

DRUG ABUSE: A LAYMAN'S APPROACH TO THE PROBLEM

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LLOYD EARL ROBINSON JR.

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Major Professor

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CHAPTER 1

WHAT DO WE MEAN BY DRUGS

In recorded history, every society has been equipped with drugs. Their use ranged from medical reasons to abuse. Therefore, drug abuse is not a new factor in this generation. Moreover, each society has had to deal with the problem in relationship to its nature.

The United States is faced with a severe problem concerning drug abuse. The basic reason is that it has been a drug-oriented society for some time. Anyone can become a drug abuser through medical reasons, recreational reasons, or sociological reasons as in the case of illegal "street drugs". The problem is here, and increasing, due to the lack of constructive and honest material being presented to the public. There is reliable factual literature pertinent to the drug problem; but, it is limited only to those professionals of drug abuse and drug education. Most of the literature should be easily communicated from the professional to the layman. Somehow the information is passing over those who cannot understand the context. Another factor includes too much opinionated and untrue literature written as factual information. This produces a negative attitude which turns the public off completely. Everyone must have a factual outlook of the drug issue. The lack of knowledge of drugs influences the growth of the misuse of drugs. In essence, every person should acquaint himself with the different kinds of drugs and how they are abused daily.

Parents should be aware of the drug problem since their children will confront it among their peers. They must be able to discuss the problem with their children with an open mind. To do this, they must understand the facts about drugs, their legality and illegality, and their effects.

From "scare tactics" to outlandish lies, the present literature on drugs must be equipped with factual material to prevent misleading information. To date, the public has been generally misinformed as to the nature of the drug problem. Many people feel that the problem lies with the abuser of "street drugs". In addition, the majority of society has labeled the abuser of illegal drugs as a deviant. They are actually saying that the problem belongs to the deviant; therefore, he must be cast out of the societal ranks. Little do these people know that the drug problem is a part of the whole society. For instance, the most abused drug in America is alcohol. Other abused drugs are cigarettes, tranquilizers, barbiturates, amphetamines, coffee, and tea. The point to be made here is that these drugs are legally acquired. The public is misinformed as to the relationship of drugs to drug abuse.

We have a society dedicated to leisure activities and avoiding discomfort and tension. Robert Kaplan stated that advertising on radio, television, and in magazines sells us pills for our livers, stomachs, and bowels; salves for skin and hemorrhoids; washes for our mouths and eyes; and more pills and tablets to help us relax, reduce tension, and sleep. In effect, the drug problem is related to everyone that uses drugs. Ironically, everyone is a drug user in one way or another.¹

¹Robert Kaplan, Drug Abuse: Perspectives on Drugs (W. C. Brown Co., 1970), p. 8.

PURPOSE

The purpose of this study is to bring together certain basic facts about drugs and drug abuse. The problem will be approached from three areas: historical aspects, scientific aspects and sociological aspects. Each section will deal with the current issues concerning drug abuse. The material will be presented as an up-to-date factbook for the layman. In other words, the research sources will be broken down into a language so that the average person may understand the nature of drug abuse. Only those sources that are of a reliable nature will be researched. Therefore, the method of study is only concerned with finding the factual literature through the process of library research. The services of the Kansas State University Library and the Drug Education Center in Manhattan, Kansas, were used in acquiring the resource material.

In these times, it is especially important that responsible people know such basic facts about the drug problem that they can be alert for the signs of possible drug misuse and thus know when to seek expert help.

DEFINITION OF TERMS

- 1) PHYSICAL DEPENDENCE: This is an adaptation whereby the body learns to live with a drug, tolerates ever increasing amounts and reacts with certain withdrawal symptoms when deprived of it. The total reaction to deprivation is known clinically as an abstinence (withdrawal) syndrome. With many drugs, the chronic user finds he must

constantly increase the dose in order to obtain an effect equal to that from the initial dose. This phenomenon is called tolerance.

- 2) TOLERANCE: Tolerance represents the body's ability to adapt to the presence of a foreign substance. Tolerance does not develop for all drugs or in all individuals, but with drugs such as morphine, addicts have been known to build up great tolerance very quickly.
- 3) PSYCHIC DEPENDENCE: A more important factor in keeping the abuser enclaved by his habit is the psychic or psychological dependence present in most cases of drug abuse. Psychic dependence is an emotional or mental adaptation to the effects of a drug. The abuser not only likes the feeling from the drug and wants to re-experience it, he feels he cannot function normally without the drug. It enables him to escape from reality from his problems and frustrations. The drug and its effects seem to provide the answer to everything including disenchantment and boredom. With the drug, all seems well and it is a psychological factor which causes an addict who has been withdrawn from his physical dependence to return to drug abuse.
- 4) ADDICTION: Frequently confused terms encountered in drug abuse discussions are "addiction," "habituation," and "drug dependence." Addiction has been defined as a state of periodic or chronic intoxication produced by the repeated consumption of a drug, and it involves: a) tolerance; b) psychological dependence; c) usually

physical dependence; d) an overwhelming compulsion to continue using the drug; and e) detrimental effects on both the individual and society.

- 5) **HABITUATION:** Habituation has been defined as the condition resulting from the repeated consumption of a drug which involves little or a) no evidence of tolerance; b) some psychological dependence; c) no physical dependence; d) a desire with no compulsion to continue taking the drug for the feeling of well-being it engenders; and e) detrimental effects, if any, are primarily on the individual.
- 6) **DRUG DEPENDENCE:** Drug dependence is described as a state arising from repeated administration of a drug on a periodic or continuous basis.
- 7) **HALLUCINOGENS:** Any of several drugs popularly called "psychedelics" which produce sensations such as distortions of time, space, sound, color and other bizarre effects while they are pharmacologically non-narcotic, some of these drugs, in other words, marijuana, are regulated under Federal Narcotic Laws.
- 8) **NARCOTIC:** This term has two definitions. Medically defined, narcotics are drugs which produce insensibility or stupor due to their depressant effect on the central nervous system. They relieve pain. Included in this definition are opium, opium derivatives (morphine, codeine, heroin) and synthetic opiates (meperridine, methadone). As regulated by Federal Narcotic Laws, the term "narcotics" also embraces the cocoa leaf and its derivative, cocaine. Legally

defined, the term means any drug regulated under the Harrison Act and other Federal Narcotics Laws.

- 9) **POTENTIATION:** Potentiation occurs when the combined action of two or more drugs is greater than the sum of the effects of each drug taken alone. Potentiation can be very useful in certain medical procedures. For example, physicians can induce and maintain a specific degree of anesthesia with a small amount of the primary anesthetic agent by using another drug to potentiate the primary anesthetic agent. Potentiation may also be dangerous. For example, barbiturates and many tranquilizers potentiate the depressant effects of alcohol.

CHAPTER 2

ASPECTS OF DRUG ABUSE

In discussing the problem of drug abuse, this chapter will be separated into three sections. The first section will include a short historical perspective, and the second, the scientific outlook. The final section will emphasize the social aspects of drug abuse.

HISTORICAL

Since earliest times, man has been acquainted with drugs. The oldest known drug is alcohol. It is believed that the use of wine and beer began in Anatolia in 6400 B. C. and the use of beer in Egypt in 4500 B. C. About 800 B. C., the Greeks were using wine for medicinal, recreational, and religious purposes. The Roman Empire later introduced wine drinking as a way of life in 200 B. C. Finally, the Europeans were introduced to alcohol between 800 and 1000 A. D.²

Opium and marijuana were introduced as far back as 3000 B. C. and 2700 B. C. respectively. Opium was known as the pain killer and a source of enjoyment. The Chinese Emperor, Shen Nung, noted that marijuana was prescribed for gout, rheumatism, malaria, beri-beri, constipation, female weakness, and absent-mindedness.³

² Smithsonian Institution, *Drugs in Perspective: A Fact Book on Drug Use and Misuse* (Smithsonian Institution, Washington, D. C., 1972), p. 27.

³ *Ibid.*, p. 30.

Mushrooms, such as the hallucinogenic Amanita Muscaria, may have been used for worshipping back in 1500 B. C. Mushrooms are known to have existed in Guatemala in 1000 B. C. Another type of hallucinogen similar to LSD was used in 1670 in Europe for a disease, "St. Anthony's Fire". Jimsonweed was introduced in the 1650's in Jamestown, Virginia, where it was ingested as a dish of boiled greens.⁴

In 1528, cocoa was found by Cortez. Cocoa is a compound related to caffeine. In conjunction with this, coffee was known by the Arabs in the 1300's. Then by 1500, it was widely used around the world. It became so popular that the governments were making a considerable profit.⁵

Tobacco, which is second to alcohol in use, was discovered in 1492 by Columbus' interaction with the Indians. Its popular use spread even though it was condemned. Then, in 1883, James Duke made the first cigarette-making machine. In addition to cigarette smoking, opium smoking became very widespread at the same time. It is mostly known among the Chinese from the early 1700's to the present day.⁶

As time went on, drugs such as morphine were introduced for the treatment of opium addiction. At this time the development of the hypodermic needle was discovered for the administration of morphine which is an extract of opium. From morphine, heroin was extracted as a cure for morphine addicts. Today, methadone (an extract of heroin) is used

⁴ Ibid., p. 30.

⁵ Ibid., p. 31.

⁶ Ibid., p. 32.

for heroin addiction. Therefore, due to addiction, the drug culture was growing for medical reasons.

The United States awoke to the problem of alcohol abuse in 1900. Also, opium addiction was prevalent. From this, certain legislative acts were passed by Congress for prevention of abuse and addiction. In 1906, Congress passed the Federal Pure Food and Drug Act to provide standards of purity for drugs sold in the United States. It also required patented medicine labels. In 1927, an amendment established the Food and Drug Administration for a separate enforcement agency.⁷

In 1909, the United States passed an act to prohibit the import and use of opium. In 1914, the Harrison Narcotic Drug Act was enacted to regulate the manufacture and distribution of opium, cocaine, or their derivatives. Later in 1970, the Drug Abuse Control Act was developed for more stringent law enforcement dealing with illicit drugs.⁸

In 1920, the 18th Amendment prohibited the sale and transportation of alcohol with the Volstead Act prohibiting its possession. But due to bootleggers, crime, profits, and growing use, the 21st Amendment was ratified and ended prohibition.⁹

Marijuana arrived in the U. S. in the early 1900's. It was popular among jazz musicians and even spread with the growth of jazz.

⁷ Edward M. Brecher, Licit and Illicit Drugs (Boston: Little and Brown, 1972), p. 260.

⁸ Ibid., p. 58.

⁹ Ibid., p. 410.

In 1930, sixteen states prohibited marijuana. The Uniform Narcotic Act was adopted in 1932 to fill the gaps in the Harrison Act of 1914. In 1937, the Marijuana Tax Act placed marijuana under federal control by taxing it. This lowered the use of marijuana in the 1940's. World War II started marijuana growth to the point of widespread use today. Marijuana is the most commonly used of the illegal drugs today.¹⁰

Another recent development was the synthesizing of LSD in 1938. It was used in 1943 for treatment of psychiatric patients. Amphetamine use became more evident with an increase in consumption of alcohol during this time.¹¹ Thus, the United States was just beginning to witness the problems of drug abuse that later would be an increasing crisis. From the introduction of drugs in earliest times to now, it must be noted that drug abuse is here to stay, even with controlled legislation.

SCIENTIFIC

The primary focus here is on the types of drugs, their characteristics, categorization, and effects. Basically a drug can be defined as any chemical substance that may cause physical or mental changes, or both. Substances of abuse range from simple kitchen spices through countless flowers and weeds, to highly sophisticated drugs. All these types may be divided into certain categories: 1) narcotics; 2) sedatives and hypnotics; 3) tranquilizers; 4) stimulants; 5) hallucinogens; and 6) volatile solvents.

¹⁰ David Solomon, The Marijuana Papers (New York: Signet Books, 1968), p. 15.

¹¹ Brecher, op. cit., p. 337.

Narcotics

This is a class of drugs which induces sleep or a stupor, and relieves pain. This classification includes opiates (opium, morphine, heroin, and codeine) and the synthetic narcotics (Percodan, Dolophine, Demerol, or Dromoran). For medical reasons, narcotics are mainly used to relieve pain, cough, and diarrhea without producing any excessive drowsiness, weakness, or loss of consciousness.¹²

All narcotics are alike except for the degree of effects produced. They act primarily on the central nervous system. The action is considered depression due to drowsiness, reduced activity, and little mental awareness. When abusive doses are used, they will produce an elevation of mood, euphoria, relief of fear and apprehension, and feelings of peace and tranquility. After a short period of time, the individual's state changes to an apathetic nature producing loss in mental and physical activities that induces sleep. Also, his appetite becomes very poor and there is little interest in sex. It also may enhance aggressive drives. In other words, the addict may turn to crime in order to pay for his "fix". Other actions concerning narcotics may be feelings of body warmth, constipation, vomiting and pupillary constriction, nausea, and itchiness of nose. These actions are from therapeutic doses. The larger doses lead to sleep, lowered blood pressure, slowed breathing; with an overdose leading to a coma producing respiratory failure and death. The addict will develop a tolerance to most of these

¹² Samuel Irwin, Drugs of Abuse (Student Association of Hallucinogenics, 1972), p. 3.

effects which in turn causes a need for an increase in dosage. At this stage, the drugs are taken to prevent the withdrawal symptoms.

During early use there is a chance of accidental overdosage. Most narcotics have a potential to produce a physical and psychological dependence at a tremendously high rate. This may lead to social deterioration, reduced motivation, or infection from a non-sterile syringe needle which leads to serum hepatitis. The largest and most dangerous effects are the addict's tolerance level and physical dependence. This requires the taking of larger and larger doses of the drug to get high and prevent the withdrawal symptoms.

Withdrawal symptoms include frequent yawning, watery eyes, running nose, dilated pupils, chills, restlessness, anxiety, irritability, loss of appetite, nausea and vomiting, muscle and abdominal cramps, and insomnia which occur three to eight hours after dosage which varies with the drug. These symptoms may last as long as ten days which may produce convulsions followed by coma and then death. These symptoms may be reversed by another narcotic antagonist such as Nalline.

Some other signs of use include: scars on the arms and legs from injection; hypodermic syringe, bent spoons, cotton needles, metal bottle caps, medicine droppers and glassine bags in locker or desk drawers; and empty bottles of cough medicine that include narcotics.

There are 600,000 known addicts in the United States. Each user's habit varies, but there are those who may have a \$75-\$300 a day habit that leads to serious crime in acquiring funds to purchase the drug.¹³

¹³ Ibid., p. 3.

The federal penalties for illegal narcotics are established under the Harrison Act of 1914 which provides that illegal possession of narcotics is punishable by fines and/or imprisonment. Sentences range from two to ten years for the first offense, five to twenty years for the second, and ten to twenty years for further offenses. Illegal sale of narcotics can mean a fine of \$20,000 and a sentence of five to twenty years for the first offense, and ten years to forty years for further offenses. If a person sells narcotics to someone under eighteen, they may be refused parole and probation. If the drug is heroin, the sentence can be life imprisonment or the death penalty.¹⁴

Sedatives--Hypnotics

Drugs in this group are used as a depressant of the central nervous system. The hypnotics have a stronger depression of the central nervous system. The barbiturates are by far the largest group of sedatives. They vary in duration of action from the fast-acting thiopental (Pentothal) which can be used as an anesthetic, to the moderately fast-acting pentobarbital (Nembutal) and secobarbital (Seconal), to the slow-acting phenobarbital (Luminal). The short-acting barbiturates may lead to heavy abuse. Without medical guidance, increasing doses lead to habituation and physical dependence. Other abused sedatives include glutethimide (Doriden), chloral hydrate, bromides and certain minor tranquilizers such as meprobamate (Miltown, Equanil), and chlordiazepoxide (Librium). Another representative of this class is alcohol.

¹⁴ Ibid., p. 3.

Alcohol abuse, alone, is a subject of its own. It will not be discussed in this report.¹⁵

Medically speaking, these drugs are used for epilepsy, high blood pressure, insomnia, and in treatment and diagnosis of mental disorders. If used under medical supervision, barbiturates are very safe and effective.

Barbiturates, similar to alcohol in action, generally have a depressing effect on the central nervous system. But barbiturate abuse is far more dangerous than alcohol abuse. Larger doses may produce drowsiness and sleep. This comes about from the tolerance build-up. Those who take excessive amounts probably will go into a coma and induce death. Other actions include a slow-down in breathing, a drop in blood pressure, and unconsciousness. Also, barbiturates may produce restlessness, excitement, and even delirium. This resembles an alcoholic. Persons intoxicated by barbiturates seem to be inebriated and mistaken for "drunks". The user exhibits slurred speech, irritability, poor coordination, and staggering gait.

One of the main dangers is convulsions which may lead to death. But the largest problem can be overindulgence in alcohol before barbiturate ingestion. This causes a fatal depression of the respiratory and cardiovascular systems. Other hazards include faulty judgement and uncoordination, accidental death from overdosage, erratic emotional responses, and aggressive behavior that may lead to violence.

¹⁵ Ibid., p. 4.

In withdrawal, there is restlessness, abdominal cramps, nausea and vomiting, shaking, weakness, insomnia, delirium, delusions and convulsions. These symptoms are quite severe after twenty-four hours. Convulsions resembling epileptic seizures may develop within thirty-six to seventy-two hours. These are an ever present danger with barbiturate withdrawal. It is extremely dangerous to allow these withdrawal symptoms to continue without medical assistance. Emptying the stomach, artificial respiration, and maintaining body heat are the most immediate treatments available.

The barbiturate abuser shows signs of social deterioration, impulsiveness, and violence. Also the pupils of the eyes may be small, or large, in the case of Doriden. The abuser may also have needle marks if the drug is taken intravenously. There may also be a significant amount of colored pills in his possession.

There are some 3,000 barbiturate suicides occurring each year. Countless accidental deaths also occur. There have been a number of instances where death occurred with the combination of barbiturate and alcohol levels in the blood.

Today, the sedative drugs are available only on prescription. They are also controlled by the Comprehensive Drug Abuse Prevention and Control Act of 1970. It provides for regulating manufacturers, distribution, and possession. A prescription older than six months for a controlled drug may not be refilled, plus no more than five refills are allowed during that six month period.

Illegal possession of sedatives is punishable by: first offense equals imprisonment of up to one year and/or a maximum \$5,000 fine.

Unlawful distribution and possession with an intent to distribute the drug may bring up to five years' imprisonment and/or a maximum \$15,000 fine with a required two year special parole term for a first offense. Involvement in a large scale enterprise will bring ten years to life imprisonment with a maximum \$100,000 fine plus forfeiture of profits and interests in enterprise. For the second and succeeding offenses, the penalties are doubled.¹⁶

Tranquilizers

Tranquilizers are used to counteract tension and anxiety without producing sleep or impaired mental and physical function. In relieving tension, they promote a state of calmness and relaxation. Many tranquilizers have the same effects as the sedative-hypnotics such as the barbiturates. The representatives of tranquilizers are: Meproamate (Miltown, Equanil); chlordia-epoxide (Librium); diazepam (Valium). These are classified as the minor tranquilizers. The major tranquilizers which are the most potent are: phenothiazines (Compazine, Thorazine, Pacatal, Sparine, Phenergan) which are used for mental illness. These are effective in combating symptoms of psychosis, including hallucinations, delusions, excitement, agitation, and aggressiveness. The minor tranquilizers are used to combat anxiety, tension, fast heart rate, tension headaches, gastrointestinal disturbances, restlessness, insomnia, irritability, and oversensitivity.¹⁷

¹⁶ Brecher, op. cit., p. 253.

¹⁷ Irwin, op. cit., p. 4.

These drugs are less prone to produce incoordinated movements or impair judgement. They also are less likely to produce coma, respiratory failure and death from overdosage (except meprobamate), and less likely to produce psychologic dependence. Physical dependence has been reported for meprobamate and chlordiazepoxide, but is likely to occur with the other members of this class of drugs. All the dangers, withdrawal symptoms, antidotes, and physical signs of abuse are the same as the hypnotics. The only difference is that they are rarely taken intravenously. One final point is that tranquilizers are reduced in intensity.

Stimulants

A stimulant is a substance which acts on the central nervous system. This leads to wakefulness, alertness, arousal, activity, talkativeness, restlessness, pleasurable sensations and reduced appetite. Larger doses may produce irritability, aggressiveness, anxiety, suspiciousness, excitement, auditory hallucinations and paranoid fears (delusions, psychotic reactions). They also dilate the pupils, increase sweating, quicken breathing, raise blood pressure and cause tremors of the hands. The most widely used stimulant is caffeine which is found in coffee, tea, cola, and other beverages. Other representatives include: methamphetamine (Methedrine), d- and d,1-amphetamine (Dexedrine and Benzedrine), cocaine, and methylphenidate (Ritalin). All these drugs have high potentials for psychologic dependence. Tolerance develops with some withdrawal effects after extremely high doses.¹⁸

¹⁸ Irwin, op. cit., pp. 5-6.

Stimulants are medically used to reduce appetite, overcome fatigue and sleepiness, improve mood, and increase motivation. They are also used to reduce the overactivity of hyperactive children.

There are many main dangers confronting the user of stimulants. They produce high levels of pleasurable feelings and sometimes feelings of increased power. There are also sexually orgasmic experiences when the drug is taken intravenously. Anyone may easily be seduced into repeated use of these drugs. Overdosage may occur quickly with impaired judgement, paranoia, aggressive behavior, and erratic eating and sleeping habits. This, in turn, will lead to physical deterioration. Psychotic-like behavior and suicides may result from constant heavy doses. The constant user will also have withdrawal symptoms such as severe depression, complete exhaustion, severe cramping of abdominal muscles, symptoms related to asthmatic attacks, and changes in brain wave patterns. Other symptoms of use include rapid speech, confusion, fatigue, and loss of appetite.

These drugs are legally acquired on a doctor's prescription. Penalties for illegal possession are established under the Drug Abuse Control Amendments of 1965. The first offense includes imprisonment up to one year and/or a maximum \$5,000 fine. Unlawful distribution and possession may bring up to five years' imprisonment and/or a maximum \$15,000 fine and a required two year special parole term (except that cocaine is subject to stiffer penalties because it is legally classified as a narcotic). Involvement in a criminal enterprise carries a penalty of ten years to life imprisonment with a maximum \$100,000 fine and

forfeiture of profits and interests.¹⁹ A second or successive offense causes the penalties to be doubled.

Hallucinogens

Hallucinogens are drugs that create vivid distortions in the senses without greatly disturbing the user's consciousness. These drugs include: Marijuana, Mescaline, LSD, Psilocybin, Dimethyltryptamine (DET), Dom ("STP") and many others.²⁰

Marijuana has an active ingredient called tetrahydrocannabinol (THC). This intoxicating substance is found in a resin from the flowering tops and leaves of the female "Hemp" plant. The degree of potency varies with its geographical location. For example, hash is much more stronger and it is also a derivative of the "Hemp" plant. At one time, marijuana was used in the practice of medicine. Marijuana may be smoked, sniffed, or injected, but the effects are experienced most quickly in smoking. The mental effects include: euphoria, exaltation, and a dreamy sensation accompanied by a freeflow of ideas. Senses of time, distance, and vision may become distorted. Sometimes signs of paranoia are experienced. The user may hallucinate with larger doses. When in a crowd, the user is talkative and filled with laughter, but all alone experiences drowsiness and quietness. The user's ability to perform tasks such as driving an automobile normally may be impaired.

¹⁹ Brecher, op. cit., p. 294.

²⁰ Irwin, op. cit., pp. 7-8.

Other effects include dizziness, dry mouth, and hunger, particularly for sweets. Marijuana does not produce a physical dependence but may cause a psychological dependence with prolonged use. One particular point is that marijuana does not lead to the use of harder drugs. Also there is no tolerance produced from the use. The only findings lately have been related to the active ingredient tetrahydrocannabinol. In its pure form, it may cause severe reactions from heavy doses. There are between 8,000,000 to 12,000,000 marijuana smokers in the United States today. The principal danger in marijuana is that it is illegal.

Mescaline (Peyote) has been used in Indian tribe rituals for years. It can be found in the peyote cactus, or made synthetically. It may be obtained as a crystalline powder in capsules, a liquid in vials, and as whole cactus buttons. The effects may appear one to two hours after ingestion, and may last up to twelve hours. This presents stomach disorders and may cause vomiting. Vomiting should occur if its effects are felt, but the effects of the drug will not change. Also, most mescaline sold is either LSD or a combination of LSD-PCP.

Psilocybin is derived from certain mushrooms found in Mexico. It is not as potent as LSD, but may produce similar hallucinogenic effects with adequate doses. This drug is available in crystalline, powdered, or liquid form.

LSD, commonly known as D-lysergic acid diethylamide, is a powerful synthetic chemical which was developed by Dr. Albert Hofmann, a chemist with the Sandoz Research Laboratories in Switzerland in 1938. Its perception altering properties were accidentally discovered by

Dr. Hofmann in 1943. Until the early 1950's, research on the chemical was confined to Europe. LSD is principally obtained from ergot, a fungus that grows as a rust on rye, wheat and other grasses. One ounce is enough to provide 300,000 of the usual doses.²¹ LSD has been used in the past to treat patients with severe psychosis; however, such use has created many more adverse than beneficial effects. LSD is the strongest drug in the hallucinogenic class, and by itself is not fatal on any level. It causes mind expansion, hallucinations, and alteration of conscious perception. It is usually available in tablets or capsules. It can also be in liquid form, blotter paper, paper microdot, and gelatin. Most bad reactions to LSD come from impure components. These include strychnine-like reactions. Lysergic chemicals left over from synthesis produce these reactions. LSD is considered dangerous because it causes panic, flashbacks or recurring drug effects, and accidental death due to paranoid feelings. The effect of LSD ranges from eight to twelve hours. The physical effects consist of enlarged pupils, a flushed face, chilliness, maybe a rise in temperature and heart beat, and a slight increase in blood pressure. LSD is not addictive and has no withdrawal symptoms if it is suddenly discontinued. The best antidote for anxiety and panic is "talking down" the user by an experienced person.

Since there is a large portion of hallucinogenic drugs on the market, the ones previously discussed will be used as an insight to the abuse of hallucinogens. The other drugs such as STP and DMT are not

²¹ Brecher, op. cit., pp. 338-375.

some of the most desired hallucinogens such as LSD, marijuana, mescaline, and psilocybin.

Volatile Solvents

The non-drug substances represented here are: glue, gasoline, paint thinner, aerosols, and anesthetics. The most popular substance at one time was airplane glue, but it is on the decline. It seems as though there is an increase in the use of aerosols. These substances are usually used by pre-adolescents ranging from ten to fifteen. The use of the solvents is by inhalation from a rag or a plastic bag. The effects include irritation of the tissues in contact with the solvent, nausea, dizziness, shakiness, and muscle spasms. Weight loss may occur with prolonged periods of use. The psychic effects include a "high" dreamlike state, drunkenness, sleepiness, disorientation, hallucinations, delusions, and stupor. Sometimes the individual may manifest excitement, impulsive behavior, and overactivity. Tolerance varies with each individual; and, there is no withdrawal or physical dependence. The major dangers are impaired judgement and motor function and proneness to accidents. Death may be caused by suffocation.

SOCIAL ASPECTS

Whether a person is poor or rich or black or white, the problem of drug abuse should be everyone's concern. Of course, there are those who feel that the problem lies only with the youth and the "street" drugs. They fail to recognize that almost everyone uses drugs in some form or another. This society has been structured as a drug-oriented society for ages. As long as there are drugs, there will be drug

abuse. Basically, we cannot completely empty our society of drugs. If we were to do that, there probably would not be a population explosion due to illness and death from illness. Ironically, our society needs drugs to survive. Therefore, there must be a constructive solution in solving our problems with drug abuse. At present, stringent legislation, scare tactics, and education have not slowed down the abuse of drugs. In addition, too much misinformation has been floating around as factual material. Thus, there must be some type of avenue to take to solve this problem. All the material to be discussed here will deal with suggestions in preventing drug abuse.

There are certain basic reasons why some youths use drugs and why some do not use drugs. It is the author's opinion that the number one reason why youths use drugs is conforming to peer pressure. Everyone must do as the group does or be an outcast. Other reasons stem from getting a thrill out of use, aesthetic rewards as in expanding the senses, exposure and availability of drugs, curiosity for a new experience, misinformation about drug effects, or gaining and maintaining status. Probably the most damaging reasons for using drugs might include such factors as: escape from personal problems and pressures, rebellion against the establishment, escape from boredom, or lack of inner strength.

Those who do not use drugs are usually well-informed or just not exposed to the drug culture. In other words, they may be aware of the dangers involving drugs such as physical risks, legal risks, or mental risks. The greatest fear evolves around possible addiction, effects on offspring, or having a bad trip. Of course, these reasons

were more than likely instilled into the youth from their type of environment. They were fortunate enough to have a good strong family togetherness. In essence, this may give them a strong ego that produces social independence. In summing up the reasons, these basic points may be applied to anyone. A lot of people feel as though it only is the ghetto youth that will always use drugs. Of course, this is a mistaken assumption. Every youth is liable to abuse drugs no matter how far up the social ladder they exist. Therefore, all adults and youths should be concerned about acquiring good factual knowledge on drug abuse from using coffee to using heroin.

The first prevention effort then would be to set up a good educational program. This means to eliminate all the "scare tactics" which are outlandish approaches concerned with scaring the hell out of the youth. Next, there must be complete and factual information concerning the drug culture. Finally, the most important approach would be based upon the philosophy of human behavior and decision-making influencing drug abuse. This involves starting the program at an early age of the youths. This may be only one of many methods used in solving the problem effectively.

Another effective program involves community interaction. It includes organizations, activities, and program planning that bring people together. All city government officials, churches, civic associations, schools, business and trade groups, and law enforcement agencies should share future concern for the community. Many programs may be set up to meet the needs of each community through involvement of each member. Some relating programs include counseling, volunteer

projects, block and social clubs, youth centers, halfway houses, crisis centers, and drug prevention programs located in community facilities, church basements, and storefronts. A community program must define its human resources, its problems, and its goals. From here, they can start their program. Each community will probably have a different program to meet their needs, but at least there will be a constructive effort in preventing drug abuse.

Education and community programs are the most effective means in preventing drug abuse. All the gaps between adults and youth can be solved through these programs. There is more interaction and concern among all peoples. Therefore the steps to preventing drug abuse involve a good sound educational program and community interaction.

CHAPTER 3

THE DRUG ERA TODAY

Drug misuse is found in every sector of society. It occurs increasingly in affluent suburbs as well as slums. It is becoming tragically commonplace in schools, colleges, and industry. As our daily papers tell us all too clearly, it is a particular problem among young people. Drug laws are designed to help control the problem; they do not eliminate or prevent it. Education with a good sound and open program is needed. Before there can be effective control, there must be widespread understanding among laymen of the possible tragic effects of drug misuse on mind and body.

In these times, it is especially important that responsible people-supervisors, teachers, parents and others-know such basic facts about the drug problem so that they can be alert for the signs of possible drug misuse and thus know when to seek expert help.

This drug scene is a part of a larger one. This American society is truly a pill society. For years its people have been taking billions of pills and capsules. This society also tolerates the use of alcohol and nicotine; both technically are drugs, and millions of people abuse both drugs. In addition, it has had a number of addicts hooked on heroin or opium and even barbiturates.

The drug problem is here to stay. It will always be a stepping stone for us to conquer. Everyone must realize that they are a part

of the problem if we are to prevent the spread of drug abuse. In conclusion, people should concern themselves in combating the problem and helping to devise a solution. They should have a constructive outlook on drugs as a whole through good factual information. This report was one step in reproducing the factual information in layman terms. Of course, all the problems of drug abuse will not be solved but at least there can be a starting point for us all.

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APPENDIX

Drug Glossary

Acid -- LSD
Acid head -- Frequent user of drugs
A's -- Amphetamines
Baggie -- A container of drugs, usually marijuana
Bagman -- Drug supplier
Bam -- Mixture of stimulant and depressants
Barbs -- Barbiturates
Bennies -- Amphetamine
Blanks -- Poor quality drugs
Blow your mind -- Get high on drugs
Block -- A unit of Hashish
Blues -- Depressants, also blue devils
Brick -- A kilo (2.2 pounds) of marijuana
Bread -- Money
Bummer -- A bad experience
Busted -- Arrested
C -- Cocaine
Coke -- Cocaine
Cold Turkey -- Sudden withdrawal from drugs
Connect -- To buy drugs
Cop -- To obtain a drug
Cop Out -- To alibi or confess
Crash -- To end a drug experience
Dealer -- Middleman who supplies drugs to a pusher
Dojee -- Heroin
Downs -- Depressants or barbiturates
Drivers -- Amphetamines
Drop -- Take drugs orally
Dynamite -- High quality narcotics
Fix -- Injecting a narcotic
Flush -- To get rid of drugs when arrest is imminent
Freak -- A user of drugs
Goofball -- Barbiturate
Grass -- Marijuana
H -- Heroin
Hang-up -- Personal problem
Hard Stuff -- Heroin, morphine or cocaine
Hashish -- Concentrated marijuana from resin
Head -- A frequent user
Hearts -- Amphetamines
Hemp -- Marijuana
Herb -- Marijuana
High -- The effect of use of a drug

Hit -- Injection of a drug into vein, smoking marijuana
Hooked -- Dependent on a drug
Horse -- Heroin
Hustling -- Making money to buy drugs, often by theft
Jay -- Marijuana
Joint -- Marijuana cigarette
Junk -- Heroin
Junkie -- An addict
Marjorie -- Marijuana
Mary Jane -- Marijuana
Nickle Bag -- \$5.00 unit of marijuana or other drug
Nod -- Drowsiness resulting from drug use
OD -- Overdose
Pop -- To inject narcotics
Pot -- Marijuana
Pusher -- A peddler of drugs
Reds -- Depressants, barbiturates
Reefer -- A marijuana cigarette
Roach -- The butt of a marijuana cigarette
Scag -- Heroin
Score -- To make a drug purchase
Shoot -- To inject a drug into veins
Snow -- Cocaine
Snith -- An informer
Speed -- Amphetamines
Smack -- Heroin
Square -- A non-user
Stash -- Hiding place for drugs or a hidden supply
Stick -- Marijuana cigarette
Stoned -- Under influence of drug heavily
Strung Out -- Addicted
Ten Cent Bag -- A \$10.00 unit of drugs
Tab -- A tablet of LSD
Tracks -- Small scars on arms or legs by syringe
Trip -- Hallucinogenic effects
Ups -- Amphetamines, stimulants
Weed -- Marijuana

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ABSTRACT

The purpose of this study is to provide a complete but concise source of drug information; whereby, a factual outlook of the scientific, historical, and social perspectives are brought together. Also included in the report is a drug glossary. The problem is approached in devising a factbook for the laymen to understand the material without technical notations.