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The continued public interest in the problem of drug addiction warrants a review and classification of some basic concepts such as the definition of drug addiction, the distinction between narcotic drugs and other drugs, the effects of narcotic drugs, the treatment of drug addicts, and some general principles of prevention.

1. DEFINITIONS

Strictly speaking, anyone who for any reason makes it a habit to take medicinal substances into his body might be considered a drug addict. Obviously, this interpretation is entirely too liberal since it includes individuals who indulge in relatively harmless drugs such as vitamins, tonics, and laxatives. It also includes individuals who have a legitimate reason for taking drugs, for example, a dying cancer patient suffering from intense pain. Therefore, the popular conception of a drug addict is a person who, for no compelling medical reason, habitually uses medicinal substances that are considered harmful to him, socially undesirable, or both.

Professional views are best expressed by the Expert Committee on Drugs Liable to Produce Addiction of the World Health Organization who drafted the following definitions:

Drug addiction is a state of periodic or chronic intoxication, detrimental to the individual and to society, produced by the repeated consumption of a drug (natural or synthetic). Its characteristics include:

(1) An overpowering desire or need (compulsion) to continue taking the drug and to obtain it by any means;
(2) A tendency to increase the dose;
(3) A psychic (psychological) and sometimes a physical dependence on the effects of the drug.[1]

Drugs falling into the proscribed category commonly include alcohol, sedatives or "sleeping pills" such as bromides and barbiturates, benzedrene and benzedrene-like drugs, and lastly the narcotic drugs or opiates. This article is concerned primarily with the narcotic drugs as defined in federal laws quoted below:

The term "addict" means any person who habitually uses any habit-forming narcotic drug as defined in this chapter so as to endanger public morals, health, safety, or welfare, or who is or has been so far addicted to the use of such habit-forming nar-

cotic drugs as to have lost the power of self-control with reference to his addiction. The term "habit-forming narcotic drug" or "narcotic" means opium and coca leaves and the innumerable alkaloids derived therefrom, the best known of these alkaloids being morphine, heroin, and codeine, obtained from opium, and cocaine derived from the coca plant; all compounds, salts, preparations, or other derivatives obtained either from the raw material or from the various alkaloids; Indian hemp and its various derivatives, compounds, and preparations, and peyote in its various forms.[2]

Subsequent provision was made for adding to the list certain synthetic drugs found to be addicting by classing them as "opiates" defined as follows:

The word "opiate" as used in this part and sub-chapter A of chapter 23 shall mean any drug (as defined in the Federal Food, Drug, and Cosmetic Act) found by the Secretary of the Treasury, after due notice and opportunity for public hearing, to have an addiction-forming or addiction-sustaining liability similar to morphine or cocaine, and proclaimed by the President to have been so found by the Secretary.[3]

Under these provisions such drugs as amidone, isoamidone, bemidone, ketobemidone, and several others have been found to be addicting.

2. Effects of Narcotic Drugs

From the standpoint of physiological effect, narcotic drugs may be classified roughly as depressants and stimulants. In general depressants decrease mental and physical activity in varying degrees to the point of deep sleep, coma, and finally death depending upon the dosage taken. The stimulants have the opposite effect sustaining activity, thwarting sleep, and masking symptoms of fatigue to the point where death may occur because of exhaustion.

Of the stimulant narcotic drugs cocaine is the best known. It is derived from the coca plant which is native to South America and has been known to its Indian population for centuries. The Indians chew the leaves of the plant to counteract the pangs of hunger and the sense of fatigue in connection with their daily labors. Addicts in the United States, however, do not chew the leaves, but take cocaine either as a snuff or preferably by intravenous injection.

Actually cocaine is not now as popular in this country as it was at the turn of the century. It may be the initial drug taken, but is soon abandoned in favor of, or used in conjunction with, one of the depressant drugs. In the recent up-surge of addiction among juveniles many individuals gave a history of starting on cocaine and later switching to heroin.

When taken intravenously cocaine produces a very pleasurable sensation described by its devotees as something akin to a sexual orgasm.

However, this effect is very fleeting and in order to recapture the thrill repeated doses of the drug must be administered. This cumulative dosage may result in certain toxic symptoms that are quite disagreeable. The individual becomes very apprehensive, breaks out in perspiration, the pupils of his eyes dilate, his hands tremble, and his voice sinks to a whisper. His body may become rigid, a condition called "freezing" by the initiates. Convulsions may occur.

Another toxic manifestation of cocaine addiction is the development of hallucinations and illusions, as well as delusions of persecution. The sensation of insects crawling over the skin is quite common. Bits of paper and other small objects are misrepresented as bugs or insects. Imaginary animals, usually small, are seen crawling about. Delusions of being followed or watched by policemen and detectives are strikingly frequent. It is this factor which makes cocaine addicts dangerous. They may attack friends or innocent bystanders under the mistaken impression that they are the hated and feared persecutors.

Cocaine satisfies all the requirements for an addiction producing drug except for physical dependence. It is true that withdrawal of the drug produces a let-down feeling comparable to an alcoholic "hangover." However, this letdown feeling does not compare with the acute misery experienced by heroin addicts when deprived of their drug.

Another stimulant narcotic drug is peyote, obtained from a species of cactus plant. Peyote is not of much significance as an addiction problem. Its use is practically confined to Southwestern Indians in this country, in connection with religious ceremonies. Its effects are very similar to cocaine except that there is a greater tendency to visual hallucinations especially of vivid colors.

The depressant narcotic drugs include Indian hemp, better known as marihuana, opium, its various derivatives and preparations, and a number of synthetic drugs whose action is similar to that of opium derivatives. For practical purposes, the most important of the depressant narcotic drugs are marihuana, heroin, and morphine.

The active principle of marihuana is contained in the resins of the hemp plant, especially in the flowering tops of the female. The drug may be taken by mouth in the form of an infusion or "tea" or in solid cakes of concentrated resins known in the Far East as hashish. However, in the Western Hemisphere the preferred method is to inhale the smoke of specially prepared cigarettes called "reefers."

There is considerable controversy about the effects of marihuana. In

general, investigators in the United States are inclined to minimize the importance of smoking marihuana, speaking of it as a relatively innocuous vice. The vast majority of smokers become mildly intoxicated without the staggering gait or incoordination observed in alcoholics. The marihuana user appears to have a good time, giggles or laughs uproariously, and experiences a peculiar distortion of the sense of time and space so that minutes seem like hours and objects look larger or smaller than ordinary. There are no unpleasant after effects; there is no physical dependence on the drug; and apparently it is easier to quit smoking marihuana than it is to stop smoking tobacco. Like alcohol, marihuana releases inhibitions which may account for the commission of crimes or the development of mental disturbances in certain predisposed individuals.

On the other hand, many law enforcement officers and scientific investigators, principally from foreign countries, are fully convinced that the use of marihuana is an evil practice dangerous to the individual as well as society.[4] At the least it deprives the individual of good judgment, leading him to commit various antisocial acts. At the worst it drives him to orgiastic sexuality, brutal assault, murder, and eventual insanity.

It is rather difficult to reconcile these opposing viewpoints. Perhaps the following factors may account for the differences of opinion:

1. Marihuana obtained in this country generally is not as potent as that obtained in other parts of the world.
2. Addicts in the United States smoke marihuana diluted with considerable air, hence the dosage must be very small compared to the dosage taken by addicts who eat the drug or drink infusions of it.
3. Experimental studies in the United States have been made in a controlled institutional environment where the subjects are not exposed to the same type of stimuli as they would be in their natural environment.
4. The prolonged use of marihuana among addicts of the United States is exceptional. In the majority of instances marihuana smoking serves in some parts of the country as the introductory step to heroin or morphine addiction, particularly in the case of juveniles.

Actually these differences of opinion are chiefly academic. There is full agreement that the use of marihuana is not to be condoned if for no other reason than its propensity to lead its victims into more serious types of addiction.

The remaining depressant narcotic drugs have very similar properties, hence a discussion of one will suffice to describe the effects of the others. Morphine is perhaps the best selection for this purpose. It is a white crystalline powder derived from opium. It may be taken by mouth, but most addicts prefer to inject it under the skin or directly into a vein.

Within a few seconds after an injection of morphine there is a flushing of the skin accompanied by a mild itching and tingling. The pupils of the eyes constrict and the mouth feels dry. As the drug takes hold the individual passes into a comfortable drowsy state called "being on the nod." There is a feeling of warmth, general well-being, freedom of pain or discomfort, and relief of tension. Imagination is given free play in pleasant reveries. Worries are forgotten. This is the bliss which the addict seeks, a state of intoxication without being drunk.

However, after a time the same dosage of the drug fails to produce this feeling of euphoria. As a consequence the user gradually steps up the dosage in an effort to recapture the original thrill. He is able to do this because he develops what is known as tolerance to the drug, that is, a comparative immunity to its toxic manifestations. For example, the safe therapeutic dose of morphine as administered in general hospitals is about 1 grain in a period of sixteen hours. But a confirmed addict may safely build up his tolerance to as much as seventy-eight grains in sixteen hours, enough to kill a dozen or more unaccustomed individuals.[5]

Another characteristic of morphine addiction is the phenomenon of physical dependence. The drug becomes as necessary as food in maintaining the physiological balance of the body. Abrupt withdrawal of the drug in a fully addicted person results in very distressing symptoms known as withdrawal sickness or the abstinence syndrome.[6] Within 12 to 24 hours after the last dose is taken the individual looks as if he had a "cold." His eyes water, his nose runs, he sneezes, yawns, and perspires freely. In addition the pupils of his eyes dilate, he loses his appetite, his muscles quiver and tremble, and goose flesh appears over the exposed parts of his body.

During the second or third day after withdrawal the symptoms become more intense. The breathing becomes more rapid, marked restlessness and insomnia sets in, fever is present, the blood pressure goes up, and the body aches all over. In severe cases there is marked weight loss, vomiting, and diarrhea. Occasionally death may occur. Yet all this misery can be ended by resuming the use of morphine or an equivalent drug.

Once an individual becomes addicted to a narcotic drug like morphine or heroin he is caught between two forces. One is the unrelenting drive to secure a supply of drugs. The other is the hostility of an organized society which impedes him in his efforts to get the drug. As a result he must develop a certain amount of cunning in finding sources of supply, raising the money to pay for the drugs, and concealing his addiction from

"square Johns" which is his name for people who do not use narcotic drugs.

The ever constant problem is raising the money to buy drugs. It costs six to fifteen dollars per day to support a habit. Obviously not many addicts earn that much in legitimate pursuits. As a consequence they must resort to begging, borrowing, or stealing to make up the difference. A common practice is the selling of narcotic drugs to other addicts in a series of transactions. The original purchaser cuts his supply in half, keeps one half for his own use, dilutes the other with milk sugar and sells it to the next addict in line. He in turn does the same with his purchase. This may be repeated several times so that the last man receives very little but milk sugar.

Since practically all their income goes for drugs, the diets of addicts are usually deficient both in quantity and quality, hence they are subject to malnutrition. Lack of sterile technique in giving themselves injections leads to abscesses and subsequent unsightly scars, the "trademark" of addicts. Not infrequently addicts contract malaria, syphilis, and other diseases through the use of a common unsterilized needle.

Assured of an adequate supply of drugs, which he is seldom, the addict is capable of carrying on normal activities. However, the depressant effect of the drug lowers his efficiency, makes him lazy and ambitionless. He prefers to be alone becoming irritated when his privacy is invaded. What social contacts he has are usually with other addicts. Sexual drive is lost.

3. Treatment

Addicts who become physically dependent on drugs cannot be treated at home or in a general hospital. They must be in a special hospital or institution which has custodial precautions to provide a drug-free environment such as certain private sanitoria, some State hospitals, and the two Federal hospitals located at Lexington, Kentucky and Fort Worth, Texas.

The first step in treatment at such an institution is withdrawal of the drug which usually takes about ten days. The basic principle of this phase of treatment is a gradual reduction in dosage so as to minimize the severity of symptoms. Currently the method of choice is to substitute methadon for the drug the addict is physically dependent on and then to gradually withdraw the methadon. Abstinence symptoms of methadon are much milder than of heroin or morphine.

The next step in treatment is the removal of psychological dependence on the drug. This is much more difficult and involves a number of

approaches such as the correction of physical defects, psychotherapy, recreational therapy, occupational therapy, vocational training, education, religious instruction, and the like. An important factor is time, time enough in a drug free environment to become accustomed to living without drugs. The optimum period appears to be about four to six months.[7] This may be because the body of a physically dependent person does not return to complete physiological normal for approximately six months after withdrawal.

The problem is to induce patients to remain in the hospital for the optimum time. Unless there is some provision for commitment, the majority of voluntary patients leave against medical advice. The Federal hospital at Lexington has circumvented this to a certain extent by taking advantage of a Kentucky statute called "The Blue Grass Law" which makes it a misdemeanor punishable by a one year sentence to be an addict. If a voluntary patient leaves the hospital against medical advice he will not be readmitted unless he pleads guilty to being an addict before a local court. Sentence is then suspended on condition that the addict remain in the hospital until the hospital staff decides he is cured. He can demand his release, but if he does the local officials are notified and he is sent to jail to serve the suspended sentence. Needless to say, the addict prefers the hospital to a jail.

Of course, many addicts are not discovered until they commit offenses in the course of their addiction for which they can be convicted. Federal offenders may be sent to the Lexington and Fort Worth hospitals for treatment while they serve their sentences. Likewise, they may be placed on probation with the proviso that they submit to hospital treatment for as long as the medical staff deems necessary. Probation is an effective device since it insures supervision after release from the hospital. Experience has shown that most addicts who relapse do so within the first two years after release.[8] Supervision during this period reinforces continued abstinence. Moreover, the patient can be returned for further treatment if he should relapse.

Addicts who are not physically dependent on drugs may be treated extramurally making use of whatever community facilities are available in providing needed rehabilitative services. The emphasis would be on removing the psychological dependence on drugs using the various approaches mentioned in the treatment of intramural patients after the removal of physical dependence.

Adequate supervision is essential in such a program. The supervisor must have a good knowledge of community resources so that he can

coordinate the various services required. He must also be a sympathetic listener and act as a father surrogate for his charge. Probation officers are well trained in this role and should assume it in the case of addicts who come into conflict with the law. But there are many other sources for supervisors such as social workers, counselors, and various reputable citizens who volunteer their services.

Another essential is to keep the individual busy by finding a job for him, sending him to school, or both, by providing wholesome recreational outlets, and by encouraging church affiliation. Another possibility is joining an Addicts Anonymous Group, which is governed by the same principles as Alcoholics Anonymous. If an Addicts Anonymous Group is not available, a chapter may be started or possibly former addicts may be accepted in a local chapter of Alcoholics Anonymous.

4. Prevention

There are two basic approaches to prevention. One is to protect the individual from coming into illegitimate contact with the drug. The other is to strengthen the individual's resistance to becoming an addict. The first is chiefly a function of law enforcement agencies. Legal machinery exists for the control of production and distribution of narcotic drugs in the form of international agreements, Federal laws, and uniform State laws now adopted by forty-two States.[9] However, it is too much to expect law enforcement agencies to have complete control over the sources of supply. Their effectiveness can be enhanced by increasing the number of Federal agents and by supplementing them with trained officers at the State and local level.

There is a growing demand for stiffer penalties to discourage narcotic drug peddlers. However, it is questionable whether punishment is much of a deterrent to crime. In China even the death penalty failed to reduce the prevalence of narcotic drug addiction to any extent. Nevertheless, longer sentences serve one good purpose. It keeps the peddlers out of circulation and makes it harder for them to reestablish connections when they get out. The danger is that a youthful addict who makes a sale in order to finance his own habit may get the same penalty as the non-addict peddler who is in the business for profit. Some distinction should be made.

Strengthening resistance to addiction entails a knowledge of the personalities of addicts and the causes of their addiction. Such knowledge is still obscure, but a few observations can be made for what they are worth. There is one group of addicts who rationalize their

addiction on the basis of seeking relief for physical discomfort which many range from extreme pain to a state of fatigue. On the face of it this seems to be a substantial excuse. Nevertheless there are very few individuals who have a painful disease necessitating the continuous administration of narcotic drugs, outside of terminal cases of cancer. The majority of medically addicted individuals find the drug supplies something that has been missing in their lives, so that even when the original physical cause for addiction has been removed and the patients withdrawn from drugs, they relapse in order to "feel normal." Morphine must do something more for these individuals than simply relieve pain. There is another group who start out as alcoholics. They learn that morphine will relieve a "hang-over." The result is that morphine is taken at closer and closer intervals until finally the drug displaces the alcohol completely. These are the individuals described by Kolb as inebriate personalities.[10]

By far the largest group, however, take to the use of drugs simply through curiosity and association with addicts. They are recruited from the younger elements of the population. Periodically the public becomes aware of this and becomes greatly alarmed about the corruption of our youth. We are passing through such a phase now.

Actually the danger of addiction for the rank and file of the younger generation is negligible. Drug peddlers, even those who are addicted themselves, have to exercise care in whom they approach. Their prospects are found in a small fringe of maladjusted young people who are constantly seeking new thrills, adventure, excitement, and release from uninteresting reality. They are the individuals who replenish the ranks of all types of delinquents and meet the drug peddler more than half way in taking up the use of drugs.

It is possible for a normal individual to become accidentally addicted, but it happens very rarely. Most addicts are either psychoneurotic or have a sociopathic personality. A high percentage come from broken homes or homes where there is little love or affection. Frequently there is a history of a tyrannical father and an overindulgent mother. Many belong to minority groups living in deteriorated metropolitan areas.

Inasmuch as a substantial number of addicts are introduced to narcotic drugs during the course of an illness, one avenue of prevention is an educational program for the medical profession emphasizing the precautions to be taken in administering narcotic drugs, particularly to neurotic and alcoholic patients. The least addicting drugs should be used whenever possible. Dosages should be minimum and spaced at

maximum intervals consistent with relieving pain. The administration of the drug should be terminated as soon as practicable.

The big problem is to reach the minority group of young hedonists who make up the bulk of initiates to drug addiction. Any educational program directed at them must also be directed at their more law-abiding contemporaries. Some authorities question the value of such a program on the grounds that it may stimulate curiosity rather than allay it. Furthermore, the susceptible group is notoriously unresponsive to any kind of advice or appeal to reason. Nevertheless, publicity has proven valuable in attacking other health and social problems and therefore deserves a try in this instance as well.

The approach, though, must be carefully planned. Material must be adapted to the cultural and sub-cultural groups to which it is directed. Pre-testing of material should be done to ascertain whether or not it does, in fact, increase curiosity rather than combat the use of drugs. All but the most general material should be disseminated through organizations such as the schools, churches, social agencies, etc., so that the effect of the information may be continuously assessed and necessary modifications made.

Providing wholesome recreational facilities is another community approach to the problem. Life is rather drab for many adolescents, especially those who live in slum areas of our larger cities. They want fun and excitement. If acceptable facilities are not available then they will seek an outlet in questionable places where they are most likely to come in contact with vices of every description.

Since most addicts have some sort of personality disorder, it follows that the basic attack on the problem of addiction is to prevent the development of such disorders. It is the current belief that most of these result from frustrated drives for security, recognition, and affection, particularly during childhood. Granting this, attention must be focused on preparing parents and prospective parents for their roles in shaping the personalities of their children.

REFERENCES

1. WORLD HEALTH ORG. TECHN. REP. SER. 1950, 21:6.1-6.4.
2. Code of Laws of the United States of America, Section 221, Title 21.
3. U.S.C.A., Title 26, 3228(f).
4. WOLFF, PABLO OSVALDO. MARIHUANA IN LATIN AMERICA THE THREAT IT CONSTITUTES. The Linacre Press, Inc., Washington 6, D. C., (1949), 55 pages.
5. ISBELL, HARRIS. *What to know about drug addiction.* PUB. HEALTH SERVICE PUBLICATION No. 94, U. S. Govt. Print. Off., Washington, D. C., (1951).
6. HIMMELSBACH, C. K., *The Morphine abstinence syndrome, its nature and treatment,* ANNALS OF INT. MED., 15:829-839 (Nov. 1941).

7. PESCOR, M. J., *Time element in the treatment of drug addiction.* AM. J. PSYCHIAT. 99:435-438 (Nov. 1942).
8. PESCOR, M. J., *Follow-up study of treated narcotic drug addicts.* Supp. 170, PUB. HEALTH REPORTS, U. S. Govt. Printing Office, Washington, D. C., (1943).
9. ANSLINGER, HARRY J., *Control of the traffic in narcotic drugs.* THE MERCK REPORT 60:4:33-38 (Oct. 1951).
10. KOLB, LAURENCE. *Types and Characteristics of Drug Addicts.* MENT. HYG., 9:300-313 (April 1925).