TREATMENT AND CARE
OF DRUG ADDICTS

Report of a Study Group

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STUDY GROUP ON THE TREATMENT AND CARE
OF DRUG ADDICTS *

Geneva, 19-24 November 1956

Members :

Dr L. Binswanger, Formerly Chief Physician, Bellevue Sanatorium, Kreuzlingen, Thurgau, Switzerland
Dr N. B. Eddy, Chief, Section on Analgesics, Division of Chemistry, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health (Public Health Service), Bethesda, Md., USA

Dr Tsung-Yi Lin, Professor of Psychiatry, Chairman of the Department of Neurology and Psychiatry, National Taiwan University Medical College and Hospital, Taipei, Taiwan

Dr J. S. Saleh, Minister of Health, Teheran, Iran

Dr G. K. Sütürup, Superintendent, Institution for Criminal Psychopaths, Herstedvester, Glostrup, Copenhagen, Denmark (Chairman)

Dr S. B. Worth, Professor of Psychiatry and Neurology, New York University, Bellevue Medical Center, New York, N.Y., USA (Rapporteur)

Representative of the United Nations :

Mr G. Yates, Director, Division of Narcotic Drugs, United Nations, Geneva

Representative of the Permanent Central Opium Board and the Drug Supervisory Body :

Mr L. Atzenwiler, Secretary of these two bodies, Geneva

Consultant :

Dr K. W. Chapman, Consultant on Narcotic Addiction, National Institute of Mental Health, National Institutes of Health (Public Health Service), Bethesda, Md., USA

Secretariat :

Dr H. Halbach, Chief, Addiction-Producing Drugs Section, WHO

Dr E. E. Krapf, Chief, Mental Health Section, WHO

* Invited but unable to attend :

Sir Ram Nath Chopra, Director, Drug Research Laboratories, Srinagar and Jammu Tawi, Kashmir

Dr A. Lewis, Professor of Psychiatry, Institute of Psychiatry, Maudsley Hospital, London, England

Dr Ahmed Wagdi, Sub-Director General, Department of Mental Diseases, Ministry of Public Health, Cairo, Egypt

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TREATMENT AND CARE OF DRUG ADDICTS

Report of a Study Group

The session of the Study Group on the Treatment and Care of Drug Addicts was opened by Dr P. Dorolle, Deputy Director-General of the World Health Organization. As the medical adviser to the United Nations’ organs concerned with the international control of narcotic drugs, the Organization welcomed the opportunity of broadening the scope of its activity by adding the study of the medical treatment and after-care of drug addicts to its functions of determining the addiction liability of drugs as laid down in the relevant international conventions. He thanked the members for their willingness to advise the Organization in its first approach to the subject.

1. INTRODUCTION

The task set the Study Group was to examine the scientific knowledge and clinical experience on the treatment and care of drug addicts. The goal was the determination of principles which might be applied to the management of addicts with different etiology and pathology and in various cultural surroundings.

In order to achieve practical results it was agreed that little of additional value would be accomplished in discussing definitions of addiction. It was recognized that there are many and widely divergent views on what constitutes an addiction; and the point at which drug use becomes drug addiction depends to quite an extent on the orientation of the observer, that is to say, whether he looks at it from, for instance, the pharmacological, psychological, forensic, social, political or moral point of view. While physicians and scientists are mainly concerned with those characteristics of drug addiction which affect the individual’s health and welfare, society is less interested in these effects unless they interfere with social productivity or have an adverse effect on other members of society, resulting, for instance, in antisocial acts. Therefore, the Study Group accepted the public health concept according to which an addict is a person who habitually and compulsively uses any narcotic drug so as directly to endanger his own or others’ health, safety, or welfare.
It was also recognized that, because of the many kinds of drugs used and abused, there was need for a delimitation of the scope of drugs for inclusion in this study to opium, opium alkaloids and substances derived therefrom, synthetic substances with morphine-like characteristics, and cannabis substances. These drugs have in common wide usage by large segments of the world population, depressant effects on neuro-physiological and psychical mechanisms, and individual and social deteriorative effects such as dullness, apathy, self-neglect and physical debilitation. They differ in the matter of the resultant physical dependence, which is limited to the opiate group and to morphine-like substances.

While recognizing that prevention is an important preliminary aspect of care and treatment, it was agreed that this general field should be left for a separate subsequent study and that the consideration of prevention be confined to the problem of re-addiction (relapse) of addicts who are undergoing or have undergone treatment.

Finally, the Study Group wished to emphasize very strongly that the treatment of drug addicts is a medical problem and that drug addicts are patients.

2. THE ADDICT

It is apparently not possible to describe the addict as a well-defined type. Although much could be, and has been, written about the etiology and pathology of drug addiction, unfortunately very little has been proved to have a firm scientific basis. (Some salient points concerning the etiology and pathology are mentioned in the Annex.) Of greatest practical value, therefore, in connexion with the treatment and care of the addicts is perhaps at present their classification according to amenability to treatment.

Fortunately, a great number of addicts would come under the category of easy amenability to treatment. This group would comprise those persons who are exposed to some more or less accidental stress, such as exhaustion, hunger and poverty, and would predominate in countries where the drugs used are relatively easily available and the cost is not prohibitive. Here mass methods of treatment may be highly successful. In many cases good results may fairly easily be obtained where the addiction is mainly due to social, environmental or cultural factors. Among these may be included the historical and cultural acceptance of the use of certain drugs by some segments of the population in a few countries. It has been observed, in at least one country, that forceful measures against the widespread use of drugs, including propaganda and education, has in a short space of time changed the general attitude of tolerance to one
of opprobrium. In other countries, where the use of drugs is less general, there may be groups or gangs, frequently of an asocial or antisocial character, where drug-taking or addiction is a prerequisite of full participation. Many such addicts would be easily amenable to treatment once removed from this subcultural influence.

The therapeutic problem is also often not too difficult where the drug addiction is the result of some episode of an illness, physical or psychological in origin, and where the main motive for taking drugs disappears once the conditioning illness has passed. This may occur, for example, in the case of a very painful disease, but also during melancholic disorders in the course of manic depressive illness. In such patients the addiction is not due to a primary personality disorder. It is, therefore, not too difficult to motivate the patient towards giving up the drug, even if the withdrawal creates physical or mental hardship, as soon as the additional motive of pain or deep depression has disappeared as a consequence of, or even without, treatment.

The group of addicts most difficult to treat, numerically smaller than the above, is composed of those who suffer from a basically pathological character structure. In these people, the more the drugs are used to solve their deep-rooted personality problems, the more malignant is the addiction. Here intensive treatment of a psychotherapeutic nature is necessary and must be based in each case on an analysis of the factors leading up to the drug addiction. Among the causative personality factors are frequently found immaturity of character development, a desire to live only in the present, a narcissistic attitude, or a destructive, even a self-destructive, tendency. The lack of a sense of meaning in life and the desire to escape from reality characterize many of this group, who often show a low capacity for dealing with frustration, anxiety and stress. Among the underlying early causes of these symptoms are found the following factors:

(a) emotional deprivation, resulting from broken homes or lack of interest shown by parents in their children;

(b) over-indulgence and lack of disciplinary training;

(c) difficulty for the child in identifying with a parental figure and forming a proper ideal—for example, in the case of broken homes, or where parents are seldom at home, or their relationship is weak;

(d) an unrealistic middle-class attitude oriented towards standards differing from the subculture to which the child belongs;

(e) distrust of authorities arising from the above.

Thus, to sum up, these drug addicts may frequently be found to suffer from poor ego and superego development—a fact which also explains a
certain tendency towards unreliability and untrustworthiness which can be observed among them.

Viewed according to amenability to treatment, drug addiction appears to have a much less discouraging prognosis than is generally believed when only the last-mentioned group is focused into the centre of attention.

It should be remembered, however, that dynamic transitions may occur between the above-mentioned groups. The individual who is considered a severe therapeutic problem because of his serious personality conflicts might, with proper management, become reasonably well adjusted and need no more drugs; on the other hand, an apparently amenable patient might, under further stress, become fixed in his pattern of the use of drugs as a problem-solving device.

3. CIRCUMSTANCES OF TREATMENT

The basic requirement for effective treatment is that there must be an effective limitation in the supply of drugs. In co-ordination with the United Nations organs concerned with the international control of narcotic drugs, this problem is being dealt with most vigorously in many countries, but it is pointed out that an individual country is much hindered in securing this limitation if neighbouring countries have not a similar policy.

The legal circumstances involved are of great importance for the success of treatment programmes. Some details of legislative provisions in various countries are given in the Annex; in a number of countries provisions exist but are little used in practice. While a few mature patients should be allowed to submit voluntarily to treatment, most addicts will require some degree of coercion—preferably some kind of civil commitment to medical treatment—to induce them to desist from what is to them often a pleasurable experience.

The possible methods of applying coercion will vary with the laws and procedures of the countries concerned. However, they should be used only in accordance with the special needs of the programme as outlined by the physician in charge; they will be discussed at the appropriate points to follow.

In certain societies and countries the addict may by law be classed as a criminal. In such instances he should, if possible, have all the benefits of adequate medical care as outlined later. Where feasible, methods should be devised within the regulations for penal servitude for the use
of graded series of security control, using, for example, parole and probationary measures in a parallel fashion to that of treatment through civil commitment.

For an ideal programme to be carried out, adequate facilities for treatment are, of course, essential. It is realized that this may not be possible in all countries; nevertheless the general principles of treatment can be followed.

4. GENERAL PRINCIPLES OF TREATMENT

It cannot be too strongly emphasized that the first principle of the treatment of drug addicts is that they should be looked upon as patients, that is to say, treated medically and not punitively. Moreover, if effective and lasting results are to be obtained, at least with the addicts outlined above who do not respond easily to simple or mass methods, treatment must be based upon a study of the individual personality. The main characteristic of treatment will therefore be its psychotherapeutic nature and it will not be fundamentally different from that used in the psychotherapeutic management of other personality problems. Such treatment should aim at giving the patient more insight into his problems, some understanding of the unrealistic character of his neurotic fears and wishes and a better judgement of situations, thus enabling him better to respond to the unavoidable stress of life.

Although it will frequently be necessary to resort to coercion before the patient can be made to undergo treatment, as far as possible he should be allowed to make, or to feel he has made, a free decision, so that from the beginning some degree of co-operation may be obtained and treatment may be based on a sense of trust. This will be partly dependent, of course, on the prognostic category of the patient, the attitude of the surrounding society (which may assist in the motivation of the patient to obtain treatment), the propaganda value of results already obtained, and, of course, the attitude and judgement of the physician.

There was complete agreement that the goal of treatment of the addict is to assist him to achieve a feeling of relative well-being and satisfaction and good interpersonal adjustment without drugs. It should be very clearly understood that the maintenance of drug addiction is not treatment. Nevertheless, under certain circumstances complete withdrawal of the drug of addiction might be deferred.

There are well recognized obvious medical conditions, such as severe chronic or terminal illnesses, where continued administration of drugs is indicated. In addition, experience with the problems of addiction in several countries and newer knowledge of the psychology of addiction leads the
medical profession to believe that in exceptional cases it is within the
limits of good medical practice to administer drugs over continuing periods
of time. In any case the physician, recognizing the presence of addiction,
should not embark upon continuation of the drug of addiction without
having adequate previous consultation and periodic review with competent
medical authority.

5. TREATMENT PROGRAMMES

Comprehensive medical treatment of the drug addict should be total—
that is, somatic, psychological and social rehabilitation of the individual.
(Further information on treatment programmes will be found in the Annex.)
The treatment consists of three phases—the preparatory phase, withdrawal,
and continued treatment—all of which should be part of a continuing
process which may have to extend over several years. Experience has shown
that when the addict continues under the care of one physician and his
team of workers, it is much easier to check his progress or his relapses than
if he comes under the supervision of a variety of people working without
relation to one another.

The preparatory phase of treatment should include an assessment of
the drug used, the degree and duration of addiction, and the addict's
personality structure and problems. Reference is made in the section on
the addict (see above) to personality structure and problems and to some
of the underlying causes. In many cases careful investigation of the
addict's social and family situation and relationship will assist not only
in the above assessment, but also in ascertaining how far it can be used
to further treatment. At this stage a plan of treatment should be outlined
and discussed with the patient in order to allay his anxiety and in the hope
of promoting his motivation to recovery. The physician-patient relation-
ship established at this point may colour and influence the rest of the
treatment programme.

As withdrawal is often painful and may cause misery and frustration,
it must be very skilfully carried out. Whatever the method of treatment,
the first responsibility of the physician is to carry through withdrawal
as quickly and humanely as possible. On the other hand, undue emphasis
and concern over methodology and a lack of understanding of the physi-
ology of the withdrawal syndrome may distort this phase out of proportion
to its proper value. One should not confuse withdrawal with the total
treatment of the patient. Indeed, one may say that the process of with-
drawal is self-limiting, providing that the drug is withdrawn and the treat-
ment not so strenuous as to affect the patient adversely.

Since cannabis substances do not produce physical dependence, they
can be withdrawn abruptly without the appearance of physical symptoms
and hence without somatic damage for the addicted individual. Therefore, the following comments relate only to opium, opiates, and morphine-like synthetic substances.

There are two general categories of withdrawal: (1) the gradual withdrawal of narcotics with varying degrees of rapidity, and (2) the abrupt withdrawal of narcotics.

1. The method of gradual withdrawal can be subdivided into:

(a) the prolonged gradual withdrawal over a period of weeks or months, using the actual drug of addiction; supportive therapy may include such substances as barbiturates, bromides, scopolamine, hyoscyamus, atropine and more recently chlorpromazine, reserpine and meprobamate;

(b) the rapid withdrawal of narcotics, which is usually accomplished in 7 to 14 days; supplemental therapy may include the above 1 (a) substances;

(c) the substitution for the drug of addiction of other narcotics, the withdrawal of which entails less severe symptoms than the withdrawal of the drug of original addiction.

2. The methods of abrupt withdrawal include:

(a) abrupt cessation of the administration of narcotics or any other drug; supportive therapy, such as intravenous fluids, cardiovascular stimulants, etc., may be used in cases of severe collapse besides other therapeutic measures to provide relief of symptoms;

(b) as above in 2 (a), except that other non-narcotic substances may be used, such as barbiturates, calcium compounds, scopolamine, hyoscyamus, chlorpromazine, reserpine, and meprobamate, the common feature of which is to mask the symptoms and signs of withdrawal;

(c) as above in 2 (a), except that electroshock or insulin shock is periodically induced.

Of the methods of withdrawal of opium, opiates or morphine-like synthetic drugs, the methadone substitution technique was considered by the majority of the group to be the most effective, simple and easy to carry out. At the request of several members of the group, a brief outline of this method is given.1

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1 The patient is given, depending on the severity of withdrawal signs, up to 20 mg of methadone (either orally or hypodermically) three times a day. After the first day the methadone is rapidly reduced to zero over a period of 3-10 days. This method requires considerable experience in the evaluation of withdrawal signs and symptoms and should be used with caution (Vogel, U. H., Isbell, H. & Chapman, K. W. (1948) J. Amer. med. Ass., 138, 1019).
With reference to the so-called "masking treatment", with, for instance, barbiturates, chlorpromazine, etc. (see above)—which often make the withdrawal unnecessarily dangerous, particularly so in view of the relatively low risks involved in the methadone substitution technique—although these drugs may be useful after withdrawal from opiates has been completed, the Study Group also recognized that there are drugs on the market said to minimize the withdrawal symptoms in a miraculous way. For the cure of addicts "patented" treatments and medicines have also been brought out, which may include a variety of drugs of no or negligible specific therapeutic value. These methods have not been substantiated by carefully controlled scientific clinical experiment.

During or shortly after the withdrawal period, efforts should be instituted to correct any remediable somatic diseases or abnormalities. It is possible that the institution of such corrective procedures may properly delay the complete withdrawal until a more appropriate time (e.g., severe cardiac distress, bronchiogenic asthma, etc.)

As soon as possible the continued treatment stage should be started. This phase is the most time-consuming, at times frustrating and yet the most important. The aim of continued treatment is to rehabilitate the addict to a degree which makes it possible for him to withstand the normal wear and tear of life without having recourse to the use of drugs.

In many patients the sudden release from drug enslavement leads to overconfidence on the one hand, or may be so discouraging and unrewarding on the other that if emotional support is not provided by the physician, these patients will fail to continue in therapy. Experience has shown that during this critical period, which may in some cases extend over two to three years, there is a high rate of relapse. During this stage it is most important that the individual be given strengthening and moral support from his physician, from his home, friends, work and from the community, including religious institutions.

The tendency to discontinue treatment makes it necessary that measures be taken which allow the physician to exercise the necessary amount of control over the patient while at the same time allowing him to acquire an increasing degree of responsibility for his own life.

It was agreed that the most effective method of ensuring this prolonged period of treatment is through some form of civil commitment to medical care, although it was realized that methods would vary from country to country. Such commitment should continue until the patient is discharged by competent medical authority. This period of enforced treatment could be carried out both in and out of institutions in the same manner as with other psychiatric disorders. There should also be provision for those

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addicts who can voluntarily co-operate with a long-term programme without enforced commitment, as has been mentioned before.

It would seem advisable to provide a graded series of environmental conditions for treatment. The determination of the degree of security required in any given case should be left to the judgement of the physician. This grading process would extend from the maximum security of locked wards down through open wards, the "half-way house" (controlled or sheltered environment) in the community, to a controlled environment in the home, where, with the help of his private doctor or community public health officer, the former addict may finally return to self-supervision. The placing of the addict in any given step in this process would depend in some degree on the evaluation of several factors, such as his personality development, family identification, degree and extent of drug use and certain community attitudes. The placement should not depend only on his taking or not taking drugs, but should take into account the whole situation. It should be made clear that no part of the above process implies penological coercion.

Since the bulk of the time of continued treatment will often be spent outside institutions, every effort should be made to enlist all community agencies, such as social service, family welfare, mental health clinics, vocational rehabilitation, employment services, etc. to provide and assist in community adjustment for the returning addict. It is in the community that addiction starts and it is in the community that the final phase of adjustment and adaptation should occur. In some cases group psychotherapy for the addict's family will be found to be necessary.

For certain co-operative addicts, as mentioned above, there should be provision for complete treatment outside as well as inside institutions. Newer knowledge of the psychology of human behaviour, experience gained by physicians in treating addicts, and parallel experience with the treatment of other psychiatric disorders led the Study Group to agree that traditional concepts of treating the first and second phases of addiction in closed institutions only should not necessarily be followed in all cases. There should be provision, legal and otherwise, for the treatment in the home, physician's office or out-patient clinic of properly selected cases, so judged by competent medical authority.

6. SUBJECTS FOR FURTHER STUDY

There are many serious gaps in our knowledge despite the valuable contributions of many investigators over the years.

The deficiencies largely relate to a lack of utilization of techniques and application of newer knowledge in the fields of medicine (including
public health), sociology and psychology. There is, for instance, a need for:

(a) The determination of the prevalence and incidence of drug addiction in the various countries, in connexion with which it would be of value to know the kinds of drugs used (why and where); and the reasons for the cyclic fluctuations in drug abuse.

(b) The development of more precise diagnostic tools, e.g., simple field laboratory techniques for the detection of drugs in the urine.

(c) Longitudinal life studies of addicts to determine, among many others, such items as more specific and deep-going descriptive biographical data, origin and development of addiction, replacement or addition of different drugs in the course of addiction or replacement of addiction by another mental disorder, relation between personality structure and choice of drugs, and effectiveness of various methods of treatment.

All of these relate in general to the "epidemiology" of drug addiction. However, there is also a need for more information in the realm of sociology, such as:

(a) The influence of social attitudes on the development of different kinds of addicts and addiction.

(b) The effect of families and immediate social groups on the development and course of addiction.

The recent developments in psycho-pharmacology offer the possibilities of new vistas in a more precise understanding of the effects of drugs from a neurophysiological standpoint. The long-sought-for drug which will relieve physical pain without the danger of addiction may be developed from this work.

The Study Group is well aware that, apart from these items, there are many others, and that it is a problem of research design as to which can be attacked and how.
Annex

BACKGROUND INFORMATION ON THE CURRENT TREATMENT AND CARE OF DRUG ADDICTS

Etiology of addiction

The etiologies of drug addiction are protean, as varying as individuals or societies. Determinants in addiction include culture, economics, and individual health and comfort, both physical and psychic.

In some Eastern countries, for example, the average rural villager has no medical personnel, no one to turn to in illness, and no relief from pain but opium, either smoked or eaten. The chronically ill are easy prey to such drugs. On the other hand, it is not unknown in Western countries for physicians carelessly to administer narcotics and through neglect cause a patient to become an addict.

It is probable that it is through personal interest or association or group pressures that most individuals become acquainted with the drugs and find in them a pleasurable sensation which they try relentlessly to recapture.

For more than half a century, according to Terry & Pellens,1 discerning physicians have recognized addiction not as a disease in itself but rather as the symptom of an underlying psychiatric disorder reflecting the inability of the individual to make an adjustment to life without narcotics. The remarkable characteristics of morphine in reducing anxiety, possibly related to fear of pain, hunger, or sexual urges, without seriously impairing the sensorium make it a natural source of emotional relief.

The passive-aggressive may find in opiates needed support for his weak ego defences. The magical thinker finds brief escape from reality in the world of fantasies through drugs. To certain “acting-out” individuals, the taking of drugs may express their hostility towards both hated parents and their social surrogates. These by no means exhaustive examples will serve to indicate the breadth and complexity of the individual personality problems leading to drug addiction.

Other intimate problems of the individual play an important part in many circumstances. Frustration in some members of minority groups may be relieved through drugs. Hunger may be assuaged by narcotics.

The use of opium by overworked parents to quieten their hungry or troublesomely-active children is a recognized factor in several countries.

The prevailing attitudes of the cultural and social milieu will also play a part in the development of addiction as well as influence the psychiatric factors. For example, opium smoking, socially acceptable in some Eastern countries, provokes little, if any, anxiety in its habitués. Although the Koran proscribes the use of substances that alter the state of consciousness, interpretation has limited this to alcohol and by inference allowed narcotics. How valid this argument is cannot be assessed, though it is part of the folklore. In Western cultures narcotic drug use of any sort is taboo. This taboo affords possible outlets for social hostility and satisfaction of need for guilt feelings not possible in the East.

Over the years hypotheses have been advanced concerning the physiological factors in addiction. Some of these relate addiction to certain deficiencies or diatheses in neural and chemical mechanisms. Advocates of such theories feel that the “field theory” of human behaviour is insufficient to explain drug addiction in many individuals. In this regard, the work of Hoffer et al.1 proposing metabolic errors as an explanation for schizophrenia is of interest since this diagnosis is not uncommon in drug addicts. The “travellizing” drugs also offer possibilities of organic explanations, in addition to the environmental-psychological, for addiction.

Although only opiates have been considered so far, one might well discuss hashish (marihuana), which is more commonly used in Mediterranean countries and also in Latin America, where it is not uncommon in rural areas to offer visiting friends a smoke of hashish as a “highball” is offered in the West. Finding certain pleasurable sensations, the addiction-prone hashish smoker will seek a constant use to the detriment of himself as a useful citizen, husband or father. It has been hypothesized that he may be using it to negate his sexual anxiety or to heighten his sexual desire for a long-acustomed partner. On the other hand, and of etiological importance, is the fact that not all of his fellows smoke to abuse though they may be all poor, frustrated and hungry. In this connexion, it may be of interest to remember the statement of experienced Egyptian physicians that the cannabis drugs act like alcohol so far as sex is concerned—namely, to heighten the desire but inhibit the act.

In the Western cultures, marihuana is a problem largely confined to certain social groups. Periodically, delinquently-inclined groups of youths will take to smoking this drug. The dangers attendant on this activity are difficult to assess because of the many unsupported and distorted

stories of orgies which are a welter of confusion of fact and fiction. A number of youths, aware of this, are suspected of offering as an excuse for their delinquent acts the smoking of a few marihuana cigarettes.

The "why" of the use of a particular drug in a particular cultural or social setting is, if anything, less tangible than the reasons for drug use. Of probable significance are cost, availability, and custom, although certain ethnological mass psychological characteristics could play a part. The explanation of the varying use of heroin, morphine, the synthetics, and marihuana from time to time and place to place in the West is most difficult. One is tempted to formulate a concept of "psychic contagion".

It would appear that the multifactorial determinants in the field of drug use make a clearly and easily defined approach to the problem exceedingly difficult. The lack of common cultural, religious, legal and social denominators prevents easy generalizations.

Circumstances of treatment

The legal framework in which the addict is treated varies widely and seemingly without relation to culture or social attitudes. To trace the laws, written or unwritten, covering treatment is almost impossible in some countries. Much depends on the attitude of the enforcement personnel, public opinion of the drug addict, and the tolerance or lack of tolerance by the medical profession, to name a few of the obvious significant determinants.

Almost all the countries concerned with drug addiction and the treatment of the addict deal with them within the broad framework of the definition of legal use of narcotics, which is, briefly, for medical and scientific purposes only. The latter can be dismissed from consideration as their scope is fairly obvious. Medical use, on the other hand, has wide interpretation.

In the United States of America, for example, this is generally construed to include only the relief of pain and suffering incident to physical illness and not the satisfaction of addiction. Drugs may be used, however, in the withdrawal treatment of addicts, provided that no supply is given to the patient and that the treatment (with rare exceptions) is carried out in hospitals. Several European countries make a similar proscription against the support of addiction. Allowance is made for the person who (although otherwise physically fit) cannot be successfully withdrawn from drugs or who cannot make a satisfactory social adjustment without drugs.1

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1 United Kingdom of Great Britain and Northern Ireland, Home Office (1956) 
*The duties of doctors and dentists under the Dangerous Drugs Act*, London
A number of States in the United States and several other countries provide for voluntary commitment under civil laws. These procedures are rarely used in most instances. There are civil procedures which allow for voluntary commitment but, because of civil rights in some countries, there is doubt of the validity of detention of patients under such laws.

Involuntary civil commitment is possible in 37 of 48 States in the USA\(^1\) and in some European countries, for example, Germany, if the patient is dangerous to himself and others. It is used infrequently in these States although, at the same time, this method is more and more frequently recommended as a solution to the problem of treatment, since it provides an unstigmatized long-term period of care and post-hospital supervision.

In essence civil laws allow for an indefinite period of treatment in a hospital under the usual safeguards for medical records and disclosure of court records. Additional advantages include parole under conditions of supervision and treatment for long periods with the opportunity for the immediate re-hospitalization in case of relapse. However, once off drugs the addict may plead for release and, in many cases, achieve freedom. To complicate the problem further, the New York State Supreme Court has ruled, for instance, that the judge has no authority to commit an addict when there is no law against being an addict. Commitments under penal laws, on the other hand, are usually for definite periods (sentence), with limited conditions for experimental release (parole or probation), and the requirement of formal court proceedings for reinstitutionalization in case of relapse. Commitments under penal laws do not, therefore, generally allow the kind of flexibility needed in treatment, nor do they provide the kind of medical treatment required.

Commitment under penal laws for treatment of addiction is accomplished in few countries. The United States of America has been the notable example since 1935, and two special federal hospitals have been constructed for that purpose, one at Lexington, Ky., and the other at Fort Worth, Tex. Iran provides camps in several provinces for this purpose, at which the addict stays for 30 days for withdrawal and re-education. Singapore also has recently developed such a treatment centre for addicts arrested and sentenced. Several other countries have planned, though not yet built, similar hospitals for the treatment of "criminally-committed" addicts. An Egyptian law of 1928 makes such a provision as does a recent law in Greece. The majority of the countries, however, do not provide treatment facilities for convicted addicts.

An interesting combination of "criminal" and "civil" commitment has been developed in Washington, D.C., USA, for addicts not under other criminal indictment. Under this procedure addicts may be forced to get treatment at a federal hospital and continue after-care follow-up in the city of Washington for a period of two years.

Most countries recognize physical illness of any sort as justification for either special treatment or excuse from withdrawal treatment. The variations are so numerous and depend on so many diverse circumstances that it is impracticable to enumerate or explain them.

Programmes of treatment

Although many countries have expressed an interest in the development of national programmes for the treatment of addicts, few have implemented their plans. Of these few, the USA and Iran have proceeded the farthest. Since 1935, the USA has had the two previously mentioned federally owned and operated hospitals for the treatment and rehabilitation of addicts. Several of the States, notably California and New York, have developed special in-patient facilities of a similar type. California opened a hospital in 1930 and closed it in 1940; the New York hospital was opened in 1952. In addition, a few large cities, such as Chicago, Ill., and Detroit, Mich., have special ambulatory psychiatric clinics for addicts for after-hospital care. Iran, in a special programme inaugurated in November 1955, established treatment centres in its several provinces to provide withdrawal and short-term rehabilitation for addicts. In many countries, such as Argentina, Denmark and Germany, addicts are treated in State mental hospitals when beds are available. In most countries, addicts can obtain treatment either in private sanatoria or on an ambulatory basis from private physicians.

Despite the rather general acceptance of the concept that drug addiction is but a symptom of an underlying psychiatric disorder, there is still a special focus on withdrawal techniques in treatment. As Kolb & Ossenfort\(^1\) said in 1938, "the bulk of the literature on the treatment of drug addiction is concerned only with the withdrawal stage ... Some of these methods are harmful ... a large proportion are useless, and all are successful, provided the opiate is withdrawn and the treatment is not so strenuous as to kill the patient, a result that is too often achieved ". A comprehensive summary and discussion of such techniques has been made by P. O. Wolff.\(^2\) Unfortunately there is little scientific evaluation of most of these methods.

\(^1\) Kolb, L. & Ossenfort, W. F. (1938) *Sth. med. J. (Bham, Ala.)*, 31, 914
Most therapists treating addicts recognize the need for adjunctive and supportive treatment beyond somatic therapy. Reports from the literature in Europe and the USA lay repeated emphasis on the necessity of some form of psychotherapy to meet this need. Even the brief treatment programme accorded to opium smokers in Iran recognizes the need to strengthen the ego and reinforce through persuasion, law enforcement, public pressure, etc., the knowledge of the bad effects of opium. In Egypt those hospitals treating hashish smokers place great emphasis on group therapy. Reports from Germany emphasize psychotherapy to be started at the beginning of treatment and maintained for weeks in the institutions and for months afterwards on an out-patient basis.

Unfortunately, the legal circumstances of and opportunities for post-institutional treatment are unsatisfactory even in those countries with the most advanced health programmes. Except for addicts on parole or probation from criminal convictions, there is little opportunity even for post-institutional supervision, let alone treatment. Few, if any, public out-patient psychiatric clinics will handle addicts. In the USA, New York City has developed a combined in- and out-patient programme for juvenile addicts only under its public health laws. As previously mentioned, Washington, D.C., is about to provide similar services under "civil-criminal" commitment laws.

The question of the kind of psychotherapy as well as of additional therapies—vocational, occupational, etc.—has been of greater interest in the United States of America—than in most other countries. There has been some experimentation with group therapy in US Government hospitals and the New York City Juvenile Addict Hospital (Riverside Hospital), and at the Abbassia Hospital in Cairo, Egypt. Time-honoured individual therapies of the various types—e.g., supportive, psychoanalytic, psychoanalytically-oriented psychotherapy—are used by most therapists when such treatment is given. Countries with recognized problems of addiction among the unskilled and untrained have programmes of vocational education and re-education. Institutional treatment of any prolonged duration usually encompasses some form of occupational and recreational therapy.

Those addicts who are convicted of crime usually receive no special treatment and are sent to prison as are other law violators in their respective countries. In the USA and Iran a few such criminals may be sent to special hospitals or institutions for treatment. In Denmark criminal addicts are often sent to the Institution for Criminal Psychopaths for treatment.

The use of N-allylnormorphine, which produces abstinence signs in narcotic addicts, has been suggested as a check method for relapse to
addiction. This drug is dangerous in unskilled hands and if given incautiously to a heavily addicted person may produce so violent a reaction as to cause death. Furthermore, the test must be done in a hospital.

Certain countries, as mentioned before, provide for the continued use of drugs by individuals under controlled circumstances who have failed in attempted treatment. The lack of tight control over the licit dispensing of narcotic drugs in many countries makes possible the support of addiction with or without treatment. It is even possible, in many countries, for a physician to maintain an addict on drugs if he chooses under the guise of “medical treatment”. The frequency with which this occurs around the world is unknown, but it is probably not inconsiderable according to information from knowledgeable people in many nations. The individual economic resources to afford continued medical care make this possible in many cases.

Attempts to follow up large numbers of patients have been made. Thus, Pescor has studied several hundred discharges from the US Public Health Service Hospital at Lexington, Ky., by correspondence. Unverified replies indicated that 15% of the patients had been off drugs for one or more years; about 50% of the inquiries were not answered. The US Public Health Service is currently attempting by personal contact methods to find all patients discharged from Lexington in a large city. Efforts will be made to determine the addiction status as well. There will be no attempt to correlate results with treatment. A recent study on drug addicts in Vancouver, British Columbia, has been conducted by Stevenson; the results have not been published.

It has been suggested that addiction in some is but a temporary maturation problem, as in certain delinquent behaviour. Cursory reviews of US prison statistics reveal the age of the majority of addicts to be in the third or fourth decades. Observers in Iran and Egypt are under the impression that not all young addicts become old addicts. Many of these implications titillate the imagination as to the possibility that drug addiction would be “curable” if only better information were available.
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