



K43 Estimate of the Incidence of Drug-Facilitated Sexual Assault in the United States

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After attending this presentation, attendees will 1) develop sensitive and quick method for the detection of 60 drugs and compounds that could be used as a "date-rape" drug, 2) determine which drugs victims of sexual assault have in their system following the crime, and 3) determine the prevalence of "date-rape" drugs in sexual assault victims.

This work will help to further elucidate the prevalence of drug-facilitated sexual assault among presenting sexual assault victims. Currently, the impact of "date-rape" drugs on society is unknown and only anecdotal evidence exists. The authors hope to confirm or deny this evidence by examining a non-biased sample of sexual assault victims.

Sexual abuse of both women and men, while under the influence of so-called "date-rape" drugs, has been the focus of many investigations in the U.S. Throughout the 1990s, an alarming increase in anecdotal reports of this crime as well as in the number of scientific publications on drug-facilitated sexual assault has been observed. In a typical scenario, a sexual predator surreptitiously spikes the drink of an unsuspecting person with a sedative drug for the purpose of "drugging" and subsequently sexually assaulting the victim while under the influence of this substance. Reported substances associated with drug-facilitated sexual assault include flunitrazepam, other benzodiazepines such as diazepam, temazepam, clonazepam, oxazepam, and also GHB, ketamine, scopolamine, and many other sedative-hypnotics, muscle relaxants, and antihistamines.

There are approximately 100,000 reported cases of sexual assault in the U.S. every year. It is estimated (Bureau of Justice Statistics) that there are more than 300,000 sexual assaults every year, three times the number actually reported. At present, there is no reliable data or estimates on the fraction of sexual assaults - actual or reported - that involve "date-rape" drugs. This project was designed to estimate the prevalence of drug-facilitated sexual assaults through a random sample of 135-150 sexual assault complaints from four reasonably representative U.S. jurisdictions. Sites include a location near San Diego, CA, one in Texas, one in the state of Washington, and one in Minnesota.

Prospective volunteers are asked if they would like to participate in the study, following a protocol approved by the UIC IRB. Those who enroll answer a set of questions concerning the general circumstances of the assault and which if any drugs the victim is using or has used. Victim's urine is then collected and refrigerated. The victim is then asked to return in one week to donate another urine sample and a hair sample. All of these samples are then sent to our laboratory where they are properly stored. The samples are analyzed for all drugs of abuse (cocaine, opiates, PCP, etc.) and any drug, over-the-counter or prescription that could be used to incapacitate someone. The classic "date-rape" drugs are analyzed for using highly selective and sensitive methods previously developed by this laboratory.

Thus far, thirty sexual assault victims have been recruited at the Texas location, forty one at the San Diego site, and 19 at the Minnesota site. The total number of sexual assault victims recruited into the study as of 6/30/03 is 90. Urine samples collected from 31 victims have thus far been screened by immunoassay for the "NIDA" drugs of abuse. All positive samples were confirmed by GC-MS following extraction and derivatization if appropriate. Out of the 31 patients, 13 provided only one (initial) urine sample. Twelve out of the 13 samples were positive for at least one drug (cocaine, marijuana, opiates, PCP, barbiturates, amphetamines or oxazepam). Eighteen victims provided initial and follow-up urine sample as well as a hair sample. Seven out of 18 initial samples were positive for drugs. In 5 cases both initial and follow-up sample was positive for drugs. In two cases the initial sample was positive for drugs but the follow-up sample was negative.

All 90 victims have been screened by GC/MS for the additional 30 drugs and substances commonly associated with sexual assault. Sixtyfive of the victims were positive for at least one of the thirty drugs with twenty-two being positive for three or more drugs. All positive samples will be confirmed by GC/MS and additionally analyzed for GHB and valproic acid.

Samples are still being received and all new samples will follow the same analysis procedure. Once all samples have been collected (January 2004), the epidemiological analysis will determine how prevalent the drugs are in sexual assault complainants in these populations. We will also be able to learn more about the reliability of self-reporting of drug



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use among sexual assault victims by comparing our results to what drugs they have admitted to using. Conclusions will also be drawn about drug use and age group, race, and geographical location. This research will help determine if “date-rape” drugs are a serious problem, or if anecdotal reports have exaggerated their use.

Date-Rape Drugs, Prevalence, GC/MS