SEDATIVES

WHAT ARE SEDATIVES?

Sedatives are part of the larger category of drugs that depress the central nervous system (CNS depressants). Sedatives are made in capsule or tablet form. This group of drugs is also called "sedative-hypnotic" because it includes drugs that calm the nerves (the sedation effect) and produce sleep (the hypnotic effect).

CNS depressants are substances that can slow normal brain function. Because of this property, some CNS depressants are useful in the treatment of anxiety and sleep disorders. Among the medications that are commonly prescribed for these purposes are:

- Barbiturates used to treat anxiety, tension, and sleep disorders.
- Benzodiazepines prescribed to treat anxiety, acute stress reactions, and panic attacks and short-term treatment of sleep disorders.

The 2002 National Survey on Drug Use and Health showed that sedatives used most often illicitly or for nonmedical reasons were Methaqualone, Sopor®, or Auaalude.® Next most common were Barbiturates such as Nembutal®, Pentobarbital, Seconal®, Secobarbital, or Butalbital, followed by Tuinal® Placidyl® and Halcion® Restoril® or Temazepam or Dalmane®. Least reported were Amytal® or Butisol®.

The non-barbiturate sedative Methaqualone (Sopor or Quaalude) is no longer legally available in the United Sates, but is still abused.

Methaqualone ("Quaalude" Sopor®) was first introduced in 1965 as a safe barbiturate substitute. Experience showed that potential for addiction and severe withdrawal symptoms were similar to those of barbiturates. Excessive use leads to tolerance, dependence, and withdrawal symptoms similar to those of barbiturates. During the 1970's, "luding out," taking methaqualone with wine, was a popular college pastime. In the United States, the marketing of methaqualone pharmaceutical products stopped in 1984, and methaqualone was transferred to Schedule I of the Controlled Substance Act.[ii]

Though sedative use is only about half as popular as it was in the 1970's, studies show that there are still about 300,000 new sedative users each year.[iii]

About a dozen different Barbiturates are in medical use today. The primary differences among many of these products are how fast they produce an effect and how long those effects last. Barbiturate abusers prefer the Schedule II short-acting and intermediate-acting barbiturates that include amobarbital (Amyta®), pentobarbital (Nembutal®), secobarbital (Seconal®), and Tuinal (an amobarbital/secobarbital combination product). Other short and intermediate-acting barbiturates are in Schedule III and include butalbital (Fiorina®), butabarbital (Butisol®), talbutal (Lotusate®), and aprobarbital (Alurate®). After oral administration, the onset of action is from 15 to 40 minutes, and effects last up to six hours.[iv]

Slang names for Barbiturates include "barbs", "downers", and "reds". Barbiturates are now very seldom prescribed. They have been replaced by the Benzodiazapines commonly referred to as "roofies" or "tranks".

Of the drugs marketed in the United States that affect central nervous system function, benzadiazepines are among the most widely prescribed medications. Short-acting benzodiazepines are generally used for patients with sleep-onset insomnia (difficulty falling asleep) without daytime anxiety. Shorter-acting benzodiazepines used to manage insomnia include estazolam (ProSom®), flurazepam (Dalmane®), temazepam (Restoril®), and triazolam (Halcion®). Benzodiazepines with a longer duration of action are

utilized to treat insomnia in patients with daytime anxiety. These benzodiazepines include alprazolam (Xanax®), chlordiazepoxide (librium®), clorazepate (Tranxene®), diazepam (Valium®, halazepam (Paxipam®), lorzepam (Ativan®), oxazepam (Serax®), prazepam (Centrax®), and quazepam (Doral®).

Individuals who abuse benzodiazepines often maintain their drug supply by getting prescriptions from several doctors, forging prescriptions, or buying diverted pharmaceutical products on the illicit market. Abuse is frequently associated with adolescents and young adults who take benzodiazepines to obtain a "high". This intoxicated state results in reduced inhibition and impaired judgement.[v]

Flunitrazepam (Rohypnol®) is a benzodiazepine that is not manufactured or legally marketed in the United States, but is smuggled in by traffickers. Known as "rophies," "roofies," and "roach," flunitrazepam gained popularity among younger individuals as a "party" drug. [vi]

Rohypnol has been of particular concern for the last few years because of its abuse in date rape. When mixed with alcohol, Rohypnol can incapacitate victims and prevent them from resisting sexual assault. It can produce "anterograde amnesia," which means individuals may not remember events they experienced while under the effects of the drugs. Combining this drug with alcohol and/or other depressants can be lethal.[vii]

Gamma-hydroxybutyrate, or GHB, is also a central nervous system depressant. Also known as Liquid X, Goop, and Georgia Home Boy, GHB is notorious as a 'Date Rape Drug' because it has increasingly been associated with sexual assaults and rapes during recent years. Persons wishing to intoxicate, sedate and assault others have added this odorless, colorless and tasteless liquid drug to unsuspecting victim's drinks. The individual ingesting GHB may feel euphoric, drowsy, dizzy, confused, nauseated, and experience memory loss. In large doses, GHB can cause seizures, respiratory depression, permanent coma, and death.[viii]

Ketamine is a rapid acting anesthetic with analgesic and amnesic properties that has been approved for both human and animal use in medical settings since 1970. About 90 percent of the Ketamine legally sold is intended for veterinary use. It is injected or snorted. Ketamine is also known as Special K, Super K or vitamin K. Certain doses of ketamine can cause dream-like states and hallucinations, and it has become common in club and rave scenes and has been used as a date rape drug. At high doses, ketamine can cause delirium, amnesia, impaired motor function, high blood pressure, depression, and potentially fatal respiratory problems. Emergency room mentions of ketamine rose dramatically during the last decade.[ix]

Sedative depressants have a high potential for abuse. Tolerance develops over time and larger doses are used to achieve the desired effect. Continued use can lead to physical dependence and withdrawal symptoms when use is reduced or stopped. Overdose of these drugs can be fatal.

What are the effects of sedatives?

Sedative effects are similar to alcohol. In small doses, sedatives produce calmness and relaxed muscles. Drowsiness and impairment of memory may occur. Larger doses cause slurred speech, altered perception, and loss of coordination including sleep. Heavy doses can cause respiratory depression, coma, and death.

What immediate risks occur with sedatives?

Use can also produce a stupor in which the user is inattentive, lacks judgment, and thus risks injury at home or in auto crashes. The user can also be taken advantage of such as in the case of 'Date Rape Drugs.' Overdose can cause coma or death.

Sedatives taken with other central nervous depressants such as alcohol can increase risks since the effects of one drug multiply the effects of the other. Sedative users should also avoid prescription opioid pain medications, and some over the counter cold and allergy medications.[x]

Are some sedatives less dangerous than others?

Using any sedative creates some risk. They can be dangerous, by themselves or combined with other drugs, especially alcohol or other

sedatives. Benzodiazaphines are considerably less risky than barbiturates, and have replaced barbiturates in most uses.

Can sedatives cause dependence?

Yes. All sedatives can cause dependence. How much and how often these drugs are taken affect how quickly tolerance and independence develop. Both legal and illegal users can develop dependence.

Withdrawal symptoms may range from restlessness, insomnia, and anxiety to convulsions and death. Barbiturate withdrawal is often more severe than heroin withdrawal.

Is there treatment for sedative dependence?

Treatment may include medical care during withdrawal, and individual and/or group counseling. Support from a self-help group may be part of a treatment program.

How are sedatives usually obtained?

Some people abuse sedatives that they obtained legally. About half of sedative overdose cases in emergency rooms have a legal prescription. Other people get sedatives from friends who have valid prescriptions, or get the drugs with forged prescriptions. The drugs are also sold on the street.

How common is sedative abuse?

In 2002, the 2002 National Survey on Drug Use and Health (NSDUH) found that an estimated 19.5 million Americans aged 12 or older were current illicit drug users (having used marijuana/hashish, cocaine, crack, heroin, hallucinogens, inhalants, or any prescription type psycholtherapeutic used non-medically such as stimulants, tranquilizers, sedatives and pain relievers. An estimated 4.4 million persons used pain relievers, 1.8 million used tranquilizers, 1.2 million used stimulants, and 0.4 million used sedatives.

What are the risks of sedative use during pregnancy?

NDA's National Pregnancy and Health Survey, conducted during 1992, was the first national survey of drug use among pregnant women in the United States. The survey collected data from a representative sample of the 4 million women who delivered babies during 1992. Of these 3.6% reported having used sedatives during pregnancy.[xii]

A women who is pregnant, considering pregnancy, or breastfeeding should not abuse sedatives. Sedatives should only be used under a doctor's supervision.

Barbiturates have been shown to increase the chance of birth defects in humans. Taking barbiturates regularly during the last three months of pregnancy may cause the baby to become dependent on the medicine leading to possible withdrawal side effects in the baby after birth. However, a doctor, when needed for serious diseases or other situations that threaten the mother's life, may prescribe barbiturates.[xiii]

Particular benzodiazepines, chlordiazepoxide and diazepalm have been reported to increase the chance of birth defects when used during the first 3 months of pregnancy. Although similar problems have not been reported with the other benzodiazepines, the chance always exists since all of the benzodiazepines are related. Too much use of a benzodiazepine during pregnancy may cause the baby to become dependent on the medicine. This may lead to withdrawal side effects after birth. Also, use of benzodiazepines during pregnancy, especially during the last weeks, may cause body temperature problems, breathing problems, difficulty in feeding, drowsiness, or muscle weakness in the newborn infant.[xiv]

If you are pregnant, be sure to discuss prescribed sedative use as well as any illicit drug use with your doctor.

Legal Information

Barbiturates and Benzodiazepines are classified as controlled substances by Michigan and Federal law. Use, possession, and delivery without appropriate license or prescription are prohibited. Penalties include imprisonment and fines. Penalties are increased if a person eighteen years or older distributes the drug to a person under eighteen, or distributes the drug near school property.

The "Hilary Farias and Samantha Reid Date-Rape Prohibition Act of 1999" (Public Law 106-172) was signed on February 18, 2000. On that date, GBL - the solvent precursor for GHB, became a List I chemical, subject to the criminal, civil and administrative sanctions of the Controlled Substances Act. On March 13, 2000, GHB was made a Schedule I controlled substance (65 FR 13225-13238). Schedule I is reserved for the most dangerous drugs that have no recognized medical use. In Michigan GHB is a Schedule 1 drug with special penalties for delivery and manufacture of GBL.

On August 12, 1999, Ketamine including its salts, isomers, and salts of isomers, became a Schedule III non-narcotic substance under the Federal Controlled Substances Act. In Michigan, Ketamine possession, delivery, possession with intent to delivery, or manufacture is a felony as a Schedule 3 non-narcotic.

Flunitrazepam (or Rohypnol®) is in Schedule IV of the Federal Controlled Substances Act. In Michigan, Rohypnol® is Schedule 4. Possession, delivery, possession with intent to deliver, or manufacture is a felony.

For details on the legal penalties, refer to the Michigan law Fact Sheet in this series.

Sources

[i] Results from the 2002 National Survey on Drug Use and Health; National Findings, Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. Office of Applied Studies

http://www.samhsa.gov/oas/nhsda/2k2nsduh/Results/2l2Results.htm#toc

[ii] Drugs and Chemicals of Concern, US Department of Justice, Drug Enforcement Administration, Diversion Control Program, website:

http://www.usdoh.gov/dea/concern/glutethimide.html

[iii] Results from the 2002 National Survey on Drug Use and Health: Detailed Tables

http://www.samhsa.gov/oas/nhsda/2k2nsduh/html/Sect1seTabs1to110.htm#tab1.1c

[iv] Drugs and Chemicals of Concern

http://www.usdog.gov/deaconcern/barbiturates.html

[v] Drugs and Chemicals of Concern

http://www.usdoj.gov/dea/concern/benzodiazepines.html

[vi] Drugs and Chemicals of Concern

[vii] www.dea.gov

[viii] Drugs and Chemicals of Concern, US Department of Justice, Drug Enforcement Administration, Diversion Control Program

http://www.deadiversion.usdoj.gov/drugs_concern/index.html

[ix] www.dea.gov

[x] NIDA Research Report Series - Prescription Drugs" Abuse and Addiction

http://www.nida.nig.gov/ResearchReports/Prescription/prescription8.html

[xi] Results from the 2002 National Survey on Drug Use and Health: National Findings.

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