.3% of the sexual assaults examined were surreptitious drugged victims and 35.4% of the sexual assaults involved voluntarily use of illicit drug.

*Negrusz A, et al. Estimate of the Incidence of DFSA in the US. US DOJ, 2005.

- ~ 44% of US sexual assaults are perceived to be under the influence of drugs or alcohol.

*Fitzgerald N, et al. Drug-Facilitated Rape: Looking for the Missing pieces. National Institute of Justice Journal 2000; April.

- The incidence of hospital-reported drug-facilitated sexual assault has shown a marked & continuing increase

*McGregor MJ et al. Rising incidence of hospital-reported drug-facilitated sexual assault in a large urban community in Canada. Retrospective population-based study. *Can J Public Health* 2004;95:441-5.

THE INVOLVEMENT OF DRUGS AND ALCOHOL IN DRUG-FACILITATED SEXUAL ASSAULT

A Systematic Review of the Evidence

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The rate of drug-facilitated sexual assault (DFSA; when an incapacitating drug is administered surreptitiously to facilitate sexual assault) is perceived to be increasing in the United Kingdom and elsewhere, causing international concern. This article examines evidence that quantifies the contribution of drugs in instances of alleged DFSA, identifies the substances involved, and discusses the implications of these findings. Of 389 studies examined, 11 were included in this review. The only study to consider covert drugging reported that 2% of alleged DFSA cases were attributable to surreptitious drug administration. Other studies failed to remove voluntary drug consumption from their cohort, biasing results. A study by the United Kingdom's National Forensic Services found no evidence to suggest that flunitrazepam (Rohypnol) had been used for DFSA during its 3-year investigation. In the United States, flunitrazepam is used recreationally, providing a likely explanation for its presence in samples of some alleged DFSA victims.

Key words: *drug-facilitated sexual assault; alcohol; drugs; review; violence*

COVERTLY ADMINISTERING an incapacitating drug to commit a criminal offence is not a new phenomenon (Kintz, Villain, & Ludes, 2004; Villain, Chêze, Dumestre, Ludes, & Kintz, 2004; Wells, 2001). Reports of "Mickey Finn specials,"

choral hydrate knock-out drops, date back to the 1800s, where they were used by the eponymous bartender to facilitate robbery (Kronz, 2000; Li, 1999; Mullins, 1999; Smith, 1999). More recently, covert drugging has become associated with

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[Epidemiology – DFSA]

- *Due to the absence of scientific studies specifically addressing DFSAs, the exact number of DFSAs unknown.*



Delays in reporting

- Numerous reports have documented that sexual assault victims either do not seek medical attention or delay seeking medical treatment for 3-7 days after the assault.

*Burgess AW, Fehder WP, Hartman CR. Delayed reporting of the rape victim. *J Psychosoc Nurs Ment Health Serv* 1995; 33(9): 21-9.

*Plumbo MA. Delayed reporting of sexual assault. Implications for counseling. *J Nurse Midwifery* 1995; 40(5): 424-7.

*Adamowicz P, Kala M. Date-rape drugs scene in Poland. *Przegl Lek* 2005; 62(6): 572-5.

*Gouille JP, Anger JP. Drug-facilitated robbery or sexual assault: problems associated with amnesia. *Ther Drug Monit* 2004; 26(2): 206-10.

*Scott-Ham M, Burton FC. Toxicological findings in cases of alleged drug-facilitated sexual assault in the United Kingdom over a 3-year period. *J Clin Forensic Med* 2005; 12(4): 175-86.

- Extended delays in collecting specimens from DFSAs may reduce the probability of detecting drugs potentially used to facilitate a sexual assault.

[Concern]

- The Parliamentary Assembly of the Council of Europe instructed member states to raise the public's awareness of the specific problems linked to “date-rape drugs”

*Parliamentary Assembly, 2006

- The current WHO guidelines for the medico–legal care of sexual assault victims identify the increasing implicative role of “date-rape drugs” in incidents of sexual violence

*World Health Organization, 2003

Factors associated with suspected drug-facilitated sexual assault

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See related commentary by Butler and Welch, page 493

ABSTRACT

Background: There has been little systematic investigation of widespread reports of drugging and sexual assault. We sought to determine the prevalence of and factors associated with suspected drug-facilitated sexual assault.

Methods: Between June 2005 and March 2007, a total of 977 consecutive sexual assault victims underwent screening for suspected drugging at 7 hospital-based sexual assault treatment centres. We defined victims of drug-facilitated sexual assault as those who presented to a centre within about 72 hours of being assaulted and who provided at least 1 valid reason for suspecting that she or he had been drugged and sexually assaulted. We used logistic regression modelling to compare victims of suspected drug-facilitated sexual assault with other sexual assault victims, controlling for covariates.

Results: In total, 882 victims were eligible for inclusion in the study. Of these, 855 (96.9%) were women, and 184 (20.9%) met the criteria for suspected drug-facilitated sexual assault. Compared with other victims, victims of drug-facilitated sexual assault were more likely to have presented to a large urban centre for care (odds ratio [OR] 2.31, 95% confidence interval [CI] 1.47–3.65), to be employed (OR 1.92, 95% CI 1.34–2.76), to have consumed over-the-counter medications (OR 3.97, 95% CI 2.47–6.38) and street drugs (OR 1.71, 95% CI 1.12–2.62) in the 72 hours before being examined and to have used alcohol before the assault (OR 4.00, 95% CI 2.53–6.32).

Interpretation: Suspected drug-facilitated sexual assault is a common problem. Sexual assault services should be tailored to meet the needs of those experiencing this type of victimization.

Une version française de ce résumé est disponible à l'adresse www.cmaj.ca/cgi/content/full/180/5/513/DC1

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Since the mid-1990s, there has been a growing number of unconfirmed reports of assailants surreptitiously using prescription and nonprescription drugs to induce disinhibition, sedation and amnesia to facilitate rape.¹ This type of victimization is most commonly referred to as drug-facilitated sexual assault. Although flunitrazepam, in

particular, has been maligned as a “date rape drug,”² many other easily accessible substances have reportedly been used to facilitate sexual assault, including alcohol and alprazolam, chloral hydrate, gamma-hydroxybutyrate, ketamine, lorazepam, ziplocloone and zolpidem.^{1,3}

Few studies have systematically measured the occurrence of drug-facilitated sexual assault. Because there is no agreed-upon definition of the phenomenon,⁴ comparisons across studies are difficult. In a large population-based telephone survey focused on rape in the United States, 2.3% of adult women reported that they had been deliberately incapacitated with drugs or alcohol and sexually assaulted.⁵ According to the 2001 British Crime Survey, among adult female victims of rape, 5.0% reported that they had been “drugged in some way.”⁶ Rates of suspected drug-facilitated sexual assault derived from chart reviews of sexual assault victims presenting to specialized sexual assault services have ranged from 6.3% to 17.5%.⁷⁻⁹ One such study demonstrated that the incidence of hospital-reported drug-facilitated sexual assault had shown a marked and continuing increase since 1999.⁸

Little is known about the victims of drug-facilitated sexual assault and how they may differ from victims of other forms of sexual assault.¹⁰ In a retrospective analysis of sexual assaults in the city of Vancouver, British Columbia, McGregor and colleagues⁴ found that, compared with other victims, those who suspected that they had been drugged waited longer before presenting to a hospital sexual assault service. In addition, this group had a lower occurrence of genital and extragenital injuries. Women aged 15–19 years had the highest risk of experiencing this type of sexual assault.¹⁰ Testa and colleagues,¹¹ working in the United States, compared 48 incidents of rape while incapacitated with 65 other rape incidents. They found that rapes involving incapacitation were less likely than other types of rape to result in injury and were also less likely to involve a perpetrator with whom the victim had had previous sexual intercourse. Rapes involving incapacitation were more likely to have occurred following time spent

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No. (%)* of victims
n = 184

Reason

For suspecting sexual assault	
Vague sensation that something is wrong or that something sexual has happened	94 (51.1)
Woke to find clothing in disarray or to find self unclothed	78 (42.4)
Unexplained body fluids (e.g., semen) or foreign materials (e.g., used condom) found on body or nearby	25 (13.6)
Unexplained genital, anal or oral bleeding or bruising	32 (17.4)
Unexplained bodily injuries (e.g., scratches, bruising)	44 (23.9)
Woke to find uninvited person in bed or in a strange place	43 (23.4)
Reported by witness to have been seen in compromised circumstances	30 (16.3)
Knew that she or he had been sexually assaulted	54 (29.4)
For suspecting drugging	
Total amnesia	115 (62.5)
Partial amnesia	46 (25.0)
Conscious paralysis	12 (6.5)
Loss of consciousness or "blacked out"	84 (45.7)
Slurred speech	46 (25.0)
Impaired vision	34 (18.5)
Drowsiness	73 (39.7)
Confusion	77 (41.8)
Hangover or symptoms inconsistent with amount of alcohol or drugs used	89 (48.4)
Disinhibition	19 (10.3)
Delirium or hallucinatory state	10 (5.4)
Impaired judgment	31 (16.8)
Dizziness or light-headedness	81 (44.0)
Impaired motor skills	50 (27.2)
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87.5%

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Non-specific

[Confounders]

Table 3: Adjusted odds ratios of factors associated with suspected drug-facilitated sexual assault ($n = 882$)

Factor	Adjusted odds ratio (95% CI)
Location of service (large urban centre v. other)	2.31 (1.47–3.65)
Employed (yes v. no)	1.92 (1.34–2.76)
Used over-the-counter medications in the 72 h before examination (yes v. no)	3.97 (2.47–6.38)
Used street drugs in the 72 h before examination (yes v. no)	1.71 (1.12–2.62)
Used alcohol immediately before (suspected) assault (yes v. no)	4.00 (2.53–6.32)

Note: CI = confidence interval.

[Other injuries]

- Victims of sexual assault may present to the ED with physical injuries resulting from the assault.
- For example, a victim may present to the ED with one or a combination of the following: contusions, lacerations, broken bones, altered mental status, and/or intoxication.

Feldhaus KM, et al. Lifetime sexual assault prevalence rates and reporting practices in an emergency department population. Ann Emerg Med 2000; 36(1): 23-7.

Distracters

[Stereotypes]

Law Hum Behav (2007) 31:369–380
DOI 10.1007/s10979-006-9068-2

ORIGINAL ARTICLE

The Impact of Negative Forensic Evidence on Mock Jurors' Perceptions of a Trial of Drug-Facilitated Sexual Assault

Gwen Jenkins · Regina A. Schuller

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Abstract Legal concerns with regard to the adverse impact of a negative toxicological screening for date-rape drugs in a case of drug-facilitated sexual assault (DFSA) were the focus of a recent Canadian case (*R. v. Alouache*, 2003). To assess the impact of a negative forensic report, as well as the impact of expert testimony explaining the many factors that may contribute to a negative outcome, participants ($N = 171$) received a written trial stimulus in which the forensic evidence (negative report, negative report plus expert testimony, no negative report and no expert testimony control) and the complainant's beverage consumption (alcohol, cola) were systematically varied. Results indicate that a negative finding in the absence of expert testimony produced greater verdict leniency and more favourable evaluations of the defendant's case. In contrast, no differences were found between the case in which the expert testified and a case in which the negative report and expert testimony were omitted.

[Stereotypes]

- Less sympathy towards victim if:
 - Relationship with the perpetrator
 - Drinking ethanol with the perpetrator
 - Doing “drugs” prior to rape
 - No recollection of events
- More sympathy towards victim if:
 - Definite drug surreptitiously administered
- Women more sympathetic than men

[3-tier chain of testing]

- A 3-tier chain of testing is employed to analyze drugs used to facilitated sexual assault at many US Forensic Laboratories
 - First Tier - quantitatively screens for ethanol from blood
 - Second Tier – screens for drugs of abuse such as, amphetamines, barbiturates, benzodiazepines, cannabinoids, cocaine, and opioids using immunoassays and fluorescent polarization assays (such as EMIT®, Dade-Behring; TDx® Abbott). Confirmation assays are performed using GC-MS and/or high pressure liquid chromatography linked to tandem mass spectroscopy (HPLC-MS/MS) analyses.
 - Third Tier - “basic amine drugs” (BAD) testing, employs a sensitive and specific means of screening (HPLC-MS/MS) for analysis of a broad array of 300-400 amine-containing compounds that may not be detected using *Tier Two* methodologies.

[3-tier chain of testing]

- In many US states, victims perceived to be under the influence of alcohol and having a blood alcohol concentration > 80 mg/dL are not typically analyzed beyond the level of *First Tier* ethanol testing without specific medical documentation suspecting symptoms of additional drug exposure.
 - many drug-facilitated sexual assault cases (other than alcohol) may be undetected under the current screening protocols performed at some State Forensic Laboratories.
- Medical teams must document suspicions of drugs in the patient's medical record to justify drug-specific analyses by Forensic Laboratories.

[Current laws]

- The Drug-Induced Rape Prevention and Punishment Act of 1996 (Public Law 104-305) modified 21 U. S. C. § 841 to provide penalties of up to 20 years imprisonment and fines for persons who intend to commit a crime of violence (including rape) by distributing a controlled substance to another individual without that individual's knowledge.
 - Enacted due to emergence of flunitrazepam
- This Act provides specific definitions of controlled substances and crimes of violence that assist prosecutors in maximizing the penalties against sexual predators.

Agents Utilized in DFSA

- Ethanol
- Chloral hydrate
- Benzodiazepines
- Non-benzodiazepine sedative/hypnotics
- GHB
- Ketamine
- Opioids
- Dextromethorphan
- Barbiturates
- Anticholinergics
- Antihistamines
- Tetrahydrozoline



[Question?]

What is a blackout?

Blackout

- **Def'n:** a phenomenon caused by the intake of alcohol or another substance in which long term memory creation is impaired or there is a complete inability to recall the past.
 - Blackouts are frequently described as having effects similar to that of anterograde amnesia, in which the subject cannot create memories after the event that caused amnesia.
 - 'Blacking out' is not to be confused with the mutually exclusive act of 'passing out', which means loss of consciousness.
- Various studies have also proven links between general alcohol consumption and its effects on memory creation. Particularly, these studies have shown that associations made between words and objects when intoxicated are less easily recalled than associations made when not intoxicated.
- Later blackout-specific studies have indicated that alcohol specifically impairs the brain's ability to take short-term memories and experiences and transfer them to long-term memory.
- It is a common misconception that blackouts generally occur only to alcoholics; research suggests that binge drinkers, such as college students, are often at risk as well.
 - In a 2002 survey of college students by researchers at Duke University Medical Center, 40% of those surveyed who had consumed alcohol recently reported having experienced a blackout within the preceding year (<http://inside.duke.edu/article.php?IssueID=54&ParentID=3051>).

[Blackout]

- Blackouts are commonly associated with the consumption of large amounts of alcohol.
- However, surveys of drinkers experiencing blackouts have indicated that they are not directly related to the amount of alcohol consumed.
 - Respondents reported they frequently recalled having "drunk as much or more without memory loss", compared to instances of blacking out. Subsequent research has indicated that blackouts are most likely caused by a rapid increase in a person's blood-alcohol concentration.
 - In one early study (Quart J Stud Alcol 1970;31:616) subjects were stratified easily into two groups, those who consumed alcohol very quickly, and blacked out, and those who did not black out by drinking alcohol slowly, despite being extremely intoxicated by the end of the study.
- GABA-A agonists (e.g., benzos, barbs) are also known to cause blackouts (it is not just ethanol).
- Research indicates that those with a history of blackouts are predisposed to experience blackouts more frequently than others.
 - appears to be a genetic predisposition towards blacking out.

[Question?]

What is a brownout?

[Brownout vs Blackout]

- Blackouts can generally be divided into two categories, "en bloc" blackouts, and "fragmentary" blackouts.
- En bloc blackouts are classified by the inability to later recall any memories from the intoxicated period, even when prompted. These blackouts are characterized also by the ability to easily recall things that have occurred within the last 2 minutes, yet inability to recall anything prior to this period. As such, a person experiencing an en bloc blackout may not appear to be doing so, as they can carry on conversations or even manage to accomplish difficult feats. It is difficult to determine the end of this type of blackout as sleep typically occurs before they end.
- Fragmentary blackouts (AKA Brownouts) are characterized by the ability to recall certain events from an intoxicated period, yet be unaware that other memories are missing until reminded of the existence of these 'gaps' in memory.
 - Research indicates that fragmentary blackouts, or brownouts are far more common than en bloc blackouts.