

Drug Abuse in Our Community*

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What is new about people taking drugs: Nothing! Our society is a drug-oriented society. We have been both using drugs and, at times, abusing them for years. Furthermore, drug abuse has been written about for hundreds of years. What is alarming today, however, is the number of youth who are joining the drug scene from our junior high, high schools and colleges throughout the country. Fortunately, many of these will be involved only temporarily. Others will develop physical and psychological problems as a consequence of their involvement. Our responsibility is not limited to the small percentage that have short or long-term consequences, but to all youth in our community and country. Hopefully we can answer some of the pressing questions facing parents, teachers and professionals.

The questions I hear from the community are: *What are pot, acid and speed? What does glue-sniffing really do? What are our children doing to themselves and why? What can we do to get our children off this dope?* The answers are not simple! They come only through a better understanding of the total problems and implementing of means to solutions that will be beneficial to the youth and their elders as well. What we are really talking about is education and communication.

The Drugs

There are two general classes of drugs that are abused—narcotic and non-narcotic. The narcotic drugs include heroin, morphine, codeine, opium and meperidine. The non-narcotic drugs include all the hallucinogens, the amphetamines or stimulants, and the depressants such as barbituates, alcohol and volatile solvents. Marijuana will be dealt with separately. It is the non-narcotic drugs that I wish to discuss at some length.

Depressants

The first group is that of the depressants, including volatile solvents such as glue, lighter fluid, cleaning fluid, gasoline, kerosene, ether and a variety of other organic solvents. The volatile solvents, like all forms of drugs abused, provide a chemical escape from reality achieved by inhaling their vapors. Glue-sniffing is the most commonly used practice. Its abuse is usually found in younger adolescents in the junior high school and early high school years. The active chemical ingredient in glue is toluene. When sniffed, glue is squeezed into a plastic bag or handkerchief and held over the face or mouth and inhaled. The effects are almost immediate and are usually described as a true "shock" to the nervous system or as feelings of dizziness, euphoria and drunkenness. Some users describe loss of self-control, spotty amnesia, or simply say that they "don't care about anything." Others may have visual hallucinations of vivid colors.

Glue may be purchased in almost any store in a variety of forms. The onset of action is almost immediate and may last from 15 minutes up to a few hours, depending on the length of exposure. The chronic sniffer is very likely to expose himself for longer periods of time to get the same "high" or desired effect. Habituation or dependence on the state of intoxication also occurs, but this habituation is not necessarily specific to the chemical substances found in glue. Gasoline sniffers and lighter fluid sniffers also develop the same habituation. Chronic sniffers may have some transient symptoms suggestive of withdrawal, such as irritability, nausea, lethargy and depression. These symptoms are unusual in most users.

There has been a great deal of controversy regarding the toxic effects of such depressants to vital organs such as brain, liver and kidney. It is true that some studies have found abnormal urine findings of a transient nature. Transient abnormal findings of liver and kidney function tests, electroencephalographic

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tracings and blood counts are also reported in a small percentage of "sniffers." The question of chronic brain damage is still unclear. The fatalities that have occurred are attributed to suffocation by the plastic bags after prolonged periods of intoxication.

Stimulants

The second group of drugs includes the stimulants or amphetamines. These drugs have been used successfully and effectively for a variety of medical problems, most notably diet control, obesity and narcolepsy. They are mood elevators in mild emotional or psychological problems. Since the amphetamines are so widely used and produced in such large numbers, it is not surprising to find them being abused as well. Amphetamines on the "drug scene" are commonly referred to as "pep pills," "Beanies," "Dexies" and "purple hearts." The amphetamine referred to as "speed" is methylamphetamine or methedrine. This particular preparation can be purchased as a tablet or in crystalline form for 25¢ to 50¢ a pill or cap. Speed has a more marded stimulating effect on the user than the usual amphetamine. It causes a "rush"—gives a sensation of excitement and sudden available energy which is pleasurable to the user. The pharmacological effect of amphetamines in general is stimulation of the central nervous system resulting in euphoria, feelings of alertness, elevation of mood and absence of fatigue.

The common medical complications caused by the intravenous injection or "mainlining" of speed are infectious hepatitis and cellulitis. The instance of infectious hepatitis in some drug communities has risen to epidemic proportion because of the communal use of non-sterile needles and syringes.

When combined with LSD (lysergic acid diethylamide), the methedrine or speed prolongs and intensifies the LSD trip or experience. It may even reactivate the trip in regular users without further LSD intake.

By increasing the dosage over a period of weeks or months the amphetamines can produce a gradually increasing tolerance without bringing about actual physical dependence. The psychological dependence that occurs in the habituated user is a very real factor that is of major concern. Users in this group are frequently "mainlining" or using higher oral doses and may develop an "amphetamine psychosis" characterized by disorganized behavior, hallucinations and paranoia. Upon withdrawal of the drug, prolonged periods of sleep, marked hunger for food, depression and panic may occur, lasting from several days to several weeks. The person with unstable personality in this depressed state may attempt suicide or become involved in other anti-social or acting-out behavior. The habituated high school or college student frequently has difficulty studying, becomes disheveled,

loses weight, is more susceptible to illness, and eventually may drop out of any productive endeavor.

Hallucinogens

The third group of drugs consists of the hallucinogens, the psychedelics or the psychotomimetics. LSD or "acid," DMT (dimethyltryptamine) and STP (2,5-dimethoxy-4-methylamphetamine) are the most powerful. Peyote, mescaline and psilocybin and such exotics as nutmeg and morning glory seeds are also included in this group.

All of these drugs act qualitatively in much the same manner as LSD; only the quantity of drug needed to produce the same effect will vary from drug to drug because of differences in chemical activity or potency.

When LSD first appeared there was much interest in its medical application, specifically for the treatment and evaluation of emotional problems. The most encouraging reports to date have come from its clinical application in the treatment of chronic alcoholism.

To give some idea of the effects of LSD, it may be said that one ounce of LSD can "turn on" a city of 300,000 people. Most of the LSD appearing on the drug scene is being manufactured illegally and dispensed in tablet or capsule form in dosages of 50 to 150 micrograms. This dose, when "dropped" or ingested, will start a "trip" or psychedelic experience. The experience will depend on the user's personality make-up, emotional state at the time of ingestion, past experience with other drugs, and the quality of the drug itself. Acid can be purchased for \$5.00 to \$10.00 a pill, depending on the available supplies. Increased dosages lead to prolongation of the trip rather than intensification. Tolerance develops and disappears rapidly, and there is no evidence of physical dependence.

Within 20 to 45 minutes after ingestion the psychedelic experience begins and may last from 10 to 16 hours. The user will almost invariably experience one of the following: distortion of sense perception; de-personalization; disorientation in time and space; visual illusions; pseudo-hallucinations involving shape, size, color and apparent plasticity. Thought processes are frequently disturbed, resulting in changes of mood ranging from euphoria to anxiety. Some users may react with overwhelming fear, confusion and panic; while others appear to be withdrawn into themselves in a somewhat catatonic state. These adverse reactions are more likely to occur in a person with emotional instability. These individuals are the most unfortunate, for the drugs only potentiate borderline problems and magnify existing ones. Contrary to popular belief, the proper preparation of the user and the presence of a well experienced "guide" do not guarantee a good trip.

The somatic complications of LSD include chromosomal abnormalities. Current research activity by responsible investigators continues to support earlier observations of the "breaks." I am not aware of any knowledge of the relationship of dosage, or frequency of use, to the effects on chromosomes. Answers to these questions will come with time.

Flashbacks or recurrent experiences weeks to months after the last dose of LSD ingested are reported with increasing frequency. What triggers these trips and how long they continue to occur is still unclear.

DMT is prepared as a liquid. Tobacco or marijuana can be dipped into the liquid preparation, dried, and smoked in a pipe or a "reefer." The effects are milder than those of LSD, but DMT tends to give a greater proportion of visual illusions. The onset is more rapid and lasts only about 30 minutes. You can, no doubt, imagine the effect this may have when it is combined with marijuana.

STP stands for "Serenity, Tranquillity and Peace." It is related chemically to the amphetamines and mescaline and its effects are more intense and prolonged than those of LSD. It has been called by the unflattering name "mega-hallucinogen." Its effects may last up to 72 hours or five days in a dose as small as 10 micrograms. The complications are great, both psychologically and physiologically. Abdominal discomfort, blurred vision, elevations of temperature and delirium are not uncommon complications accompanying the usual psychedelic experience. Death has been reported from respiratory depression and convulsions.

Nutmeg has been known for a long time among sailors and even prisoners as a psychedelic agent. The experience is similar to LSD. The onset of effects is usually two to five hours after ingestion and may last 12 to 24 hours. Again, the side effects of malaise, headache, dry mouth, dizziness and abdominal discomfort usually discourage most people after their first or second experience.

Morning glory seeds contain two alkaloids of lysergic acid as the active ingredients. Only two varieties of the plant produce psychedelic effects. Many young adolescents who eat morning glory seeds find either no effect at all or a bum trip since the Agriculture Department is spraying them with insecticides and nauseating chemicals to discourage their ingestion.

Marijuana

The last, but certainly not least of the hallucinogens is marijuana (*Cannabis sativa*). It is known by a variety of names—"pot," "hashish," "gagga," "weed," "grass" and others. Marijuana has been written about for thousands of years but has no known use in medical practice throughout the world, including the United States. The chemical compound THC (tetra-

hydrocannabinol) produces the euphoria or "high." It is only one of the cannabols found in the resin, which comes from the flower of the female plant and the leaves near the flower. The chemical activity in marijuana depends on the climatic conditions where it is growing. The ideal climate is tropical or semi-tropical as is found in India and Mexico. Marijuana grown in the U.S. has very little activity. THC has been recently synthesized and is now a greater source for research with responsible investigators.

In this country marijuana is usually smoked, although it may be eaten or drunk. The cigarettes are generally referred to as "joints," "sticks," or "reefers" and are a mixture of the leaves and the flowering top of the cannabis plant. The set, or the people involved, and the setting in which the drug is smoked will influence the experience a great deal. Marijuana has its effects on the central nervous system, although the actual mode of action is still unclear. After inhaling the smoke, the user may begin to get a high within a matter of minutes, depending upon how much is smoked and the quality of the mixture. The effects may last from three to five hours. Smokers usually describe a feeling of well-being, euphoria, or an inner joy, and distortion of time, space and depth perception. In compatible groups people may enjoy singing, laughing or talking about irrelevant issues. An experienced smoker may become quite anxious, paranoid, have panic reactions, or experience depression again depending on his personality. The dangers of a prolonged reaction, called psychosis, seen with LSD are small with marijuana in this country. In India the incidence is much higher. Hallucinations, both auditory and visual, have been reported although these are also unusual.

There is no physical dependence and there are no withdrawal symptoms, but there is very definitely psychological dependence in the chronic user of marijuana. This is particularly true of the person who uses it as an escape from a psychological conflict such as depression, anxiety or a sense of failure. It is the chronic user who will frequently become victimized by the pusher, who is anxious to get him on more expensive drugs such as the narcotics. The extent of physiological dependence on marijuana is not generally known, for several reasons. The quality of marijuana will vary from batch to batch. Where it was grown, how it was mixed, how it is being dispensed, and whether it is being laced with other drugs such as DMT are factors affecting studies and statistics.

The laws concerning possession of small amounts, smoking or selling marijuana are a great source of contention among adolescents and young adults. On the basis of *available* knowledge of the potential hazards, the answer is clearly that these laws should be re-evaluated in terms of their harshness and penalties. Should marijuana be legalized? This is perhaps

the most difficult question of all to answer for there is a tremendous amount of emotionalism and puritanical prejudice involved on both sides. There is no way to answer this as a flat yes or no. I do feel that laws imposing penalties out of proportion to the seriousness of the offense contribute to disregard for the law. If the younger generation continues to find inequities or inaccuracies in one small area such as the laws regarding marijuana, they will disbelieve totally and fail to heed other warnings which are well founded.

Adolescents and the Use of Drugs

The next major question is: Why do adolescents become involved with the drug scene? It is alarming when we consider the large numbers of intelligent youth who are involved. Four years ago the use of drugs by young people was a casual topic of conversation. Today it is a major symptom of youth's turmoil. It can be related to a multitude of factors in our society such as the current social conditions, the international and national dilemmas, the ineffectiveness of many people youth look to as authority figures, and our affluence. As a result of youth's frustration and confusion they criticize all of society and what it represents, and a number turn to drugs as a false instrument to find their values. Taking drugs is in a sense a form of acting out behavior. Dr. Graham Blaine, who is chief of psychiatry at Harvard University Health Services, suggested that drug takers be divided into three very broad categories, realizing however, that not everyone is going to fit into a category. These categories would be the experience seeker, the oblivion seeker and the personality change seeker.

The *experience seekers* are the majority of young drug takers and comprise approximately 80 percent of the total number involved. The affluence we enjoy has provided much in the way of luxury items and free time. Free time leads to boredom, and in an attempt to overcome this boredom many seek adventure by taking drugs. Most adolescents have a need for peer affiliation and participation. The use of drugs, and the magic that it brings, proves the user is "in" and not a chicken. The experience seeker may be a student who is lonely, an outsider who is on the fringes and wants to be popular and admired. By distributing drugs he feels important, wanted or needed by the group of people he is supplying. It may also be the president of the class or the captain of a football team who derives some strange inner gratification by "turning on" others. The danger of being arrested is an adventure and many find this exciting. At the same time, breaking the law or being arrested demonstrates strength by defying authority.

Many experience seekers are taking drugs because they are angry or feel resentment toward authority. Because of real or fancied rejection by parents, they

break rules by using drugs to upset their elders and get attention. This attention may not be the most desirable, but it is certainly better than no attention at all. Some of these young people are obviously asking for arrest and punishment, thereby bringing disgrace to their families. This form of acting-out is on an unconscious level.

The glue sniffer and many of the methadrine takers are in the experience-seeking group. These younger adolescents are somewhat lethargic or lacking in emotion. The "shock" or "rush" reassures them of their ability to experience emotion.

A large number of students, particularly the marijuana smokers, are trying to prove that the concern about the harmfulness of this drug is unfounded. The public smoke-ins where marijuana is openly smoked and offered to the police are ways of mocking the official attitude about law enforcement. A few experience seekers are hoping to find the meaning of life with the hallucinogenic drugs. They anticipate a vision that will provide an answer to the dull or drab existence they have had up to the present time.

The second group, *oblivion seekers*, are in some ways more serious extensions of the experience seekers. They take drugs for a year or more and perhaps have adopted the philosophy of Dr. Timothy Leary, "turn on, tune in, to drop out." By this it is meant to turn on with LSD, speed or marijuana, tune in with the world that transcends this one, and having tuned in, to drop out of this world. It is perplexing to understand why these young people from middle class and upper middle class families choose to turn on, particularly when the pressures they talk about from home, school and community do not seem to be strong enough to warrant this type of action. Often their explanations are voiced as disgust with the materialism and hypocrisy they see around them.

A closer look at some who are turning on in order to drop out frequently reveals in them outward expressions and feelings of contempt but underlying feelings of fear, inadequacy and incompetence. Perhaps it is because they are unable to meet not only their own expectations, but those of their parents and their society.

The drug scene then, through its illusions and pseudo-hallucinations, transports them out of this world into the false security of the psychedelic world. There they feel free of fear and failure which bothered them consciously or unconsciously before they joined the drug scene. In others there is a struggle for independence which they feel can only be obtained by repeated drug experience. The results in the habituated user, unfortunately, are only dulled senses that make his confused world a little more tolerable. The oblivion seekers take greater risks and are more likely to accidentally become the victims of overdoses and medical complications.

The third group includes the *personality change-seekers*. Many of these young people are trying to bring about basic changes in their personalities. They are the ones who are most likely to become addicted and permanently incapacitated by repeated drug use. They feel compelled to combine drugs and increase dosages to overcome frustration and disappointment. Unfortunately, their goals are never reached, for continued participation brings rapid deterioration. They are usually identified and labeled as the freak outs or the kooks. The psychiatrically ill person, such as the psychopath, severe neurotic and schizophrenic, often joins these ranks. This group, which comprises approximately 3 to 5 percent of drug users, is probably responsible for most of the crimes and violence that occur in various drug communities around the country.

There are other young people who do not belong in these categories and should be mentioned. The "new morality" has brought changes in our youth's sexual activities. Sexual intercourse tends to be experienced at earlier ages by greater numbers. This brings pressure for performance at a time when most young people are physically or emotionally incapable of such experiences. The result may be feelings of sexual abnormality, which not infrequently result in a search for drugs to make them sexually more mature. There is no drug that is a true aphrodisiac.

Members of one additional group claim they are imitating the use of tranquilizers by their parents. These mood elevators and stabilizers are prescribed and dispensed in large numbers and are readily available in many homes. This, undoubtedly, leads a few of the young to seek similar peace of mind through drugs such as marijuana, rather than taking their parents' chemical escapes. Perhaps it goes beyond this, for in our society we live with "the myth of the magic of the drug."

Conclusions and Recommendations

This presents a rather bleak picture; we have good reason to be concerned about the sale and use of drugs among high school, college students and young adults. There are measures that can be taken to remedy these problems, but they are not simple. As I have mentioned, drug abuse is only a symptom. These symptoms do not always stem from individual home environments but from society as well.

1. Education is of primary importance. Educational programs should include factual knowledge of the risks involved, and what we do and do not know about the long and short term effects of drugs and the medical complications. This education is directed at those who are involved and those contemplating taking drugs. It will also satisfy the curiosity of a few who may not need to try drugs once they know the true facts about them. More important than bringing

education to the students, is the instruction of faculty and administrators. Young people who are indecisive will turn to respected elders for advice. If they find ignorance or get false information, they will not heed any further advice or warnings from these individuals. Any state, federal or school sponsored educational programs should include teachers, guidance counselors, principals and parents within the scope of their instruction.

2. Further research is being done by many responsible investigators concerning the physiological and psychological effects of LSD, marijuana and the newer synthetics. Our present suspicions about the long term effects of drugs can be proved or disproved only by sound and thorough investigation.

3. Looking for adventures or challenges is 'by nature one of adolescent's most noteworthy traits. Community centers for youth, work in local community mental hospitals, or tutoring programs in underprivileged areas can be just as exciting and challenging as joining the drug scene. This approach can have a doubly beneficial effect. Tutorial programs in the ghettos provide knowledge and understanding which help to relieve racial tension and environmental conditions contributing to drug abuse.

I would like to close by quoting Dr. Graham Blaine's book (1967), *Youth and the Hazards of Affluence*. "More than providing these essentials is the willingness on our part to try to understand and respond to the unspoken demand which comes from the young. These demands are for firmness, consistency and respect from parents and teachers. These are so often covered over by the belligerent request for unlimited freedom, by expectations that we tolerate ridiculous extremes in dress and behavior, and by surly defiance, that we have missed the message that lies beneath. We must learn to translate the language of the adolescent if we are to understand him. His true message is often the opposite of what his words and actions seem to imply. He tells us so often and so clearly to leave him alone, but at heart he may want us to pay attention. The students at Berkeley are demanding freedom at one moment and asking for more personal interest and authority in the next. There is no way to achieve a permanent harmony between the generations, but in today's society is wide room for improvement."

Reference

Blaine GB Jr: *Youth and the Hazards of Affluence*. New York, Harper & Row, 1967, p 139