Hospital Treatment of the Narcotic Addict

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The treatment of a hospitalized narcotic drug addict is a relatively simple and a relatively complex procedure. Treatment of the physical addiction resulting from the pharmacological properties of the opiates is relatively simple. Treatment of the psychological addiction and of the basic mental disorder is relatively complex.

This paper will discuss the treatment of addicts at the United States Public Health Service Hospital at Lexington, Kentucky, and the characteristics of the addicts as they are seen at that hospital. It must be remembered that the addicts admitted to the hospital are not necessarily representative of addicts in the United States even though about 3,000 are admitted each year. No attempt will be made to explain some of the observations because the explanation must be arrived at by studies that cannot be done at the hospital. The word addict when used in this paper means a person who is physically and psychologically addicted to an opiate drug or a synthetic drug with opiate-like properties and who is or has been a patient at the hospital.

Why hospitalize addicts? It is expensive and requires specialized facilities and scarce personnel.

The primary purpose is to provide an opportunity for treatment of the addict patient. Recovery from physical addiction can be attained in a few months in a drug-free environment with modern methods even if only passive cooperation of the patient is obtained. This is important because the continued use of narcotic drugs by an addict is in part due to physiological drives resulting from physical dependence. Hospitalization provides the opportunity to initiate or complete treatment of the psychological addiction and to begin social and vocational rehabilitation. This requires active participation of the patient. And therein lies the difficulty.

Hospitalization removes the addict from the environment that nurtured his addiction to an environment where the use of narcotic drugs is controlled. This is important not only to the person who lives in deteriorated metropolitan areas where drugs are available, but also to the nurse or physician addicts who have access to drugs as an ordinary part of their occupations.

Hospitalization is a public health measure that prevents the spread of addiction by isolating a principal agent of dissemination—the narcotic addict. A common method of introduction to the use of narcotic drugs of addicts at the hospita
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was by another addict. This was often done by nonpeddler addicts giving drugs to a nonaddict for psychological reasons that are difficult to understand. Some addicts were introduced to drugs by other addicts who sold drugs for profit used principally to support their own addiction. Isolation to prevent the spread of disease could be accomplished by means other than hospitalization but the latter has been the accepted medical procedure for isolating sick people.

Some of the patients admitted to the hospital began their addiction in the course of treatment of an illness by a physician. Hospitalization provides an opportunity to terminate the addiction in those whose initiating illness is no longer present. If the initiating illness is still present, hospitalization and treatment can result in a reduction in the dosage of narcotic drug or in most instances an elimination of the use of narcotic drugs because of improvement resulting from specific treatment of the disease.

The hospital, located about 5 miles from Lexington, Kentucky, was opened in 1935. The functional capacity is about 1,200 patients. Three hundred and fifty of the 1,300 beds are in the infirmary wards—medical, surgical, psychiatric, tuberculosis, and withdrawal. The rest of the beds are in dormitories. The buildings are surrounded by 1,050 acres of land and are less prison-like in appearance than most prisons and more prison-like than most hospitals. It is a minimum custody hospital and about four prisoners depart without authorization each year. One patient was overheard telling a newcomer who was complaining about the accommodations, “Dis place is a boid's nest on da ground.”

General Information About the U. S. Public Health Service Hospital at Lexington*

The hospital is authorized by law to treat federal prisoners and probationers, addicts committed from the District of Columbia, and voluntary patients who are addicted to narcotic drugs as defined in the federal law. These include cocaine, codeine, dihydro-morphinone (dilaudid), heroin, Indian hemp (marihuana), laudanum, meperidine (demerol), methadone (dolophine), metopon, morphine, opium, pantopon, paregoric, peyote (mes-caline), and any other narcotic drug, the sale of which is under the Federal Narcotic Act. Persons addicted to barbiturates, alcohol, or other drugs are not eligible for admission unless they are also addicted to a narcotic drug.

The prisoner addicts are sent to the hospital by the Bureau of Prisons after conviction in a federal court. Escape risks, persons with marked antisocial records prior to addiction, and persons otherwise unsuitable are not sent to the hospital. Most of the prisoners have been convicted of violating the narcotic law but some are convicted of stealing and forging government checks or other crimes.

The probationers from federal courts and committed patients from courts of the District of Columbia are required to remain in the hospital until treatment is completed and are under supervision after return to their home community. Voluntary patients are admitted at their own request if beds are available after eligible prisoners and probationers have been admitted. Federal law provides that the record of admission, treatment, and discharge of a voluntary patient shall be confidential and shall not be divulged and that such voluntary patient shall not forfeit nor abridge his rights as a citizen of the United States, nor shall such treatment be used against him in any proceedings in court. However, the hospital does not furnish refuge for known fugitives from justice. Voluntary patients able to pay are charged $8 per day for their hospitalization.

Application forms are obtained from the hospital and when completed are mailed directly to the hospital. About 250 applications are received each month. The applicant is advised by letter that either he is to report to the hospital by a certain date, that his name is being placed on a waiting list and he will be notified when a bed is available, or that he is not eligible for treatment. Separate waiting lists are maintained for men and women. Letters of authorization are sent out in the order of receipt of the applications.

The Lexington hospital accepts females from any state and males from east of the Mississippi river. Male patients from west of the river usually are treated at the United States Public Health Service Hospital in Fort Worth, Texas.

Applicants should not go to either hospital until they receive a letter of authorization. Patients who present themselves without written notification may not be admitted.

Clothing is furnished to patients while they are in the hospital. They can bring their own house slippers, black or brown shoes, solid color sweater and plain socks. Patients are required to send...
other clothing home or donate it to the hospital. Suitable clothing and a $25 gratuity are provided at the time of discharge if the prisoner is indigent. The hospital provides transportation home for prisoners, probationers, and those indigent voluntary patients who stay until hospital treatment is completed.

Patients may correspond with relatives and other persons approved by the hospital staff; outgoing letters are limited to two per week. Mail is opened and read. Patients may receive telegrams but not telephone calls. Outgoing telegrams and telephone calls are restricted to emergencies. Money sent to the hospital for deposit in a patient’s account must be in the form of certified check or postal money order. Commissary facilities at the hospital sell cigarettes, candy, and small articles purchasable with coupons from commissary books.

Men and women have quarters in separate parts of the hospital. There is no separation by race or age, of prisoners, probationers, voluntary, or District of Columbia committed patients.

The Addict Patient

The important characteristics of addiction to opiate drugs are physical and psychological addiction. Physical addiction to opiate drugs is characterized by two unique phenomena. One of these is well known—physical dependence. Repeated intake of opiate drugs results in physiological changes which produce characteristic abstinence signs and symptoms when the opiate is discontinued. The other phenomenon, tolerance, is equally important. Repeated intake of opiate drugs results in the development of tolerance to some of the drug’s effects—the analgesic, euphoric, and sedative effects which are all-important to the addict. Little tolerance is developed to the gastrointestinal or pupillary effects. Because of the development of tolerance the physiology of the addict requires increasing amounts of narcotic drugs to obtain the desired effects. For this reason it is very difficult for addicts with physical dependence to stabilize on a maintenance dose. Physical dependence and tolerance appear to be related to changes in the sympathetic and central nervous systems and in the endocrine glands. Changes in function associated with physical dependence may include cessation of menstruation in women and disinterest in sexual activity with impotence in the male. Meperidine (demerol) in addition to the usual effects of opiates, produces impaired vision, mental confusion, and sometimes convulsions. About 50 percent of the meperidine addicts admitted in a 3 year period were physicians, nurses, or other persons associated with the medical profession.

Why did the patients continue to use narcotic drugs once the introduction had been made? The answer varied with the particular individual. For some persons narcotic drugs provided an escape from anxiety, loneliness, despair, frustration, anger, or hostility into a placid world of unreality. For some, narcotic usage was the ultimate in hedonistic experiences which combined the pleasures that other persons derive from work, love of wife, family, or friends, personal or group accomplishments, or service to others. For others the intravenous injection of narcotics provided the ecstasy of the adult at orgasm and the somnifacient satisfaction of the satiated infant at the breast. The addict with his narcotic drug had little interest in any person, belief, or thing; an addict without drugs was principally interested in obtaining a supply. This motivation for drug usage has to be replaced by a desire to live without narcotic drugs if treatment is to be successful.

Addiction to opiates, as stated above, is characterized by physical and psychological addiction. The psychological addiction is related to the basic mental disorder of the patient. A few patients are admitted to the hospital who have physical addiction without psychological addiction. They usually develop their addiction in the course of treatment of some physical disease.

In addition to the diagnosis of drug addiction there is usually enough information derived from diagnostic studies to establish the presence of a mental disorder. Kolb and later Felix developed classification systems of these disorders that were operationally useful. These have been superseded by utilization of the nomenclature in the Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association published in 1952. The mental disorders most frequently present are personality trait disturbances, sociopathic

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Personality disturbances, psychoneurotic disorders, and personality pattern disturbances. Occasionally patients are admitted with schizophrenic or affective reactions.

Personality trait and sociopathic personality disturbances are present in the patients hospitalized here with progressively increasing frequency. These individuals appear to be the products of a disorder in emotional development. The behavior shown by such persons indicates that development is fragmentary and may include behavior that would be normal for an infant, a young child, a preadolescent, and adolescent all in the same person. At different times or at the same time they may be dependent, demanding, narcissistic, stubborn, pouting, passively obstructive, have temper tantrums. Today is the reality in time. Some have acted out their feelings in a manner that brings them into conflict with their immediate family, group, or with society.

The personal history of many of these patients shows the absence of the father or a weak father or mother during the patient's childhood. The failure of emotional maturation may be related to this absence of any constant person with whom identification could occur. If there was no chance of identification then there could be no introjection and formation of internalized emotional control and growth. With some patients identification and introjection may have occurred but it was an unhealthy person that served as the model.

Some of the most interesting and unexplained phenomena observed at this hospital are the remarkable changes in the characteristics of the "typical" addict, if one can use such a concept. The 1955 model addict differs from the 1936 "statistical addict" described in Pescor's study of a thousand admissions. He isn't a "white male prisoner 38 years of age given a two year sentence for illegal sale of narcotics." He is a Negro male voluntary patient in his twenties. He didn't have a parental home "intact up to the age of eighteen." He probably can't remember seeing his father, and his mother was away trying to earn a living as a domestic. He wouldn't "become addicted to morphine at the age of twenty-seven." He would start on heroin at about age twenty. He would not "prefer morphine." He would prefer heroin. His first arrest would not "occur at the age of 28 for violation of drug laws." He would be a young voluntary patient whose FBI record could not be requested by the hospital. He would not "as an adult be subject to some chronic disease such as heart trouble, arthritis, tuberculosis, or asthma." He would be free of such afflictions.

These considerations of the characteristics of the addict and of addiction must be given consideration in the planning and organization of a treatment program.

**Characteristics of the Hospital Addict Population**

The average daily population of addicts in the hospital has varied relatively little over the years, but significant changes have occurred in its composition. The average daily population was near 900 from 1945 to 1949. From 1950 to 1955 it has been about 1,100 except for 1951 and 1953 when it was about 1,200. Prior to 1946 there were less than 100 voluntary patients in the hospital. This daily average increased each year until the high points of over 600 in 1951 and 1953. A rapid fall in 1954 to 400 was followed by a decline to 328 in 1955. There has been a gradual decline in probationers in the hospital from a high of 86 in 1947 to 18 in 1955. The number of prisoners has varied from a high of almost 900 in 1944 to a low of 492 in 1952 and a steady increase to 782 in 1955. (See Figure 1).

*The basic data used in this part were provided by Mary L. Tonks, medical record librarian, and Walter K. McCurry, administrative assistant.*
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1946 to 4,166 in 1953 was followed by a decline to 2,848 in 1955. The changes were due to the fluctuations in the annual rates of admission of voluntary patients—from less than 1,000 per year prior to 1946 to a high of 3,499 in 1953 and then down to 2,231 in 1955. The admission rate for prisoners has been fairly constant. The annual admission rate of probationers has declined steadily from a high of 222 in 1947 to a low of 151 in 1955. (See Figure 2).

FIGURE 2.—ANNUAL ADDICT ADMISSIONS, 1938-1955
U.S. PUBLIC HEALTH SERVICE HOSPITAL,
LEXINGTON, KENTUCKY

One of the changes in the addict population in the hospital is the increase in number of young Negro addicts. In Pescor’s 1936 series there was 8.9 percent Negroes. In 1955 the percentage was 52. The age distribution of the white males in 1938 and 1955 was similar—a fairly equal distribution by decades from 20 to 60. In the 1955 study 70 percent of the Negro males were under age 30 as compared with 27 percent of the white males. A study of 347 females discharged in 1955 showed that 48 percent were Negro and 85 percent of these were under age 30 with no female Negro over 40. The white females, like the white males, were fairly evenly distributed by decades from 20 to 60 (See Figure 3).

Since Pescor’s 1936 group was mostly prisoners, a study was made of the medical records of prisoners to obtain information on the age of onset of addiction as given by the patient. The data on the first 200 prisoners admitted in 1955 and the first 100 admitted in 1956 are compared with Pescor’s findings:

<table>
<thead>
<tr>
<th>Age of Onset of Addiction</th>
<th>1936</th>
<th>1955-56</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 and under</td>
<td>16.5%</td>
<td>45.0%</td>
</tr>
<tr>
<td>20-29</td>
<td>53.2%</td>
<td>44.6%</td>
</tr>
<tr>
<td>30-39</td>
<td>21.1%</td>
<td>7.6%</td>
</tr>
<tr>
<td>40 and over</td>
<td>8.9%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Not given</td>
<td>0.3%</td>
<td>—</td>
</tr>
</tbody>
</table>

These findings are in keeping with the age on first admission to the hospital of male addicts in 1955. Sixty-five percent were 30 and under.

There has been a decrease in the number of Chinese addicts in the hospital from about 100, 10 years ago, to about 15 now. The number of Jewish addicts has decreased in the same period from about 100 to about 25.

Questions are frequently asked about the criminal records of addicts prior to addiction. A study was made of the FBI records of the first 200 prisoners admitted to the hospital in 1955 and the first 100 admitted in 1956. This group is not representative of the patients admitted, since there were almost four times as many voluntary patients admitted in the same period. Voluntary patients were not included because FBI records could not be requested. It is not necessarily representative of federal prisoners who were addicts, because the prisoners who were sent to Lexington by the Bureau of Prisons are a selected group. It is obvious that it would not be representative of

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Addicts generally. However, the finding was as follows: 30 percent of the prisoners had convictions prior to the stated age of onset of addiction.

Treatment Program

The treatment program is based on more than 20 years of clinical experience and research. The planning takes into consideration the individual and group characteristics of the patients, the limitations in terms of the number and quality of staff, the limitations imposed by law, and the limitations in our knowledge. The goal of the treatment program is as simple to state as it is difficult of accomplishment—to prepare addicts to return to their home communities where they can continue their rehabilitation and live without using narcotic drugs.

When the addict comes into the gatehouse at the entrance to the hospital grounds his treatment program begins. There he surrenders any narcotics and enters an environment where he is protected from the misuse of drugs. As soon as the usual medical record information is obtained in the Admitting Unit, a physical examination is done and appropriate medication is ordered. The patient is admitted to the Withdrawal ward if there is physical dependence on narcotic drugs and if there is no complicating disease requiring admission to some other infirmary ward.

Much has been written about the agonies of the opiate abstinence syndrome and it is certain a period of physiological upheaval. A system of measuring the intensity of the syndrome was developed by Himmelsbach and Kolb. If a patient has physical dependence on an opiate drug, the severity and time of onset of the abstinence signs will be related to the dosage and the particular drug used. The signs include sweating, lacrimation, rhinorrhea, yawning, dilation of pupils, gooseflesh, muscle jerking (not convulsions), and cramps, anorexia, vomiting, diarrhea, insomnia; increases in blood pressure and temperature. These signs may be precipitated by the use of nalorphine. With competent medical care and use of the methadone substitution method the discomfort and dangers of the abstinence syndrome are minimal. This method is described in a number of publications by Isbell, Wikler, and Fraser of the Addiction Research Center of the National Institute of Mental Health which is located at this hospital. The method, in brief, is to administer methadone orally in quantities just sufficient to keep signs of abstinence at a tolerable level and then steadily reduce the dosage. The treatment of the acute phase of the abstinence syndrome which results from physical dependence on narcotic drugs usually requires less than 2 weeks. This is followed by a period of convalescence or subacute symptoms lasting about 2 weeks when the patient regains his strength, weight, and appetite, but is irritable, restless, and has difficulty in sleeping. Complete recovery from physical addiction takes about 4 months. The time and severity will vary somewhat according to the degree of tolerance and physical dependence of the patient and this in turn is determined by the drug used, duration of use, and daily dosage. When the patient is no longer receiving methadone and the acute abstinence signs and symptoms have abated, transfer from the Withdrawal ward to an Orientation ward is made. When necessary, patients are transferred to another infirmary ward—medicine, surgery, tuberculosis, or psychiatric.

Each patient has an administrative physician. He is the physician who is responsible for coordinating and supervising the patient's program from the time he leaves the Withdrawal ward until he is discharged from the hospital. The administrative physicians are first, second, and third year psychiatric residents. Their work is supervised by staff psychiatrists. The patient may be in individual or group psychotherapy with another psychiatric resident; he may have his most meaningful relationship with his vocational supervisor or dormitory aid; or he may be in casework therapy with a social worker, but the overall responsibility for the patient rests with the administrative physician. He formulates the program, follows the progress of the patient and, except for prisoners, decides when the patient is ready to return to his home community. This system has been in operation since July 1955, and is based in a large part on the research of Stanton and Schwartz.

The patient remains on the Orientation ward for about 2 weeks while convalescence is occurring. During this time group discussions for orien-

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Patients are interviewed individually by members of the vocational, correctional, social service, and psychiatric staffs for diagnostic purposes and written reports made. The patient's administrative physician prepares a diagnostic summary formulation from the reports. This is reviewed with him by a staff psychiatrist and a treatment program for the patient is formulated.

Every patient who is physically able to work has a job. Most of the young addicts have had erratic or no work records. One purpose of the work assignment is to enable these self-centered and many times hostile persons to work with other people and to accept authority. Immature adults, like normal children, resist and reject authority because it limits their freedom of action. To many of our patients authority is regarded in terms of their past experience with their parents and society—as hostile, punitive, and rejecting. Constructive, consistent relations with authority figures of a different type may permit a modification of previous reaction patterns.

The program varies from one patient to another according to the patient's needs and the limitations of staff time and facilities. One element is common to all programs—residence in a drug-free environment for a minimum period of 4 months to recover from the physical addiction. This period also initiates the disestablishment of the habit of using narcotic drugs as a pattern of living to relieve anxiety or for euphoria. Those patients who appear to be suitable are offered the opportunity for individual psychotherapy or group psychotherapy. It is not expected that all patients will remain in the hospital until psychotherapy is completed because this may need to be continued beyond the time when hospitalization is indicated.

Group psychotherapy and activity therapy appear to be more suitable than individual psychotherapy for patients with personality trait or sociopathic disturbances. Because of their emotional immaturity, dependency, and hostility the most useful program seems to be one similar to the activity programs used with disturbed children. The immediate "therapist" is the person with whom the patient spends the most time. In most instances this would be the vocational supervisor. Consideration is given not only to the vocational needs of the patient but, when indicated, to the needs of the patient for continued association with a particular kind of staff person. The vocational supervisors are apprised of the patient's problems when it appears to be indicated and the supervisor can phone or otherwise discuss the patient with the administrative physician at any time. Staff psychiatrists provide consultation in discussions with groups of vocational supervisors.

The hospital is not a vocational training school, but it does have a large variety of well-organized and active vocational training programs which it is hoped serve as a medium for nurturing emotional maturation. The educational and vocational training unit chief assists the section chiefs in the design of training programs preparing patients for "payroll" jobs. The accomplishments of the patients in these programs are amazing when viewed in the light of their past vocational history or lack thereof. It demonstrates the unactivated potential for change that exists within these patients. Each month the vocational supervisor sends a report to the patient's administrative physician rating the patient on cooperation, attitude, interest, dependability, and progress in skill learning. Ratings have been found to be useful indicators of ability to adapt to living in the hospital. Toward the end of his hospitalization assistance in getting employment is provided.

For many of the patients narcotic drugs were the only source of pleasure in living. One source of pleasure for most people is recreation—reading, athletics, movies, television, bowling, music, etc. The hospital attempts to provide the patients with opportunities for developing interests in recreation as one facet of living. These patients are able to participate more readily in passive recreation or individual activities than in any endeavor that requires active cooperation as a team member. Recreation can serve as a vehicle for learning to live with other people and to accept the limitations of behavior imposed by the rules of the game.

Part of the patient's day and evening is spent in the dormitory with other patients. This presents many opportunities for constructive, destructive, and neutral associations. Since narcotic drugs were the central and sometimes the exclusive preoccupation of the patients before hospitalization, much time is spent in discussions on this subject. Until a few years ago the women patients were in a separate small building a short distance away from the main building. A frequent comment by the staff at that time was that the men spent so much time talking about drugs. Now the comment is that they spend so much time talking about women.
The aid on the dormitory has an important role in the hospital program. The responsibilities include helping the patients learn to live with other persons without more than the ordinary amount of strife; helping the patients to learn other adult patterns of living and, most important, the aid can listen to patients' problems and when indicated provide advice and encouragement. The dormitory aid can get assistance from his supervisor or if the problem is with regard to a particular patient then he can consult with the patient's administrative physician. A 12 month training program of classroom, demonstration, and supervised assignments is used to prepare aids for their work.

Social service participates in the diagnostic studies and has the responsibility of identifying the social service needs of the patient. The principal activity is to provide casework services to patients. The problems presented range from personal problems of the patient in the hospital to family problems in a community many miles away. The staff does all the work related to parole and is the liaison with the federal probation officers.

Religion is an important part of the lives of many patients. The hospital has Catholic, Jewish, and Protestant chaplains whose duties include conducting services, individual counseling, and group discussions. The College of the Bible of the Christian Church at Lexington, operates a chaplain training program at the hospital which is supervised by the Protestant hospital chaplain. The trainees work with patients as a part of their training.

Acting out behavior of persons with neuroses or character disorders is a problem whether at home, in the community, or in the hospital. For 20 years this hospital had a so-called "Adverse Behavior Clinic" which has been discontinued. Patients with problems are assisted by the staff members who have direct relations with them. When necessary the supervisor, administrative physician, or a staff psychiatrist is available. Action that appears most helpful to the patient is taken.

When is hospitalization terminated? For the prisoner this is determined by the sentence received, the action of the Board of Parole, and earning of "good time." For some who demonstrate that they are unsuitable for treatment at the hospital it is terminated by transfer to a prison. Patients who are on probation or are committed by the District of Columbia courts remain until hospital treatment is completed. Voluntary patients can terminate their stay at any time.

Of the 350 infirmary ward beds 150 are for nonaddict patients with mental disorders. Most of these patients are Merchant Seamen or United States Coast Guard personnel who have been transferred from other United States Public Health Service hospitals that do not have psychiatric services. The few addicts who are psychotic are admitted to these wards. About 85 beds are in the withdrawal wards for men and women. The medical and surgical wards have about 115 beds. The staff of the Addiction Research Center of the National Institute of Mental Health and about 80 consultants in the various medical specialties are available as consultants to the regular hospital staff.

It has been my intention to indicate that a great many persons have important roles in the treatment program at the hospital—the aid on the dormitory, the vocational supervisor, the physician, the social worker, and the consultant, to name some. It was also my intention to emphasize that completion of hospitalization is not completion of rehabilitation for the patient. This can only occur after the patient has left the hospital and has returned to his home community.

Results

One way of describing results is in terms of the number of persons who were hospitalized and treated. From the time the hospital opened in 1935 until the end of fiscal year 1955, 23,625 addicts were admitted a total of 45,058 times. Voluntary patients accounted for 29,002 of the admissions and almost 24,000 of these occurred in the last 10 years. A study of 17,741 patients admitted from 1935 to 1952 was made in 1955 to determine the number of times patients were hospitalized. There were 34,539 admissions in this period. Fourteen percent of the patients were admitted three or more times and accounted for 45 percent of the total admissions. Twenty-two percent were hospitalized twice and 64 percent were hospitalized once (See Figure 4 on page 50).

Another way of determining results is to ascertain how many patients stay in the hospital until hospital treatment is completed. A study of the 765 male voluntary patients discharged in January through June 1955 showed that 40 percent stayed less than 15 days and an additional 15 percent
left by the end of 30 days. About 30 percent stayed until hospital treatment was completed (See Figure 5).

A study of 302 female patients discharged in the same period showed similar findings for the first 30 days but only 23.5 percent stayed until hospital treatment was completed. It should be noted that there was only a slight difference between the experience with first admissions and readmissions.

The results of hospitalization can be expressed by comparing the condition of the patient at the time of discharge with his condition at the time of admission. Patients are classified as “unimproved” if physical dependence is present at the time of discharge, or if there is no progress toward freedom from psychological dependence. “Hospital treatment completed” means that at the time of discharge there was freedom from physical addiction and enough progress toward freedom from psychological addiction had occurred so that discharge to the community is indicated. “Improved” is the status between these two.

In 1955 about one-third of the addict patients admitted stayed in the hospital for such short periods that their condition on discharge was “unimproved.” These were voluntary patients. About one-third of the patients were discharged as “improved” and one-third reached the status of “hospital treatment completed.”

The recovery from narcotic addiction is dependent upon many factors—the patient, what happens in the hospital, and what happens after he leaves the hospital. It would be interesting to know how many patients who were discharged did not become readdicted. While the results would not be related to hospitalization alone, it could be assumed, perhaps, that there was some relationship. Pescor attempted such a study of 4,706 patients discharged in years 1936 through 1940. The followup information was obtained from four sources: First, the patient if readmitted; second, the arresting authority if the former prisoner or probationer’s arrest was reported to the FBI; third, probation officers, and fourth, letters mailed at 6-month intervals to former patients. Pescor felt that this method was crude and this opinion seems well founded since information was obtained on only 60.1 percent of the group even though 75 percent were prisoners and probationers. He did determine that 39.9 percent had relapsed in periods varying from 6 months to 6 years. It is interesting to note that paroled prisoners made the best record from the standpoint of abstinence. It was this group that received the most posthospital supervision and could not leave the hospital until there was a satisfactory plan for job, place to live, parole advisor, etc. An important item to remember is that parolees are a highly selected group and the results may be re-
lated to this as well as to what happened during and after hospitalization.

Rayport studied 1,020 male patients consecutively admitted to the hospital to determine how many had first received narcotic drugs from a physician to the point of addiction, in the course of treatment for an illness. There were 141 such patients—137 white and 4 Negro, an incidence of 27 percent among the white patients and 1.2 percent among Negro patients. The average age of the whites was 47.4 years and the average duration of addiction 14.8 years. These 141 “medical addicts” were placed in three groups: those whose original illness was no longer present—89 (63.1 percent); those who still had the original but reversible illness—2; and those who had the original but essentially irreversible illness—50 (34.7 percent). Treatment of the first group was similar to that of “nonmedical” addicts. Treatment of the second group required treatment of the original disease and of the addiction to opiates. All of the patients in group 3 were successfully treated for their physical addiction by the methadone substitution method and treated for their irreversible illness by the use of specific medication, nonnarcotic analgesics and physiotherapy. After these patients had received no narcotics for about 100 days, 84 percent stated that they felt well or very well even though their cardiovascular, gastrointestinal, pulmonary, bone and joint, or neurological diseases were still present.

Discussion

There are a number of difficulties involved in the treatment of the patient with narcotic addiction. The patient must remain in the hospital if treatment of the physical addiction is to occur, yet 40 percent of the voluntary patients leave in less than 2 weeks.

If treatment of the psychological addiction is to be initiated, then the patient must have some motivation to live without narcotic drugs. There is little purpose in hospitalizing persons who do not have any desire to actively work toward this goal. To date medical science has discovered no way of artificially instilling this motivation. It has to be generated within the patient by the patient, or by persons in the environment who are important to the patient, or by the demands of society. There is no way known to measure motivation objectively. Its presence has to be inferred from verbalized attitudes and from actions.

Clinical and laboratory research has provided a very satisfactory method for treatment of physical addiction to opiates—the methadone substitution method—so this presents no difficulties if the patient is in a drug-free environment.

There have been some reports stating that chlorpromazine and reserpine are of value in the treatment of the acute opiate abstinence syndrome. To date the reports are based on clinical usage with poor or no controls and usually the reported intake of narcotic drugs is what the addict says he thinks he has been using. This information has no value. Fraser and Isbell studied the effects of chlorpromazine and reserpine in patients who were in a rigidly controlled environment and who were administered known amounts of narcotic drugs for specified periods and in whom abstinence signs were measured by objective criteria. Neither chlorpromazine nor reserpine administered orally or intramuscularly reduced the intensity of the acute abstinence syndrome from morphine.

It is indeed unfortunate that the treatment of the psychological addiction to narcotic drugs is not as well developed as the treatment of physical addiction. Research has provided relatively less knowledge than is useful to the clinician. Psychological addiction is closely related if not a manifestation of a mental disorder and these same mental disorders occur in persons who are not addicts. One can expect, then, that improved methods for treatment of the psychological addiction will become available as research on mental disorders progresses.

Completion of hospital treatment marks the beginning of community treatment and rehabilitation. While it is necessary to remove the addict from the setting in which addiction occurred to a controlled environment, if hospitalization has served its purpose it has prepared the patient for return to the community. Hospital treatment can start a patient on the way to recovery but it cannot provide a lifelong immunity that protects the patient against relapse. Hospital treatment can initiate rehabilitation but it must be completed after the patient returns to the community.


18 H. F. Fraser, and H. Isbell, “Chlorpromazine and Reserpine: (A) Effects of Each and of Combinations of Each With Morphine; (B) Failure of Each in Treatment of Abstinence from Morphine,” Accepted for publication, Archives of Neurology & Psychiatry.