



SUBSTANCE ABUSE:

**INCREASE
YOUR
KNOWLEDGE AND AWARENESS**

ATTACHMENT 2

ENCLOSURE (7)

SUBSTANCE ABUSE:

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INTRODUCTION

Substance abuse is a national concern. This booklet has been developed to provide you, the reader, with some basic information on those drugs which often are misused, in order to increase your knowledge and awareness of substance abuse.

CHAPTER ONE

INHALANTS

What are inhalants?

Inhalants are breathable chemicals that produce psychoactive (mind-altering) vapors. People do not usually think of inhalants as drugs because most of them were never meant to be used that way. They include solvents, aerosols, some anesthetics, and other chemicals. Examples are model airplane glue, nail polish remover, lighter and cleaning fluids, and gasoline. Aerosols that are used as inhalants include paints, cookware coating agents, hair sprays, and other spray products. Anesthetics include halothane and nitrous oxide (laughing gas). Amyl nitrite and butyl nitrite are inhalants that also are abused.

What is amyl nitrite?

Amyl nitrite is a clear, yellowish liquid that is sold in a cloth-covered, sealed bulb. When the bulb is broken, it makes a snapping sound; thus they are nicknamed "snappers" or "poppers." Amyl nitrite is used for heart patients and for diagnostic purposes because it dilates the blood vessels and makes the heart beat faster. Reports of amyl nitrite abuse occurred before 1979, when it was available without a prescription. When it became available by prescription only, many users abused butyl nitrite instead.

What is butyl nitrite?

Butyl nitrite is packaged in small bottles and sold under a variety of names such as "locker room" and "rush." It produces a "high" that lasts from a few seconds to several minutes. The immediate effects include decreased blood pressure, followed by an increased heart rate, flushed face and neck, dizziness, and headache.

Who abuses inhalants?

Young people, especially between the ages of 7 and 17 are more likely to abuse inhalants, in part because they are readily available and inexpensive. Sometimes children unintentionally misuse inhalant products that are often found around the house. Parents should see that these substances, like medicines, are kept away from young children.

How do inhalants work?

Although different in makeup, nearly all of the abused inhalants produce effects similar to anesthetics, which act to slow down the body's functions. At low doses, users may feel slightly stimulated; at higher amounts, they may feel less inhibited, less in control; at high doses, a user can lose consciousness.

What are the immediate negative effects of inhalants?

Initial effects include nausea, sneezing, coughing, nosebleeds, feeling and looking tired, bad breath, lack of coordination, and a loss of appetite. Solvents and aerosols also decrease the heart and breathing rate and affect judgement. How strong these effects are depends on the experience and personality of the user, how much is taken, the specific substance inhaled, and the user's surroundings. The "high" from inhalants tends to be short or can last several hours if used repeatedly.

What are the most serious short-term effects of inhalants?

Deep breathing of the vapors, or using a lot over a short period of time may result in losing touch with one's surroundings, a loss of self-control, violent behavior, unconsciousness, or death. Using inhalants can cause nausea and vomiting. If a person is unconscious when vomiting occurs, death can result from aspiration.

Sniffing highly concentrated amounts of solvents or aerosol sprays can produce heart failure and instant death. Sniffing can cause death the first time or any time. High concentrations of inhalants cause death from suffocation by displacing the oxygen in the lungs. Inhalants also can cause death by depressing the central nervous system so much that breathing slows down until it stops. Death from inhalants is usually caused by a very high concentration of inhalant fumes. Deliberately inhaling from a paper bag greatly increases the chance of suffocation. Even when using aerosol or volatile (vaporous) products for their legitimate purposes, i.e., painting, cleaning, etc., it is wise to do so in a well-ventilated room or outdoors.

What are the long term dangers?

Long-term use can cause weight loss, fatigue, electrolyte (salt) imbalance, and muscle fatigue. Repeated sniffing of concentrated vapors over a number of years can cause permanent damage to the nervous system, which means greatly reduced physical and mental capabilities. In addition, long-term sniffing of certain inhalants can damage the liver, kidneys, blood, and bone marrow.

Tolerance, which means the sniffer needs more and more each time to get the same effect, is likely to develop from most inhalants when they are used regularly.

What happens when inhalants are used along with other drugs?

As in all drug use, taking more than one drug at a time multiplies the risks. Using inhalants while taking other drugs that slow down the body's functions, such as tranquilizers, sleeping pills, or alcohol, increases the risk of death from overdose. Lose of consciousness, coma, or death can result.

CHAPTER TWO

HALLUCINOGENS

What are hallucinogens?

Hallucinogens, or psychedelics, are drugs that affect a person's perceptions, sensations, thinking, self-awareness, and emotions. Hallucinogens include such drugs as lysergic acid diethylamide (LSD), mescaline, psilocybin, and dimethyltryptamine (DMT). Some hallucinogens come from natural sources, such as mescaline from the peyote cactus. Others, such as LSD, are synthetic or manufactured.

Phencyclidine (PCP) is sometimes considered an hallucinogen because it has some of the same effects. However, it does not fit easily into any one drug category because it can also relieve pain or act as a stimulant.

What is LSD?

LSD is manufactured from lysergic acid which is found in ergot, a fungus that grown on rye and other grains. LSD was discovered in 1938 and is one of the most potent mood-changing chemicals. It is odorless, colorless, and tasteless. LSD is sold on the street in tablets, capsules, or occasionally in liquid form. It is usually taken by mouth but sometimes is injected. Often it is added to absorbent paper, such as blotter paper, and divided into small decorated squares, with each square representing one dose.

What is mescaline?

Mescaline comes from the peyote cactus and although it is not as strong as LSD, its effects are similar. Mescaline is usually smoked or swallowed in the form of capsules or tablets.

What are some other psychedelic drugs?

Psilocybin comes from certain mushrooms. It is sold in tablet or capsule form so people can swallow it. The mushrooms themselves, fresh or dried, may be eaten. DMT is another psychedelic drug that acts like LSD. Its effects begin almost immediately and last for 30-60 minutes.

What are the effects of psychedelics like LSD?

The effects of psychedelics are unpredictable. It depends on the amount taken, the user's personality, mood and expectations, and the surroundings in which the drug is used. Usually, the user feels the first effects of the drug 30-90 minutes after taking it. The physical effects include dilated pupils, higher body temperature, increased heart rate and blood pressure, sweating, loss of appetite, sleeplessness, dry mouth, and tremors.

Sensations and feelings change, too. The user may feel several different emotions at once or swing rapidly from one emotion to another. The person's sense of time and self change. Sensations may seem to "cross over," giving the user the feeling of "hearing" colors and "seeing" sounds. All of these changes can be frightening and can cause panic.

What are "bad trips"?

Having a bad psychological reaction to LSD and similar drugs is common. The scary sensations may last a few minutes or several hours and may be mildly frightening or terrifying. The user may experience panic, confusion, suspicious anxiety, feelings of helplessness, and loss of control. Sometimes taking a hallucinogen such as LSD can unmask mental or emotional problems that were previously unknown to the user. Flashbacks, in which the person experiences a drug's effects without having to take the drug again, can occur.

What are the effects of heavy use?

Research has shown some changes in the mental functions of heavy users of LSD, but they are not present in all cases. Heavy users sometimes develop signs of organic brain damage, such as impaired memory and attention span, mental confusion, and difficulty with abstract thinking. These signs may be strong or they may be subtle. It is not yet known whether such mental changes are permanent or if they disappear when LSD use is stopped.

PCP

What is PCP?

Phencyclidine (PCP) is most often called "angel dust." It was first developed as an anesthetic in the late 1950s, however it was taken off the market for human use because it sometimes caused hallucinations.

PCP is available in a number of forms. It can be a pure white crystal-like powder or a tablet or capsule. It can be swallowed, smoked, sniffed, or injected. PCP is sometimes sprinkled on marijuana or parsley and smoked.

Although PCP is illegal, it is easily manufactured. It is often sold as mescaline, tetrahydrocannabinol (THC), or other drugs. Sometimes it may not even be PCP, but a lethal by-product of the drug. Users can never be sure what they are buying since it is manufactured illegally.

What are the physical effects of PCP?

Effects depend on how much is taken, the way it is used and the individual. Effects include increased heart rate and blood pressure, flushing, sweating, dizziness, and numbness. When large doses are taken, effects include drowsiness, convulsions, and coma. Taking large amounts of PCP can also cause death from repeated convulsions, heart and lung failure, or ruptured blood vessels in the brain.

Why is PCP dangerous?

PCP can produce violent or bizarre behavior in people who are not normally that way. This behavior can lead to death from drowning, burns, falls (sometimes from high places), and automobile accidents. Regular PCP use affects memory, perception, concentration, and judgement. Users may show signs of paranoia, fearfulness, and anxiety. During these times, some users may become aggressive while others may withdraw and have difficulty communicating. A temporary mental disturbance or a disturbance of the user's thought processes (a PCP psychosis) may last for days or weeks. Long-term PCP users report memory and speech difficulties, as well as hearing voices or sounds which do not exist.

How do PCP users feel?

Users find it difficult to describe and predict the effects of the drug. For some users, PCP in small amounts acts as a stimulant, speeding body functions. For many users, PCP changes how users see their own bodies and things around them. Speed, muscle coordination, and vision are affected; senses of touch and pain are dulled; and body movements are slowed. Time seems to "space out."

CHAPTER THREE

STIMULANTS (INCLUDING AMPHETAMINES AND COCAINE)

What are stimulants?

Stimulants ("uppers") refer to several groups of drugs that tend to increase alertness and physical activity. Some people use stimulants to counteract the drowsiness or "down" feeling caused by sleeping pills or alcohol. This up/down cycle is extremely hard on the body and dangerous. Amphetamines, cocaine, and caffeine are all stimulants.

AMPHETAMINES

What are amphetamines?

Amphetamines include three closely related drugs - amphetamine, dextroamphetamine, and methamphetamine. Their street names include: "speed," "white crosses," "uppers," "dexies," "bennies," and "crystal." In pure form, they are yellowish crystals that are manufactured in tablet or capsule form. Abusers also sniff the crystals or make a solution and inject it.

Are amphetamines used for medical purposes?

Amphetamines are used for treating narcolepsy (a rare disorder marked by uncontrolled sleep episodes) and minimal brain dysfunction (MBD) in children. They also are prescribed for short-term treatment of obesity.

What are the physical effects of amphetamines?

Amphetamines increase heart and breathing rates and blood pressure, dilate pupils, and decrease appetite. In addition, the user can experience a dry mouth, sweating, headache, blurred vision, dizziness, sleeplessness, and anxiety. Extremely high doses can cause people to flush or become pale; they can cause a rapid or irregular heartbeat, tremors, loss of coordination, and even physical collapse. An amphetamine injection creates a sudden increase in blood pressure that can cause death from stroke, very high fever, or heart failure.

How do amphetamine users feel?

In addition to the physical effects, users report feeling restless, anxious, and moody. Higher doses intensify the effects, and the user can become excited and talkative and have a false sense of self-confidence and power.

People who use large amounts of amphetamines over a long period of time also can develop an amphetamine psychosis: seeing, hearing, and feeling things that do not exist (hallucinations), having irrational thoughts or beliefs (delusions), and feeling as though people are out to get them (paranoia). People in this extremely suspicious state frequently exhibit bizarre - sometimes violent - behavior. These symptoms usually disappear when people stop using the drug.

What about long-term effect?

Long-term heavy use of amphetamines can lead to malnutrition, skin disorders, ulcers, and various diseases that come from vitamin deficiencies. Lack of sleep, weight loss, and depression also result from regular use. Frequent use of large amounts of amphetamines can produce brain damage that results in speech and thought disturbances. In addition, users who inject amphetamines intravenously can get serious and life-threatening infections from nonsterile equipment or self-prepared solutions that are contaminated. Injecting them can cause lung or heart disease and other diseases of blood vessels, which can be fatal. Kidney damage, stroke, or other tissue damage also may occur.

Can people become dependent on amphetamines?

Yes. Some people report a psychological dependence, a feeling that the drug is essential to their normal functioning. These users frequently continue to use amphetamines to avoid the "down" mood they get when the drug's effects wear off.

In addition, people who use amphetamines regularly may develop tolerance, the need to take larger doses to get the same initial effect.

When people stop using amphetamines abruptly, they may experience fatigue, long periods of sleep, irritability, hunger, and depression. The length and severity of the depression seems to be related to how much and how often the amphetamines were used.

What are "look-alike" stimulants?

Look-alike stimulants are drugs manufactured to look like real amphetamines and mimic their effects. The drugs usually contain varying amounts of caffeine, ephedrine, and phenylpropanolamine. These three legal substances are weak stimulants and often are found in over-the-counter preparations, such as diet pills and decongestants. More recently, new drugs called "act-alikes" have been manufactured to avoid new state laws that prohibit look-alikes. The act-alikes contain the same ingredients as the look-alikes but don't physically resemble any prescription or over-the-counter drugs. These drugs are sold on the street as "speed" and "uppers" and are expensive, even though they are not as strong as amphetamines. They often are sold to young people who are told they are legal, safe, and harmless. This is one reason they are being increasingly abused.

What are the effects of look-alikes?

Some negative effects of look-alikes, especially when taken in large quantities, are similar to the effects of amphetamines. These effects include anxiety, restlessness, weakness, throbbing headache, difficulty breathing, and a rapid heartbeat. There have been several reports of severe high blood pressure, leading to cerebral hemorrhaging and death. Often, in an emergency, look-alike drug overdose cases are misidentified by physicians and poison control centers. This can cause a problem in determining the proper treatment.

What are the dangers of look-alikes?

One of the greatest dangers is that these drugs are easily available and are being used by young people and others who do not normally abuse drugs. Once people start using these drugs, they may be at high risk for using other drugs.

Because look-alikes are not as strong as real amphetamines, they are extremely dangerous for people who - deliberately or accidentally - takes the same amount of real amphetamines as they would take of the look-alikes. For example, people who buy look-alikes on the "street" may, unknowingly, buy real amphetamines and take enough to cause an overdose. On the other hand, people who have abused amphetamines may underestimate the potency of the look-alike drugs and take excessive amounts that can result in a toxic reaction.

CAFFEINE

Is caffeine a drug?

Yes. Caffeine may be the world's most popular drug. It is a white, bitter, crystal-like substance found in coffee, tea, cocoa, and cola. It also is found in some products such as aspirin, nonprescription cough and cold remedies, soft drinks, diet pills, and some street drugs.

What are the effects of caffeine?

As with all drugs, the effects vary depending on the amount taken and the individual. When a person drinks two cups of coffee (150-300 milligrams of caffeine), the effects begin in 15-30 minutes. The person's metabolism, body temperature, and blood pressure may increase. Other effects include increased urine production, higher blood sugar levels, hand tremors, a loss of coordination, decreased appetite, and delayed sleep. Extremely high doses may cause nausea, diarrhea, sleeplessness, trembling, headaches, and nervousness. Poisonous doses of caffeine have occurred occasionally and may result in convulsions, breathing failure, and death. Although it is almost impossible for death to occur from drinking coffee or tea, deaths have been reported through misuse of tablets containing caffeine.

Can a person become dependent on caffeine?

Tolerance to caffeine (the need for a larger dose to get the same effect) may develop with the use of over 500-600 milligrams (for example, 4-6 cups of coffee) of caffeine per day. A regular user of caffeine who has developed a tolerance also may have a craving for the drug's effects, particularly to "get going" in the morning. Some researchers have found a withdrawal-like syndrome among people who suddenly stop using caffeine. The symptoms include headache, irritability, and mood changes.

COCAINE

What is cocaine?

Cocaine is a drug extracted from the leaves of the coca plant which grows in South America. Like the amphetamines, it is a central nervous system stimulant. Cocaine appears in several different forms. Cocaine hydrochloride is the most available form of the drug and is used medically as a local anesthetic. It is usually a fine white crystal-like powder, although at times it comes in larger pieces which on the "street" are called "rocks." Cocaine is usually sniffed or snorted into the nose, although some users inject it or smoke a form of the drug called freebase.

Another form of the drug is coca paste. It is a crude product that is smoked in South America. It may be especially dangerous because it also consists of contaminants such as kerosene which can cause lung damage.

What are the immediate effects of cocaine?

When cocaine is "snorted," the effects begin within a few minutes, peak within 15-20 minutes, and disappear within an hour. These effects include dilated pupils and increases in blood pressure, heart rate, breathing rate, and body temperature. The user may have a sense of well-being and feel more energetic or alert, and less hungry.

What is freebase?

Freebase is a form of cocaine which is made by chemically converting "street" cocaine hydrochloride to a purified, altered substance that is then more suitable for smoking. Smoking freebase produces a shorter and more intense "high" than most other ways of using the drug because smoking is the most direct and rapid way to get the drug to the brain. Because larger amounts are getting to the brain more quickly, smoking also increases the risks associated with using the drug. These risks include confusion, slurred speech, anxiety, and serious psychological problems.

What are the dangers of cocaine use?

The dangers of cocaine use vary, depending on how the drug is taken and the individual. Some regular users report feelings of restlessness, irritability, anxiety, and sleeplessness. In some people, even low doses of cocaine may create psychological problems. People who use high doses of cocaine over a long period of time may become paranoid or experience what is called a "cocaine psychosis." This may include hallucinations of touch, sight, taste, or smell.

What are some physical dangers of cocaine use?

Occasional use can cause a stuffy or runny nose, while chronic snorting can ulcerate the mucous membrane of the nose. Injecting cocaine with unsterile equipment can cause hepatitis or other infections. Furthermore, because preparation of freebase involves the use of volatile solvents, deaths and serious injuries from fire or explosion can occur. Though few people realize it, overdose deaths can occur when the drug is injected, smoked or even snorted. Death results from multiple seizures followed by respiratory and cardiac arrest.

Can people become dependent on cocaine?

Yes. It is a very dangerous, dependence-producing drug. People use cocaine repeatedly because they like its effects and can get to the point of centering their lives around seeking and using the drug. Smoking freebase increases the risk of dependence. Sometimes people who have been using the drug over a period of time continue to use it in order to avoid the depression and fatigue they would feel if they stopped using the drug.

Are there cocaine "look-alikes"?

Yes. The growing demands for cocaine, its high price, and limited supply have led to the widespread use of substitute drugs that resemble cocaine and may have stimulant effects. Cocaine look-alikes contain ingredients that are legal and that also appear as impurities in samples of street cocaine. Substances which are used to "cut" or dilute cocaine include household items such as flour, baking soda, talc, and sugar. Local anesthetics, caffeine, and other chemicals also are sold as substitutes.

CHAPTER FOUR

MARIJUANA

What is marijuana?

Marijuana (grass, pot, weed) is the common name for a crude drug made from the plant *Cannabis sativa*. The main mind-altering (psychoactive) ingredient in marijuana is tetrahydrocannabinol (THC), but more than 400 other chemicals also are in the plant. A marijuana "joint" (cigarette) is made from the dried particles of the plant. The amount of THC in the marijuana determines how strong its effects will be.

The type of plant, the weather, the soil, the time of harvest, and other factors determine the strength of marijuana. The strength of today's marijuana is as much as ten times greater than the marijuana used in the early 1970s. This more potent marijuana increases physical and mental effects and the possibility of health problems for the user.

Hashish, or hash, is made by taking the resin from the leaves and flowers of the marijuana plant and pressing it into cakes or slabs. Hash is usually stronger than crude marijuana and may contain five to ten times as much THC. Hash oil may contain up to 50 percent THC. Pure THC is almost never available, except for research. Substances sold as THC on the street often turn out to be something else, such as PCP.

What are some of the immediate effects of smoking marijuana?

Some immediate physical effects of marijuana include a faster heartbeat and pulse rate, bloodshot eyes, and dry mouth and throat. No scientific evidence indicates that marijuana improves hearing, eyesight, and skin sensitivity.

Studies of marijuana's mental effects show that the drug can impair or reduce short-term memory, alter sense of time, and reduce ability to do things which require concentration, swift reactions, and coordination, such as driving a car or operating machinery.

Are there any other adverse reactions to marijuana?

A common bad reaction to marijuana is the "acute panic anxiety reaction." People describe this reaction as an extreme fear of "losing control," which causes panic. The symptoms usually disappear in a few hours.

What about psychological dependence on marijuana?

Long-term regular users of marijuana may become psychologically dependent. They may have a hard time limiting their use, they may need more of the drug to get the same effect, and they may develop problems with their jobs and personal relationships. The drug can become the most important aspect of their lives.

What are the dangers for young people?

One major concern about marijuana is its possible effects on young people as they grow up. Research shows that the earlier people start using drugs, the more likely they are to go on to experiment with other drugs. In addition, when young people start using marijuana regularly, they often lose interest and are not motivated to do their schoolwork. The effects of marijuana can interfere with learning by impairing thinking, reading comprehension, and verbal and mathematical skills. Research shows that students do not remember what they have learned when they are "high."

How does marijuana affect driving ability?

Driving experiments show that marijuana affects a wide range of skills needed for safe driving. Thinking and reflexes are slowed, making it hard for drivers to respond to sudden, unexpected events. Also, a driver's ability to "track" (stay in lane) through curves, to brake quickly, and to maintain speed and the proper distance between cars is affected. Research shows that these skills are impaired for at least 4-6 hours after smoking a single marijuana cigarette, long after the "high" is gone. If a person drinks alcohol, along with using marijuana, the risk of an accident greatly increases. Marijuana presents a definite danger on the road.

Does marijuana affect the human reproductive system?

Some research studies suggest that the use of marijuana during pregnancy may result in premature babies and in low birth weights. Studies of men and women who use marijuana have shown that marijuana may influence levels of some hormones relating to sexuality. Women may have irregular menstrual cycles, and both men and women may have a temporary loss of fertility. These findings suggest that marijuana may be especially harmful during adolescence, a period of rapid physical and sexual development.

How does marijuana affect the heart?

Marijuana use increases the heart rate as much as 50 percent, depending on the amount of THC in the cigarette. It can cause chest pain in people who have a poor blood supply to the heart and it produces these effects more rapidly than tobacco smoke does.

How does marijuana affect the lungs?

Scientists believe that marijuana can be especially harmful to the lungs because users often inhale the unfiltered smoke deeply and hold it in their lungs as long as possible. Therefore, the smoke is in contact with lung tissues for long periods of time, which irritates the lungs and damages the way they work. Marijuana smoke contains some of the same ingredients in tobacco smoke that can cause emphysema and cancer. In addition, many marijuana users also smoke cigarettes; the combined effects of smoking these two substances creates an increased health risk.

Can marijuana causes cancer?

Marijuana smoke has been found to contain more cancer-causing agents than is found in tobacco smoke. Examination of human lung tissue that had been exposed to marijuana smoke over a long period of time in a laboratory, showed cellular changes called metaplasia that are considered precancerous. In laboratory tests, the tars from marijuana smoke have produced tumors when applied to animal skin. These studies suggest that it is likely that marijuana may cause cancer if used for a number of years.

How are people usually introduced to marijuana?

Many young people are introduced to marijuana by their peers -- usually acquaintances, friends, sisters, and brothers. People often try drugs such as marijuana because they feel pressured by peers to be part of the group. Children must be taught to say no to peer pressure to try drugs. Parents can get involved by becoming informed about marijuana and by talking to their children about drug use.

What is marijuana "burnout"?

"Burnout" is a term first used by marijuana smokers themselves to describe the effect of prolonged use. Young people who smoke marijuana heavily over long periods of time can become dull, slow moving, and inattentive. These "burned-out" users are sometimes so unaware of their surroundings that they do not respond when friends speak to them, and they do not realize they have a problem.

How long do chemicals from marijuanas stay in the body after the drug is smoked?

When marijuana is smoked, THC, its active ingredient, is absorbed by most tissues and organs in the body; however, it is primarily found in fat tissues. The body, in its attempt to rid itself of the foreign chemical, metabolizes (chemically breaks down and transforms) the THC. Urine tests can detect THC metabolites for up to a week after people have smoked marijuana. Tests involving radioactively labeled THC have traced these metabolites in animals for up to a month.

CHAPTER FIVE

OPIATES

What are opiates?

Opiates, sometimes referred to as narcotics, are a group of drugs which are used medically to relieve pain, but also have a high potential for abuse. Some opiates come from a resin taken from the seed pod of the Asian poppy. This group of drugs includes opium, morphine, heroin, and codeine. Other opiates, such as meperidine (Demerol), are synthesized or manufactured.

Opium appears as dark brown chunks or as a powder and is usually smoked or eaten. Heroin can be a white or brownish powder which is usually dissolved in water and then injected. Most street preparations of heroin are diluted, or "cut," with other substances such as sugar or quinine. Other opiates come in a variety of forms including capsules, tablets, syrups, solutions, and suppositories.

Which opiates are abused?

Heroin ("junk," "smack") accounts for 90 percent of the opiate abuse in the United States. Sometimes opiates with legal medicinal uses also are abused. They include morphine, meperidine, paregoric (which contains opium), and cough syrups that contain codeine.

What are the effects of opiates?

Opiates tend to relax the user. When opiates are injected, the user feels an immediate "rush." Other initial and unpleasant effects include restlessness, nausea, and vomiting. The user may go "on the nod," going back and forth from feeling alert to drowsy. With very large doses, the user cannot be awakened, pupils become smaller, and the skin becomes cold, moist, and bluish in color. Breathing slows down and death may occur.

Does using opiates cause dependence or addiction?

Yes. Dependence is likely, especially if a person uses a lot of the drug or even uses it occasionally over a long period of time. When a person becomes dependent, finding and using the drug often becomes the main focus in life. As more and more of the drug is used over time, larger amounts are needed to get the same effects. This is called tolerance.

What are the physical dangers?

The physical dangers depend on the specific opiate used, its source, the dose, and the way it is used. Most of the dangers are caused by using too much of a drug, the use of unsterile needles, contamination of the drug itself, or combining the drug with other substances. Over time, opiate users may develop infections of the heart lining and valves, skin abscesses, and congested lungs. Infections from unsterile solutions, syringes, and needles can cause illnesses such as liver disease, tetanus, and serum hepatitis.

What is opiate withdrawal?

When an opiate-dependent person stops taking the drug, withdrawal usually begins within 4-6 hours after the last dose. Withdrawal symptoms include uneasiness, diarrhea, abdominal cramps, chills, sweating, nausea, and runny nose and eyes. The intensity of these symptoms depends on how much was taken, how often, and for how long. Withdrawal symptoms for most opiates are stronger approximately 24-72 hours after they begin and subside within 7-10 days. Sometimes symptoms such as sleeplessness and drug craving can last for months.

What are the danger for opiate-dependent pregnant women?

Researchers estimate that nearly half of the women who are dependent on opiates suffer anemia, heart disease, diabetes, pneumonia, or hepatitis during pregnancy and childbirth. They have more spontaneous abortions, breech deliveries, caesarean sections, premature births, and stillbirths. Infants born to these women often have withdrawal symptoms which may last several weeks or months. Many of these babies die.

What treatment is available for opiate addiction?

The four basic approaches to drug abuse treatment are: detoxification (supervised withdrawal from drug dependence, either with or without medication) in a hospital or as an outpatient, therapeutic communities where patients live in a highly structured drug-free environment and are encouraged to help themselves, outpatient drug-free programs which emphasize various forms of counseling as the main treatment, and methadone maintenance which uses methadone, a substitute for heroin, on a daily basis to help people lead productive lives while still in treatment.

How does methadone treatment work?

Methadone, a synthetic or manufactured drug, does not produce the same "high" as illegal drug such as heroin, but does prevent withdrawal and the craving to use other opiates. It often is a successful treatment for opiate dependence because it breaks the cycle of dependence on illegal drugs such as heroin. When patients are receiving methadone in treatment, they are not inclined to seek and buy illegal drugs on the street, activities which are often associated with crime. Patients in methadone maintains programs also receive counseling, vocational training, and education to help them reach the ultimate goal of a drug-free normal life.

What are narcotic antagonists?

Narcotic antagonists are drugs which block the "high" and other effects of opiates without creating physical dependence or producing a "high" of their own. They are extremely useful in treating opiate overdoses and may prove useful in the treatment of opiate dependence.

CHAPTER SIX

SEDATIVE/HYPNOTICS

What are sedative/hypnotics?

Sedative/hypnotics are drugs which depress or slow down the body's functions. Often these drugs are referred to as tranquilizers and sleeping pills or sometimes just as sedatives. Their effects range from calming down anxious people to promoting sleep. Both tranquilizers and sleeping pills can have either effect, depending on how much is taken. At high doses or when they are abused, many of these drugs can cause even unconsciousness and death.

What are some of the sedative/hypnotics?

Barbiturates and benzodiazepines are the two major categories of sedative/hypnotics. The drugs in each of these groups are similar in chemical structure. Some well-known barbiturates are secobarbital (Seconal) and pentobarbital (Nembutal). Diazepam (Valium), chlordiazepoxide (Librium), and chlorazepate (Tranxene) are examples of benzodiazepines.

A few sedative/hypnotics do not fit in either category. They include methaqualone (Quaalude), ethchlorvynol (Placidyl), chloral hydrate (Noctec), and mebroamate (Miltown).

All of these drugs can be dangerous when they are not taken according to a physician's instructions.

Can sedative/hypnotics cause dependence?

Yes. They can cause both physical and psychological dependence. Regular use over a long period of time may result in tolerance, which means people have to take larger and larger doses to get the same effects. When regular users stop using large doses of these drugs suddenly, they may develop physical withdrawal symptoms ranging from restlessness, insomnia, and anxiety, to convulsions and death. When users become psychologically dependent, they feel as if they need the drug to function. Finding and using the drug becomes the main focus in life.

Is it true that combining sedative/hypnotics with alcohol is especially dangerous?

Yes. Taken together, alcohol and sedative/hypnotics can kill. The use of barbiturates and other sedative/hypnotics with other drugs that slow down the body, such as alcohol, multiplies their effects and greatly increases the risk of death. Overdose deaths can occur when barbiturates and alcohol are used together, either deliberately or accidentally.

Can sedative/hypnotics affect an unborn fetus?

Yes. Babies born to mothers who abuse sedatives during their pregnancy may be physically dependent on the drugs and show withdrawal symptoms shortly after they are born. Their symptoms may include breathing problems, feeding difficulties, disturbed sleep, sweating, irritability, and fever. Many sedative/hypnotics pass through the placenta easily and have caused birth defects and behavioral problems in babies born to women who have abused these drugs during their pregnancy.

What are barbiturates?

Barbiturates are often called "barbs" and "downers." Again, barbiturates that are commonly abused include amobarbital, pentobarbital, and secobarbital. These drugs are sold in capsules and tablets or sometimes in a liquid form or suppositories.

What are the effects of barbiturates when they are abused?

The effects of barbiturates are, in many ways, similar to the effects of alcohol. Small amounts produce calmness and relax muscles. Somewhat larger doses can cause slurred speech, staggering gait, poor judgement, and slow, uncertain reflexes. These effects make it dangerous to drive a car or operate machinery. Large doses can cause unconsciousness and death.

How dangerous are barbiturates?

Barbiturate overdose is a factor in nearly one-third of all reported drug-related deaths. These include suicides and accidental drug poisonings. Accidental deaths sometimes occur when a user takes one dose, becomes confused and unintentionally takes additional or larger doses. With barbiturates there is less difference than with other drugs between the amount that produces sleep and the amount that kills. Furthermore, barbiturate withdrawal can be more serious than heroin withdrawal.

What other sedative/hypnotics are abused?

All the other sedative/hypnotics can be abused, including the benzodiazepines. Diazepam (Valium), chlordiazepoxide (Librium), and chlorazepate (Tranxene) are examples of benzodiazepines. These drug are also sold on the street as downers. As with the barbiturates, tolerance and dependence can develop if benzodiazepines are taken regularly in high doses over prolonged periods of time.

Other sedative/hypnotics which are abused include glutethimide (Doriden), ethchlorvynol (Placidyl), and methaqualone (Sopor, Quaalude).

What is methaqualone?

Methaqualone ("Sopors," "ludes") was originally prescribed to reduce anxiety during the day and as a sleeping aid. It is one of the most commonly abused drugs and can cause both physical and psychological dependence. The dangers from abusing methaqualone include: injury or death from car accidents caused by faulty judgement and drowsiness, and convulsions, coma, and death from overdose.

What are sedative/hypnotic "look-alikes"?

These are pills manufactured to look like real sedative/hypnotics and mimic their effects. Sometimes look-alikes contain over-the-counter drugs such as antihistamines and decongestants, which tend to cause drowsiness. The negative effects can include nausea, stomach cramps, lack of coordination, temporary memory loss, becoming out of touch with the surroundings, and anxious behavior.

CHAPTER SEVEN

ALCOHOL

How does alcohol work?

Alcohol is a drug, like heroin or tranquilizers. It can alter moods, cause changes in the body and become habit forming.

Why is "liquor quicker"?

Alcohol acts fast. That is because it is not digested like food. It moves directly into the bloodstream from the stomach and small intestine. Right away, alcohol is on its way to the brain and other parts of the body. And it keeps circulating until it is burned up by the liver.

It is no wonder people begin to feel the effect of alcohol quickly. But also remember that it takes a long time for the effect to wear off. It takes approximately 2 hours for the liver to burn up the alcohol of one drink if the drinker weighs 150 pounds; 3 hours if the drinker weighs 100 pounds.

And if the drinker keeps pouring in drinks while the first one is still at work, it is easy to get into trouble.

Is alcohol an "upper" or a "downer"?

Alcohol is a "downer." It actually depresses the central nervous system. That is why drinking too much causes slowed reaction, slurred speech, and sometimes even unconsciousness ("passing out").

Why do drinkers act so crazy at times?

Alcohol works first on the part of the brain that controls inhibitions. And when people lose their inhibitions, they may talk more, get rowdy, and do foolish things. After several drinks, they may feel "high," but, really, their nervous systems are slowing down.

Which packs more punch - liquor or beer?

Neither. There is about the same amount of alcohol in a 12-ounce can of beer as there is in a mixed drink that contains 1 and 1/2 ounces of liquor or, for that matter, in a 5-ounce glass of wine. So do not let anyone tell you that a "few beers can't hurt." Just remember that each beer is as potent as a scotch-and-water!

In what ways can alcohol mean trouble?

Drinking can mean trouble --

- o No one should ever drink while pregnant. It can harm the developing baby. Also, drinking during breastfeeding is not a good idea.
- o It is common knowledge that drinking too much makes many people sick. And, needless to say, throwing up in public does not lead to popularity.
- o Drinking even a small amount can affect driving ability. Drinking and driving can lead to injury, or even death, for the driver, passengers, pedestrians, or others. It does not do the cars any good either.
- o Why did I do (or say) that?" is the common cry of inexperienced drinkers. They find out pretty quickly that losing control of oneself is not fun. It is embarrassing.

Will black coffee sober up a drunk person?

No. The only thing that can sober up someone who drinks too much is time - time for the alcohol to burn out of the system. Hot coffee and cold showers may wake the person up, but he or she will still be drunk.

How dangerous is drinking and driving, really?

Drinking-and-driving accidents kill a large number of people in the United States. Generally, thousands die each year from these accidents. It can happen to your friend. It could even happen to you.

While it is true that nobody can be totally safe from drinking drivers, smart people do three things:

- o They always say "no" to alcohol.
- o They refuse to ride in a car with a drinking driver.
- o They drive defensively - always alert for other drivers on the road who may be drunk or impaired by alcohol.

What is the legal limit for "driving under the influence"?

In most states, drivers are presumed to be under the influence when their blood alcohol level reaches 0.10 percent. That is actually a very high level, and their chances of having an accident increase long before they reach that rating.

The plain truth is that drinking and driving just do not mix. Many people do not know that even small amounts of alcohol can have a bad effect on driving. A driver with a blood alcohol level of 0.09 percent may be legally safe but not physically safe. And if you are a passenger in that car, you are in danger, too.

How much can someone drink and then drive safely?

Simply put, none at all. Any drinking interferes with judgement, muscle control, vision, and reaction time - all very important for driving. Even small amounts of alcohol - say one beer an hour - can interfere enough with driving ability to create a highly dangerous situation.

What are the penalties for drunk driving?

Convictions for driving under the influence can lead to serious penalties. In one state, for example, offenders can get a fine as high as \$1,000, lose their driver's license for 6 months, and get a jail sentence as long as 12 months. A second conviction within 5 years means a 3-year license suspension, a fine of up to \$1,000 and a mandatory jail sentence of up to 1 year. In another state, if arrested and found to have any alcohol in the blood, the person is automatically charged with driving under the influence.

What do I do when I am with a friend who drinks and tries to drive?

Your friend will probably feel that he or she can drive with no problem. Alcohol sometimes causes a dangerous feeling of having more power or control than usual. So do not be fooled by what your friend says about being able to drive. It may seem easier to go along, but both your safety and your friend's safety are at stake.

Take the wheel yourself. Or wait out the hours it takes until the alcohol leaves your friend's body. Take the car keys, if you have to. If nothing works and your friend insists on driving do not go along for the ride. Get a ride with someone else. Or call another friend who is sober, or someone in your family. Take a cab. There is always another way to get where you are going. Riding with a drinking driver is not loyal or daring. It is just plain dangerous.

How can I tell if someone has a drinking problem?

A problem drinker is a person whose drinking is interfering with one or more important areas of life - school, family, work, health, the law. More than 14 million Americans have problems with alcohol.

If you think someone you know has an alcohol problem, talk it over first with a person you trust. There are many sources for help, including clergy, doctors, hospitals, mental health centers, alcohol information centers, Alcoholics Anonymous, and Al-Anon Family groups. You will find their numbers in the yellow pages of the telephone directory under "alcohol." You can also contact the Civilian Employee Assistance Program Administrator for your activity.

If someone in your family has a problem, he or she can also get direct help from many of these sources.