Minutes of Meeting - HEALTH AND WELFARE COMMITTEE - 56th ASSEMBLY SESSION - March 17, 1971

Present: Wilson, White, Smalley, Glaser, Homer, Prince, Swallow, Valentine, and Poggione

Absent: None

Guests: William LaBadie, State Welfare Department; Marian Colt, Welfare Department; Dave Tomlinson, State Welfare Department; J.T. Knobel, Ross - Burke & Knobel; S. Nuteford, Ross-Burke & Knobel; Agnes Nelson, Press; C. Heckethorn, Blue Shield; Orville Wahrenbrock, Health, Welfare, and Rehabilitation Department; Mary Jane Loper, Southern Nevada Drug Abuse Council & Family Counseling Service, Dr. McAllester, Health, Welfare, and Rehabilitation Department; Dorothy J. Button, Registered Nurse Representing Nevada Nurses' Association; Jean J. Peavy, Registered Nurse representing Nevada Nursing Association; Dr. Salvadorini, Pathologist; Dr. Ravenholt, Health Officer of Las Vegas; Dr. Carr, Health Department for this area.

Meeting was convened by Chairman Wilson at 3:00 P.M.

A.B. 323: Allows maintenance treatment of narcotic addicts.

Mary Jane Loper, Southern Nevada Drug Abuse Council and Family Counseling Service, stated methadone is a type of treatment for herion addicts that have failed with all other treatments. She explained just what methadone maintenance. (Attachment 1)

Dr. McAllester, Health, Welfare, and Rehabilitation Department, stated he felt there is no question that methadone is a valuable assest to the treatment of addicts. This bill puts the methadone clinic under his department. He stated his department did not have enough staff available at the present to begin a clinic of this sort. He felt a study should be made as to what goes into a methadone program and how much it would cost to provide the staff for this clinic. After questioning from the committee, he stated to be able to set up a program he would have to have a physician, administrator, nurses, and secretary. It would take approximately $150,000. per year.

Dr. Ravenholt, Health Officer in Las Vegas, stated he was very much in favor of this bill. (Attachment 2) He did, however, suggest certain amendments to the bill. He would like to see Line 2 of Page 5 more consistent with Lines 36 & 37 of Page 4.

Dr. McAllester suggested putting this under the Division of Health. Dr. Carr, Health Department, said his Department would be willing to take this responsibility. When asked how much it would cost his Department, he stated he could not say for sure but for almost no money at all.

Mr. Swallow brought up the fact that they have no authority to charge for methadone treatments. If the people are able to pay, they should have to. This bill will be held until amendments can be made up.

A.B. 360: Requires parents to submit status of immunization certificates to public schools as requisite for admission of children.

Dorothy Button, Registered Nurse representing Nurses' Association, stated her association opposes this bill. (Attachment 3) Her statement was discussed by the Committee along with Dr. Carr and Dr. Ravenholt. Mrs. Button realized she had misunderstood the bill. She thought it meant every child had to have had all immunizations before they could enter school. The bill explains they must show a record of which immunizations they have had.

Mr. Prince made a motion for A.B. 360 a Do Pass; Homer seconded; motion carried unanimously.

A.B. 499: Creates cause of action in department of health, welfare and rehabilitation against third parties for medical aid to indigent persons.

Mr. Heckenthorn, Blue Shield, stated this would be a good bill if a few amendments could be added. (Attachment 4) Discussion followed. This bill will be held until Mr. Valentine discusses this further with Mr. Heckenthorn.

A.B. 545: Defines "personal property" and "income" for purposes of old-age assistance.

Bill LaBadie, Welfare Department, stated this bill has fiscal implications. He discussed these implications with the Committee. He suggested Line 6 should add "other than spouse" after "No relative". He felt a bill like this is definitely needed but not this particular one.

Mr. Prince made a motion for A.B. 545 to be Indefinitely Postponed; Swallow seconded; motion carried.

A.B. 547: Allows state health officer to participate in seminars, lectures for suitable stipend.

Dr. Carr, Health Department, stated this bill gives the superintendent the authority to do the things that are listed in italics of this bill.

Mr. Wilson brought up the fact that this bill does not have any limitations. An officer could take advantage of this. They would spend all of their time out of the State. This bill will be held until more information can be obtained.

A.B. 227: Exempts services involving human blood from strict liability.

This bill was discussed at an earlier date. Amendments were presented for this. Homer made a motion for A.B. 227 a Do Pass as Amended; Prince seconded; motion carried.

A.B. 159: Permits treatment of minor for drug abuse without parental consent.

The Committee heard testimony on this bill at an earlier date and elected a sub-committee to find more out about this bill. Amendments were brought up and discussed.

Mr. Prince made a motion to Amend A.B. 159 and Do Pass; Smalley seconded; motion carried.

A.C.R. 15: Directs health division of department of health, welfare and rehabilitation not to move laboratory from Clark County.

The Committee discussed this resolution at an earlier date. Mr. Swallow felt there are some tests that need to be done immediately to get the correct results. Mr. Prince felt the Division should have new personnel. Mrs. White felt that if they move the lab, then they will still have to have some kind of place to take care of the people in Clark County.

Mr. Smalley made a motion for A.C.R. 15 a Do Pass; Homer seconded; motion carried.

Meeting adjourned at 5:30 P.M.

ASSEMBLY

AGENDA FOR COMMITTEE ON HEALTH AND WELFARE

Date March 17 **Time** P.M. Recess **Room** 328

Bills or Resolutions to be considered	Subject	Counsel requested*
A.B. 323	Allows maintenance treatment of narcotic addicts.	hold
A.B. 360	Requires parents to submit status of immunization certificates to public schools as requisite for admission of children.	Do Pass
A.B. 499	Creates cause of action in Department of Health, Welfare, and Rehabilitation against third parties for medical aid to indigent persons.	hold
A.B. 545	Defines "personal property" and "income" for purposes of old-age assistance.	DP[illegible]
A.B. 547	Allows state health officer to participate in seminars, lectures for suitable stipend.	hold

*Please do not ask for counsel unless necessary.

HEARINGS PENDING

Date ____ Time ____ Room ____
Subject ____

Date ____ Time ____ Room ____
Subject ____

METHADONE MAINTENANCE FOR HEROIN ADDICTS

Methadone is a synthetic narcotic which has several useful characteristics in the rehabilitation of heroin addicts. When used appropriately, it blocks the action of heroin, i.e. if heroin is taken after methadone has been addministered, the heroin will not produce a "high." It eliminates the drug craving which motivates many detoxified addicts to return to the use of drugs. It does not produce euphoria or significant distortion of behavior. It does not produce tolerance, i.e. doses do not have to be continually increased to maintain the desired effect. It is a long-acting drug, i.e. twenty four hours.

Research over the past six years has indicated that there are some major benefits to be derived from administering methadone on a maintenance basis to heroin addicts. *However, because it is an addicting drug and the effect of its long-term use is unknown, a methadone maintenance program is considered an investigational use of an approved drug and requires the approval of the Food and Drug Administration and the Bureau of Narcotics and Dangerous Drugs and is closely monitored by them. (See the attached.) Briefly, approval is granted only when: 1) adequate safeguards are provided to prevent the misuse of the drug by allowing it to get into the blackmarket or to be used by persons who are not "hard core" addicts; 2) concerted effort is made to rehabilitate the individual addict; and 3) research data are collected to determine the efficacy and safety of the drug.

Typically, a methadone maintenance program involves the daily administration under supervision of methadone in an oral form (usually liquid) and the collection of supervised urine samples and periodic analyses to detect other drug use. For the individual addict, it is aimed at eliminating his drug craving and, therefore, his drug-seeking behavior which involves him in illegal activities and consumes all of his time and effort. At the same time, by not producing euphoria methadone leaves the addict in such a condition that he is able to participate in work, psychotherapy, vocational training or other measures designed to assist him in changing his life style. Research has indicated that society has benefited from these programs by the lower arrest records of the addicts involved, decreased welfare payments, increased tax collection, and stabilization of the families involved. It is possible that with the extension of these programs, an impact might be made on the illegal drug market.

Methadone maintenance has certain drawbacks and is subject to certain criticisms. Methadone is a narcotic and is addicting; it is not a cure for drug addiction. Experience in maintenace programs had indicated that from 15 to 30 per cent of the addicts who begin drop out. The reasons are varied: a few decide they would rather be drug free; some simply prefer the "high" they get from heroin; and some complain about the high cost (many programs charge from $7 to $10 a week). Also, there are probably other psychological reasons.

Methadone maintenance is objected to by those who see only drug abstinence as a worthy goal for any rehabilitation program. While abstinence would probably be accepted by both society and the addict as the ideal goal, past experience has shown that our efforts to date have been a dismal failure in this regard. The relapse rate of addicts coming from the two federal narcotics hospitals with supportive services has been approximately 95 per cent.

* An excellant summary of methadone maintenance research can be found in "Notes and comments: Methadone Maintenances for Heroin Addicts," The Yale Law Journal, Vol. 78: 1175, 1969.

There are some who belive that methadone maintenance would lessen the social stigma against addiction and, therefore, actually increase the spread of addiction. This is a theoretical question at present, but with the strict federal controls allowing the admission of only hard-core addicts into a maintenance program and the fact that methadone treatment in no way effects the many criminal laws in the narcotics area, it is difficult to support this contention. In addition, this type of program does not provide legal drug highs, but is actually an inconvenient medical treatment.

Some critics of methadone maintenance point to the controversial heroin maintenance programs which operated in the United States in the early Twenties and are now in existance in Britain as examples of difficulties arising from drug maintenance. The major criticism of heroin maintenance is the illicit diversion of the drug and the heroin use spread. Heroin is a drug which has a short duration of action; intense withdrawal symptoms appear within hours after the drug has been taken. This necessitates the administration of the drug several times a day, and the only practical way of doing this is to give the addict the drug for self-administration. This, of course, opens the door to illicit diversion and the spread of heroin use. In addition, because the body develops a tolerance for heroin, the addict demands larger doses in order to stay comfortable. These demands for increases are viewed as drug-seeking behavior and keep the addict preoccupied with drugs. Methadone, on the other hand, is a long-acting drug which can be administered under supervision once a day, eliminating the possibility for illicit diversion. The body does not develop a tolerance for methadone, therefore, constant dosages can be administered comfortably to the addict.

There are some commonly held beliefs about the consequences of any addiction which lead to the criticism of methadone maintenance. Some critics believe that there is invariably personality deterioration accompanying any addiction and that this makes social rehabilitation impossible. Six years of research with methadone maintenance belie this.

Methadone maintenance has been further criticized because it focuses on the symptom of the addict's problem and not on the underlying personality disorders which cause addiction. In the first place, there is some major controversy within the medical profession as to the cause of addiction, with some strong arguments in favor of a physiological cause. But even if the psychogenic theory of addiction is eventually proven correct, the psychological benefits of the total maintenance program would be of value and, when compared with other forms of treatment, methadone maintenance is still the most effective treatment available today for the hard-core addict for whom the program is designed. According to federal regulations, he must have already failed in withdrawal treatment. For this kind of addict, heroin addiction is the most frequently chosen alternative to methadone maintenance.

Finally, methadone maintenance has been criticized because it is an investigational procedure. There has been sufficient research to believe that the risks of treatment are negligible and the benefits when weighed against the likely effects of non-treatment are great. The federal regulations require that each addict be advised of the research nature of the treatment and the possible side effects of the drug before he is accepted into the program.

Mary Jane E. Loper
Supervisor
Narcotic Addict Rehabilitation
Family Counseling Service of Clark County

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

FOOD AND DRUG ADMINISTRATION

CONDITIONS FOR INVESTIGATIONAL USE OF METHADONE FOR MAINTENANCE PROGRAMS FOR NARCOTIC ADDICTS*

There is widespread interest in the use of methadone in the maintenance treatment of narcotic addicts. Though methadone is a marketed drug approved through the new-drug procedures for specific indications, its use in maintenance treatment of narcotic addicts is an investigational use for which substantial evidence of safety and effectiveness is not available. In addition, methadone is a controlled narcotic subject to the provisions of the Harrison Narcotic Act and has been shown to have significant potential for abuse. In order to assure that the public interest is adequately protected, and in view of the uniqueness of this method of treatment, it is necessary that a methadone maintenance program be closely monitored to prevent diversion of the drug into illicit channels and to assure the development of scientifically useful data. Accordingly, the Food and Drug Administration and the Bureau of Narcotics and Dangerous Drugs conclude that prior to the use of methadone in the maintenance treatment of narcotic addicts, advance approval of both agencies is required. The approval will be based on a review of a Notice of Claimed Investigational Exemption for a New Drug submitted to the Food and Drug Administration and reviewed concurrently by the Food and Drug Administration for scientific merit and by the Bureau of Narcotics and Dangerous Drugs for drug control requirements.

[The Notice shall include] a statement of the protocol. The following is an acceptable protocol. Modifications of this protocol or other protocols will be judged on their merits.

METHADONE MAINTENANCE STANDARD PROTOCOL.

Objectives.

A. To evaluate the safety of long term methadone administration at high doses.
B. To evaluate the efficacy of oral mthadone per se at high dosage in decreasing the craving for other narcotic drugs and in minimizing their euphoriant effect.
C. To evaluate the efficacy of methadone as the pharmacological moiety in a regimen for the rehabilitation of narcotics addicts including their return to a drug free state.

Admission criteria:

A. Documented history of abuse of one or more opiate drugs, the duration of which is to be stated.
B. Confirmed history of one or more failures of withdrawal treatment.
C. Evidence of current abuse of opiates.
An exception to the third criterion (i.e., current abuse of opiates) is allowable in exceptional circumstances for certain subjects for whom methadone maintenance may be initiated a short time prior to or upon release from an institution. This procedure should be justified on the basis of a history of previous relapses. In these circumstances, appropriate descriptions of the facilities, procedures, and qualifications of the personnel of the institution are to be included in the application filed by the physician-investigator. Subjects who wish to do so may be transferred from one approved program to another.

* Excerpted from Federal Register, Vol. 35, No. 113 -Thursday, June 11, 1970

Criteria for exclusion from the program

A. Pregnancy.
B. Psychosis.
C. Serious physical disease.
D. Persons less than 18 years of age.
   Addicts who are pregnant or who are suffering from psychosis or serious physical disease should be hospitalized and withdrawn from narcotics

Admission evaluation:

A. History: Recorded history to include age, sex, verified history of arrests and convictions, educational level, employment history, history of drug abuse of all types.
B. Medical history of significant illnesses.
C. History of prior psychiatric evaluation and/or treatment.
D. Physical examination.
E. Formal psychiatric examination in subjects with a prior history of psychiatric treatment and in those in whom there is a question of psychosis and/or competence to give informed consent.
F. Chest X-ray.
G. Laboratory examinations to include complete blood count, routine urinalysis, liver function studies (including SGOT, alkaline phosphatase, total protein, and albumin-globulin ratio), fasting blood sugar, blood urea nitrogen, serologic test for syphilis.

Procedure:

A. Methadone to be administered in an oral form, so formulated as to minimize misuse by parenteral injection. The dosage to be adjusted individually and not to exceed 160 mg. per day. The methadone is to be administered under the close supervision of the investigator or responsible persons designated by him. Initially, the subject is to receive the medication under observation each day. After demonstrating adherence to the program, the subject may be permitted twice weekly observed medication intake with no more than a 3-day supply allowed in his possession. (Longer intervals may be approved in exceptional cases when the investigator has stated appropriate justification in his protocol.).
B. Urinalysis: Urine collection to be supervised: urine specimens to be analyzed for methadone, morphine, quinine, cocaine, barbiturates, and amphetamines: urine speciments to be pooled or selected randomly for analysis at intervals not exceeding 1 week.
C. Rehabilitative measures as indicated: these may include individual and/or group psychotherapy, counseling, vocational guidance, and educational placement.
D. Adequate investigation and appropriate management of any abnormalities detected on the basis of history, physical examination, or laboratory examination at the time of admission to the program or subsequently, including evaluation and treatment of intercurrent physical illness with observation for complications which might result from methadone.
E. Physical examination and chest X-ray to be repeated annually and laboratory examinations conducted at the time of admission to be repeated at 6-month intervals.
F. Consideration to be given to discontinuing the drug for participants who have maintained a satisfactory adjustment over an extended period of time; in such cases, followup evaluation to be obtained periodically.

G. Adequate records to be kept for each participant on each aspect of the treatment program including adverse reactions and the treatment thereof.

Other Special procedures:

Within the limitations of personnel, facilities, and funding available and in the interests of increasing the knowledge of the safety and efficacy of the drug itself, the following procedures are suggested as worthwhile, to be carried out at baseline and periodically in randomly selected subjects: EKG, measures of respiratory, cardiovascular, and renal function, psychological test battery, simulated driving performance.

Voluntary and involuntary terminations:
A. Attempts are to be made to obtain followup on all participants who elect to leave the program. Whenever possible, the patient is to be hospitalized for gradual withdrawal from methadone, and appropriate facilities should be available for this purpose.
B. Subjects are to be terminated as having failed in the program on the basis of continued frequent abuse of narcotics or other drugs, alcoholism, criminal activity, or persistent failure to adhere to the requirements of the program.
Results:
Evaluation of the safety of the drug administered at high dosages over prolonged periods of time is to be based on results of physical examination, laboratory examinations, adverse reactions, and results of special procedures when these have been carried out.
Evaluation of rehabilitation is to be based on, among other things, the following:
A. Arrest records
B. Extent of alcohol abuse.
C. Extent of drug abuse.
D. Occupational adjustment verified by employers or records of earnings.
E. Social adjustment verified whenever posssible by family members or other reliable persons.
Evaluations are to be recorded at predetermined intervals, e.g., monthly for the first 3 months, at 6 months, and at 6-month intervals thereafter.
Evaluation group:
Whenever possible, an independent evaluation committee of professionally trained and qualified persons not directly involved in the project will inspect facilities, interview personnel and selected patients, and review individuals' records and the periodic analysis of the data.

COMMENTS ON AB 323 - METHADONE CLINICS

by OTTO RAVENHOLT, M.D.
CHIEF HEALTH OFFICER
DISTRICT HEALTH DEPARTMENT
CLARK COUNTY

Passage of Assembly Bill 323 can mark an important step forward in Nevada history. While this measure represents only one step in a journey of many, it would open the legal door to the provision of methadone to selected heroin addicts in carefully supervised hospital and clinic programs. This can have critically important benefits for both the individuals and the community.

The individual who has become addicted to heroin has fallen victim to perhaps the most disabling handicap experienced today. He has become psychologically and physically dependent upon daily use of the heroin, a derivative of opium. This is the "father" of all addiction problems. Once acquired it ruins the life of the man or woman who becomes involved. Unable to resist the impulse to seek the euphoric state which injection of the drug provides, the addict follows this master wherever it leads him.

The cost is close to $100 a day. More significant, the cost is such that the addict abandons family, job, health, and all normal standards of conduct, in pursuit of his drug. Only crime can produce the dollars that must be had. The addict becomes a criminal, or a prostitute, and a member of the criminal underworld. He soon becomes for a longer time a prisoner when arrested and convicted for either his addiction or his criminal activities carried on to support that addiction.

The addict is an individual who has lost family, job, friends, and self respect. In growing numbers heroin addicts are also losing their lives. Headlines report in the City of New York more than 100 deaths per month from heroin. This is distant, but are you aware in the City of Las Vegas in the past three months no less than four people have died from direct or indirect effects of heroin use. The toll of heroin addiction is rising.

I am aware from personal contact of a growing number of young men, veterans of the Viet Nam conflict, who have returned to our community as heroin addicts unable to adjust and destined to follow the criminal path of so many others. This indirect addiction cost of that war appears far beyond what has been publicly acknowledged by national or defense department leaders. Yet, they offer no help for these men and the community stands silently by. For its silence and failure to act it pays a heavy price.

For an addict to support his heroin cost of $50 to $100 a day, he commits crime. If he steals he must steal two to ten times that amount to obtain the money from those who buy his stolen goods. It is conservative to estimate that the heroin addict in the community costs the people no less than $50,000 a year. This is paid as higher prices to pay for shoplifting costs, as insurance premiums to pay for burglaries, and as damage from growing numbers of hotel room and tourist robberies and assaults.

If the addict-criminal is arrested, prosecuted, and imprisoned for one year, the cost to the taxpayer from this is $23,000 or more. To keep the addict in prison--to feed, clothe and guard him--costs the taxpayer from $5,000 to $10,000 a year. And, this does not guarantee that he will not continue his addiction inside the prison walls. And no sooner is the addict released from prison than in most cases he returns to his use of heroin and the activities needed to obtain it.

In the past four decades the Federal government has maintained hospitals at Lexington, Kentucky, and Fort Worth, Texas, for the treatment of the narcotic addict. The hospitals withdraw the patient and improve his health before returning him to the community. I have sent patients to both of these hospitals. Typically, one of these patients is today locked in the Clark County jail accused of heroin abuse. A study by the Public Health Service identified that more than 95% of such "cured" addicts returning to New York City were again addicted to heroin within six months, most within six weeks. Medical treatment in its usual form promises no solution for the addiction problem of the heroin addict.

Limited success has come from the "do it yourself" programs of intensive groups such as those of Synanon, once tried in the Nevada State Prison. But this impact is small when weighed against the growing problem. Only one means has emerged from experience of the past ten years offering hope of substantial impact in salvaging heroin addicts from criminal to constructive lives. This is the daily administration of methadone for which clinics are being developed in larger cities across the country.

Methadone is a synthetic substitute for heroin (free from the euphoric effect of the alkaloid narcotic) which may be taken by the addict in daily amounts, in supervised settings. The use of methadone removes the craving for heroin and denies the addict any pleasure from taking heroin. Experience in clinics which I have seen in San Francisco, in Los Angeles, in Washington, D.C., and other cities, now covers a period of more than five years. Successful rehabilitation of long term addicts has been accomplished in more than 80% of the patients in some of these clinics. The total cost for the first year of clinic service is $1,000 per patient, the second year, $500. The savings to the community is 50 to 100 times the cost.

In Washington, D.C. a growing number of these clinics now serving thousands of addicts is believed a major factor in a 20% reduction of crime during the past year. In other cases, families have been rebuilt and responsible lives have been achieved by addicts whose future held nothing but addiction, crime, and the prospect of prison or an early death from hazards of their activities and addiction.

AB 323 opens the door for methadone clinics to be developed in the State without funds. The second omission is a serious one, for I believe that for every dollar spent, the citizens of Nevada would save many times that cost now paid in other ways. Yet, I urge you to open the door legally and permit us to explore means of providing this

assistance to those addicts who may thus be returned to constructive life. If necessary, we will seek funds from the addicts themselves--or from their families--to begin such clinic service. There are families who now live in despair, fear, and concern over the addiction of one of their members.

The Nevada law today makes it a criminal offense to offer this kind of help to such people. The people of Nevada are looking to this Legislature to open a new door to reduce the human and community cost of addiction in this state.

Otto Ravenholt, M.D.

Special Communication

Progress Report of Evaluation of Methadone Maintenance Treatment Program as of March 31, 1968

*Methadone Maintenance Evaluation Committee**

The Methadone Maintenance Program, under the direction of Vincent Dole, MD, and Marie Nyswander, MD, has now been in operation for approximately four years. It was initiated by a grant from the New York City Health Research Council, has been continued and expanded by a contract from New York City Department of Hospitals through the Inter-departmental Health Council to Beth Israel Medical Center and, as of Oct 1, 1967, the program has been funded through the State of New York Narcotic Addiction Control Commission. This program is an outgrowth of work at Rockefeller University which indicated that methadone maintenance offered hope as a treatment modality in the rehabilitation of "hard core" heroin addicts.

See also page 2708.

The charge to the Evaluation Unit at the Columbia University School of Public Health and Administrative Medicine has been to attempt to evaluate the results of this program in an objective manner and to make recommendations based on this evaluation.

Description of Patients

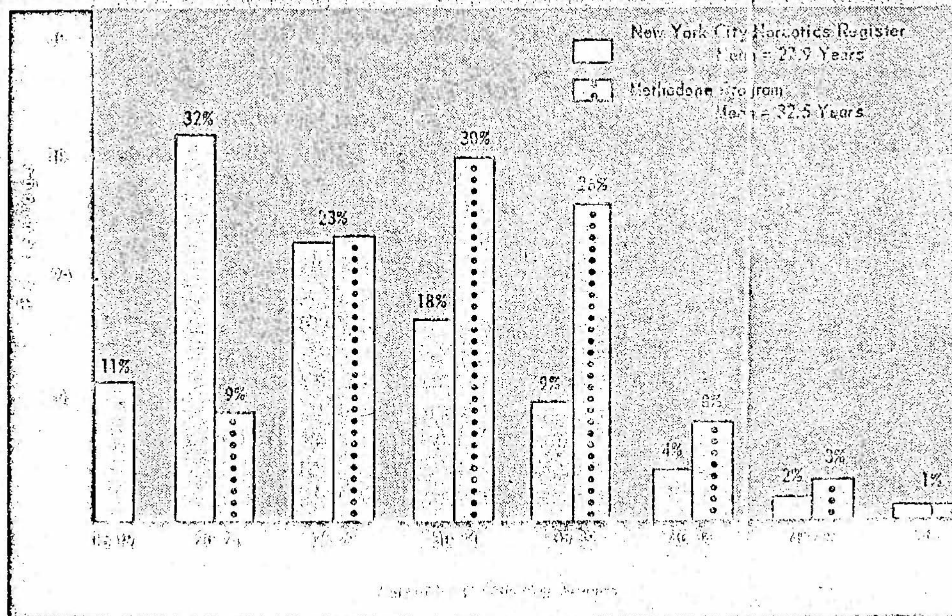
The patients in the Methadone Maintenance Program have all been well-established heroin addicts, for an average of ten years prior to admission to the program. They are between 20 and 50 years of age with an average age of 33 years as compared with an average age of 28 years for addicts reported to the New York City Narcotics Register.

Sixty-eight percent of the patients in the program are over the age of 30 contrasted with 34% of addicts reported to the Narcotics Register (Fig 1). The ethnic distribution of patients in the program compared with that of addicts known to the Narcotics Register is shown in Fig 2. The proportion of white patients is considerably higher in the program (48% vs 25%) and the proportion of Negro and Puerto Rican patients is lower (33% vs 47%) and (18% vs 27%). Approximately half of the patients did not finish high school, and practically all of them have well-documented histories of repeated previous arrests, jail terms, and repeated treatment failures.

The patients all enter the program voluntarily, and each one signs a consent form prior to starting treatment.

Program

The program is in two phases. Phase I is an in-patient phase of approximately six weeks during which the patients are given methadone hydrochloride in increasing doses until they are built up to a stabilizing dose of between 80 and 120 mg daily. During their hospital stay, the patients are given a great deal of personal, social and psychological support, as well as necessary medical and dental care. This care is provided by a team of physicians, social workers, nurses, and counselors. Research assistants who are former addicts, currently being



1. **Percentage distribution by age of patients in methadone program and New York City Narcotics Register.**

*Henry Brill, MD, *Chairman*. For a complete list of members of the committee, see page 2714.

This report was recommended for publication by the AMA Council on Mental Health.

Reprint requests to Pilgrim State Hospital, Box 22, West Brentwood, NY 11717 (Dr. Brill).

maintained on methadone, also play an essential supporting role in the program.

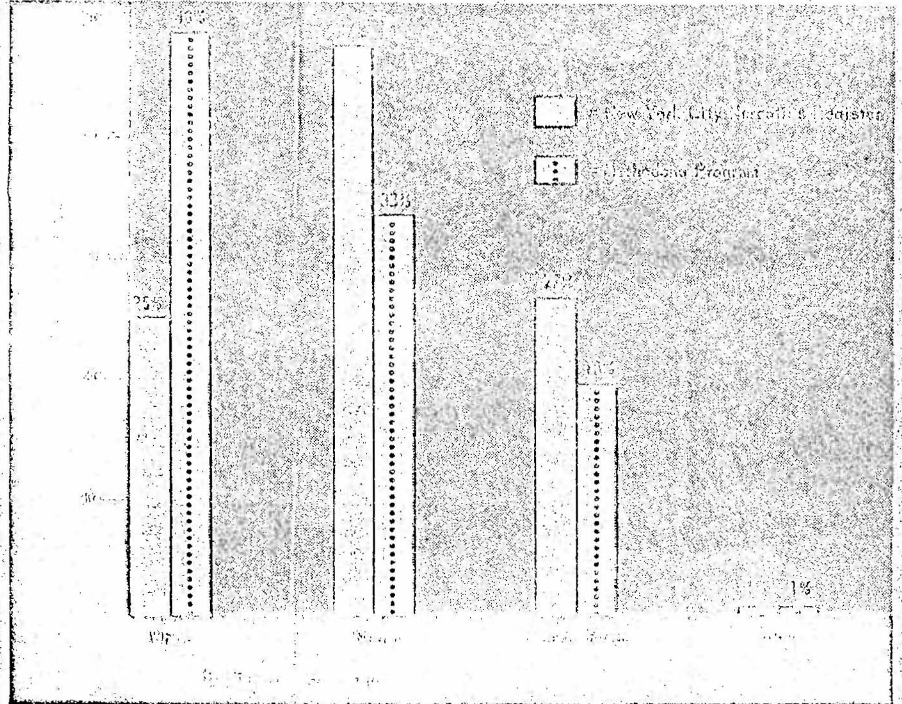
Although available, formal psychiatric treatment has been required by only a small group of patients.

Phase 2 is the outpatient phase. In the early part of phase 2, the patients appear daily for medication and urine testing for indication of heroin usage, or use of other drugs. After a few months those patients who appear to have made a good adjustment are provided with medication for several days at a time and return to the clinic once or twice a week for urine testing. Physical examinations are given periodically, psychosocial, vocational, and legal support is available, as needed. The major emphasis is in assisting the patients towards (1) getting a job, (2) returning to school to complete the equivalent of a high school education, (3) increasing their skills by taking additional technical training (ie, TV repair, auto repair, beautician).

Results

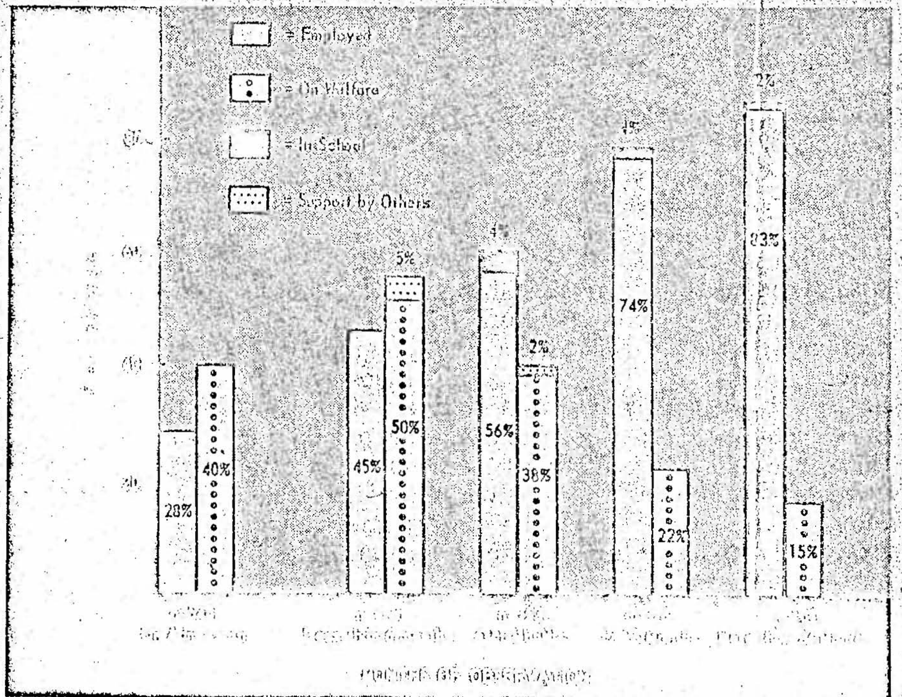
As of March 31, 1968, a total of 871 patients had been admitted to the program. One hundred and nineteen or 14% have left the program. Of these, 87 or 10% have been discharged, 3% have dropped out, and 1% have died. The Table shows the census for each of the groups which are currently being followed. Experience with the Van Etten Tuberculosis group, the Rockefeller University Ambulatory treatment group, and the group from Riker's Island is limited both in numbers and in length of follow-up; therefore, this report will focus on the results obtained in the two largest groups with the longest experience who are being treated under the program contract with Beth Israel Medical Center. This group includes 375 men from Morris J. Bernstein Institute and 169 men from Harlem Hospital who have been in the program three months or longer.

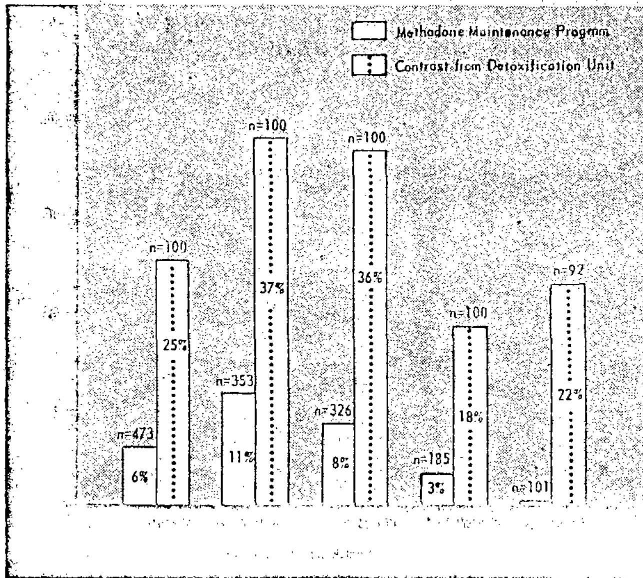
Among these 544 men only 28% were known to be gainfully employed at time of admission and 40% were known to be receiving welfare support. The progress of these patients is shown in Fig 3. After five months in the program 45% are employed, after 11 months 61% are either employed or in school and among those remaining 24 months or longer, 85% are employed or in school. The proportion of patients receiving



2. Percentage distribution by ethnic group of patients in methadone program and New York City Narcotics Register.

3. Employment status and school attendance for 544 men in Methadone Maintenance Program three months or longer as of March 31, 1968, according to months of observation.





4. Percentage distribution of arrests for 544 men in Methadone Maintenance Program three months or longer as of March 31, 1968, and for contrast group according to months of observation.

Methadone Maintenance Research Program Census as of March 31, 1968

Facility	No. Admitted Through 3/31/68		No. Discharged*		Discharged, %		No. in Program as of 3/31/68	
	M	F	M	F	M	F	M	F
MBI†	486	105	72 (4)	18 (1)	15	17	414	87
Harlem	207		16 (2)		8		191	
Van Etten	35	8	12 (1)	1	34	13	23	7
Other	20	4	...	...	...	...	20	4
Rikers Island	6		...		...		6	
Subtotal	754	117	100	19	13	16	654	98
Total	871		119 (8)		14		752	

*Number in parentheses represent deaths, overall death rate is 1%.
†MBI represents Morris J. Bernstein Institute.

welfare support shows a progressive reduction from 50% at five months to 22% after one year and 15% after two years. The experience with the 79 women who have been in the program for three months or longer shows a similar pattern.

None of the patients who have continued under care has become readdicted to heroin, although 11% demonstrate repeated use of amphetamines or barbiturates, and about 5% have chronic problems with alcohol.

Another measure of rehabilitation is a decrease in the number of arrests. Figure 4 shows the proportion of men in the methadone program who have been arrested in each period of observation contrasted with the proportion of arrests in a contrast group selected from patients admitted to the Detoxification Unit at Morris Bernstein Institute and followed up over the same period of time. This contrast group was matched with the methadone group only by age, ethnic group, and month of admission, and therefore, is not, in any sense, a control group. The recent arrest experience of those who have been dropped from the program resembles that of the group from the Detoxification Unit.

A relatively small percentage of those gainfully employed are employed in the program. This is often a transient phase in the process of rehabilitation. All patients are continuing on maintenance doses of methadone. Periodic medical examinations have demonstrated no evidence of toxic effects of the drug in either liver or kidney function tests, and no evidence of decreased motor functioning.

Conclusions

The results of this program continue to be most encouraging in this group of heroin addicts, who were admitted to the program on the basis of precise criteria. For those patients selected and treated as described, this program can be considered a success. It does appear that those who remain in the program have, on the whole, become productive members of society, in contrast to their previous experience and have, to a large extent, become self-supporting and demonstrate less and less antisocial behavior. It should be emphasized that these are volunteers, who are older than the average street addict and may be more highly motivated. Consequently, generalizations of the results of this program in this population to the general addict population probably are not justified. There remain a number of related research questions which need further investigation.

Recommendations

As a result of the most encouraging results demonstrated thus far, we recommend:

1. Continued intake of new patients as rapidly as current facilities will allow.
2. Expansion of the program to other units which can provide all elements of the current program.
3. Extension of the program to other groups, with different criteria for admission such as younger patients, or a prison population, in order to determine the applicability of this treatment program to a broader segment of the addict population, and variations in technique, including induction on an ambulatory basis.
4. Further research on the impact of each major component of the program.
5. Continued follow-up and evaluation of all patients currently in the program and in any new programs to be developed in order to assess the long-term effects and results.

Members of the Methadone Maintenance Evaluation Committee include Paul Densen, DSc; Jack Elinson, PhD; Herman Hilleboe, MD; Lawrence C. Kolb, MD; Donald B. Louria, MD; Harold Meiselas, MD; Samuel P. Oast III, MD; Dickinson Richards, MD (*Emeritus*); Cecil G. Sheps, MD; Ray Trussell, MD. *Ex-Officio Members:* Efren Ramirez, MD; Florence Kavaler, MD; Maurice Bachrach. *Staff:* Frances R. Gearing, MD, Director, Evaluation Project; Mrs. Frieda Karen, Field Supervisor.

This report was submitted to the State of New York Narcotic Addiction Control Commission by Columbia University School of Public Health and Administrative Medicine under terms of Contract Number C-26978.

Generic and Trade Names of Drug

Methadone hydrochloride—*Adanon Hydrochloride, Althose Hydrochloride, Amidone Hydrochloride, Dolophine Hydrochloride.*

Successful Treatment of 750 Criminal Addicts

Vincent P. Dole, MD; Marie E. Nyswander, MD; and Alan Warner, PhD

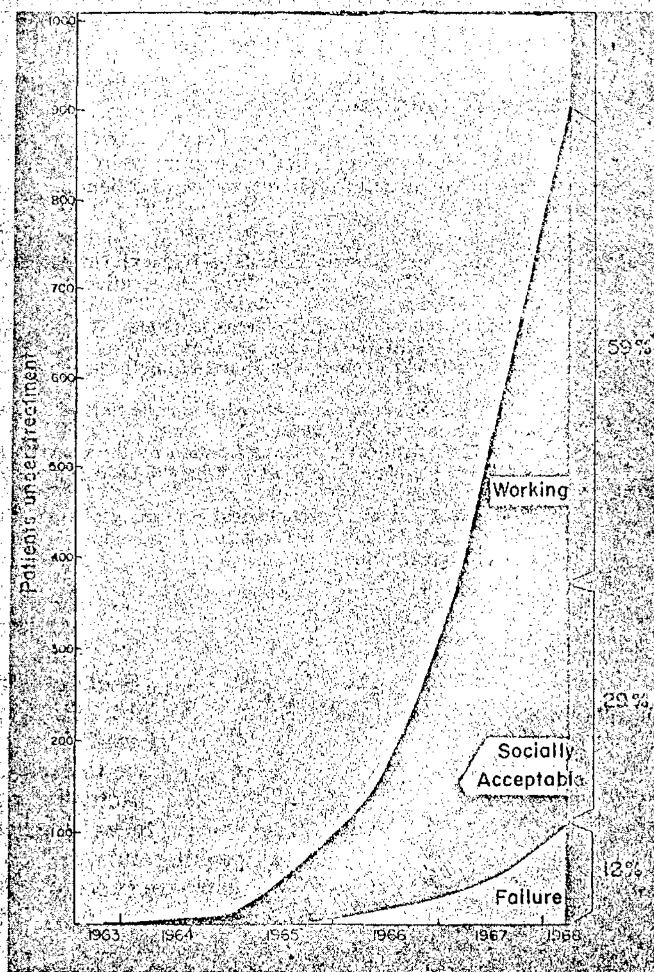
A four year trial of methadone blockade treatment has shown 94% success in ending the criminal activity of former heroin addicts. The majority of these patients are now productively employed, living as responsible citizens, and supporting families. The results show unequivocally that criminal addicts can be rehabilitated by a well-supervised maintenance program.

In November 1963, on the initiative of the Health Research Council of New York city, a study of heroin addiction was started at Rockefeller University Hospital. The council recognized the need for new methods of treatment. Thousands of heroin addicts were filling the jails of New York city. It seemed reasonable to ask whether some medication might control the drug hunger of these criminal addicts, and enable them to live in the community as decent citizens.

See also page 2712.

Clinical studies conducted in the metabolic ward during 1964 and extended to Beth Israel Medical Center in 1965 suggested that this result might be achieved by using the familiar drug methadone hydrochloride in a new way. By establishing tolerance to methadone, and subsequently maintaining the tolerant state with a constant daily oral dose, we found it possible to block the action of heroin, and eliminate the hunger for narcotic drugs.[1] Patients, thus blockaded, felt no narcotic effects, but lost their compulsive desire for heroin. They stopped being criminals, and in the majority of cases became productive members of society. A preliminary report of the clinical findings was published in 1965.[2]

At the time of this report, the potential value of treatment for large scale use remained indeterminate. The results, although encouraging, were lim-



1. Growth of the methadone maintenance treatment program. In addition to patients in treatment, approximately 1,000 addicts are awaiting admission to program.

From Rockefeller University and Beth Israel Medical Center, New York.

Read before the Section on Preventive Medicine at the 117th annual convention of the American Medical Association, San Francisco, June 19, 1968.

Reprint requests to Rockefeller University, New York 10021 (Dr. Dole).

ited to the treatment of a few patients for a few months. The present report summarizes the much more extensive experience of the past four years (Fig 1). The number of criminal addicts who have been rehabilitated with methadone treatment is large enough to empty a moderate sized jail, and there are at least 1,000 more addicts waiting for treatment. Detailed records of medical and social status have been kept for all patients, and analyses of urine for narcotic drugs, barbiturates, and amphetamines have been made at least weekly.[3]

All patients admitted to treatment from the beginning of the research (January 1964) to the time of this report (June 1968) are included in the statistics, except for a special group of patients who received combined treatment for addiction and tuberculosis, and a few patients who had been started on methadone therapy elsewhere and were accepted as transfers. For some analyses, such as measures of social stability and productivity, the tabulation has been limited to patients who have been in treatment for more than three months.

A notable feature of the treatment program has been the absence of compulsion or confinement. It has not been found necessary in the methadone program to apply prison techniques for control of behavior. Some addicts who had been notorious troublemakers in prison-type programs have become ordinary patients with methadone treatment. Not all have responded favorably, of course; some patients have been discharged for disruptive behavior, or because of nonnarcotic drug abuses. All of these failures—including patients who had been in treatment for only one day—are included in the statistics (Table 1).

Table 1.—Discharges From January 1964 to May 1968*

Cause	Time on Program, mo				
	<1	1-6	6-12	>12	
Behavior	5	23	13	13	(50%)
Drug abuse					
Heroin	0	0	0	0	(0%)
Nonheroin	2	2	0	5	(8%)
Medical					
Disability	4	8	7	8	(25%)
Death	2	1	5	1	(8%)
Voluntary	2	2	1	5	(9%)
	(14%)	(33%)	(24%)	(29%)	

*There were 863 total admissions and 109 total discharges (13% of admissions).

Procedure

Addicts with a history of at least four years of mainline heroin use and repeated failures of withdrawal treatment were admitted to treatment in the order that they applied, subject to the following conditions: age 20 to 40 (upper limit raised to 50 in the third year of the study), no legal compulsion (ie, methadone treatment not a condition of probation or parole), no major medical complication (eg, severe alcoholism, epilepsy, schizophrenia), and resident of New York city. During the first 18 months only men were admitted to the program; subsequently a woman's unit has been in operation, with admission by the same procedure except that the intake office attempts to bring in married couples to the two units at approximately the same time.

The treatment program is divided into three phases, related to the progress of rehabilitation with methadone maintenance continuing throughout. During phase 1, a six week period of hospitalization on an open medical ward, the patients are brought to a blockading level of methadone. The new patient should be given this medication in relatively small, divided orally administered doses (eg, 10 mg twice daily), and brought to maintenance level (80 to 120 mg/day) gradually, over a period of four to six weeks. Some experience in regulation of dose is necessary: if the medication is increased too rapidly, the patient will become over-sedated during the first few weeks, and may experience urinary retention and constipation, whereas if the dose is inadequate, a patient who had been using a large amount of heroin will have unnecessary withdrawal symptoms. There appears to be a wide margin of safety in administration of methadone to patients who have been heroin addicts, but of course the physician must avoid giving an excessive dose to a new patient. When in doubt, the safe rule is to give the medication in divided doses and observe the effects over the first 24 hours.

As the dose is gradually increased over a period of four to six weeks, the medication makes the patient refractory to narcotic drugs and eliminates (or greatly reduces) any narcotic drug hunger, presumably by maintaining a blockade of the sites of narcotic drug action. There should be no euphoria or other undesirable side effects (except mild constipation) if the medication is given in proper dosage. If the patient appears to be sedated during this induction phase the dose of methadone should be held constant or reduced until further tolerance is developed.

More recently, we have been testing a strictly ambulatory treatment, and have obtained favorable results, confirming the previous reports of Brill and Jaffe[4] and of Wieland.[5] New patients are started on small doses of methadone and are gradually brought up to stabilization level, as closely supervised outpatients. This is much less expensive than hospitalization and, with proper supervision, equally successful.

Phase 2 begins for the patients when they are discharged to the outpatient clinic, and continues for at least a year. The newly discharged patients return for medication to the outpatient clinic each weekday, and are given medication to take home for the weekends. Later, as justified by good conduct, the patients are permitted to come at less frequent intervals, taking out doses of medication for the intervening days. At least once per week (with rare exception) each patient is required to drink a full dose of the medication in the clinic, and thus demonstrate that he has maintained his

tolerance by taking medication during the intervals. Each time that a patient comes to the clinic he is required to leave a urine specimen for analysis.

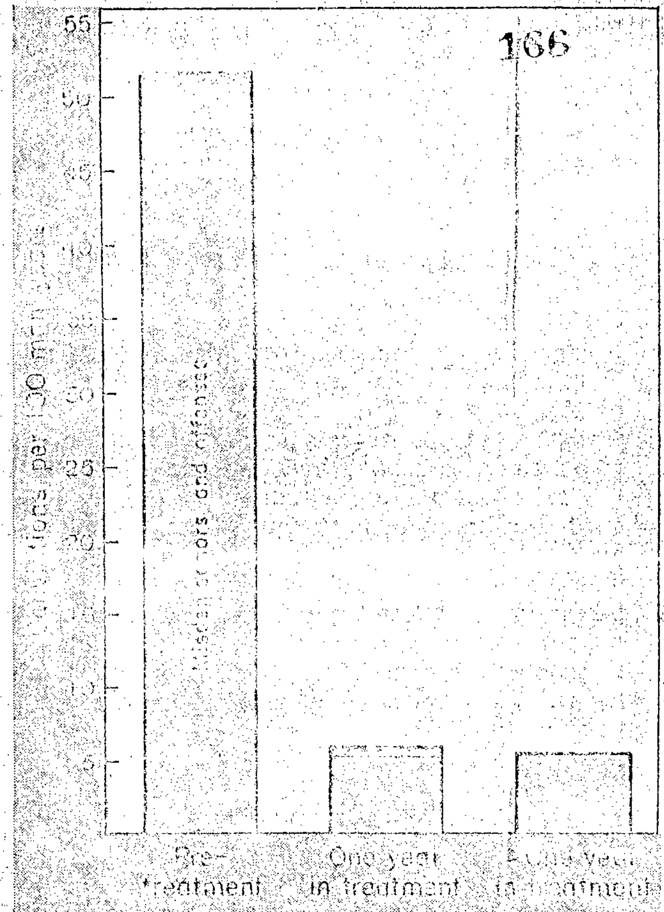
Phase 3 is reached when the subject has become a stable and socially productive member of the community, and can be treated as an ordinary medical patient. To be classified in this category, he must be acceptably employed (either in a job or at school, or if a woman, as a homemaker), and have no further problems with drugs or alcohol. The stability of rehabilitation must be proven by one year of normal life in the community. Medically the treatment of these patients remains the same as the treatment of patients in phase 2; they also take at least one dose of medication in the clinic each week, and leave a urine specimen.

Patients who have been discharged for misconduct, or who have asked to leave the program, have been withdrawn from medication by gradual reduction in dose over a period of about a month. This is done easily and without discomfort. We have not, however, considered it desirable to withdraw medication from patients who are to remain in the program, since those who have been discharged have experienced a return of narcotic drug hunger after removal of the blockade, and most of them have promptly reverted to the use of heroin. It is possible that a very gradual removal of methadone from patients with several years of stable living in phase 3 might succeed, but this procedure has not yet been adequately tested.

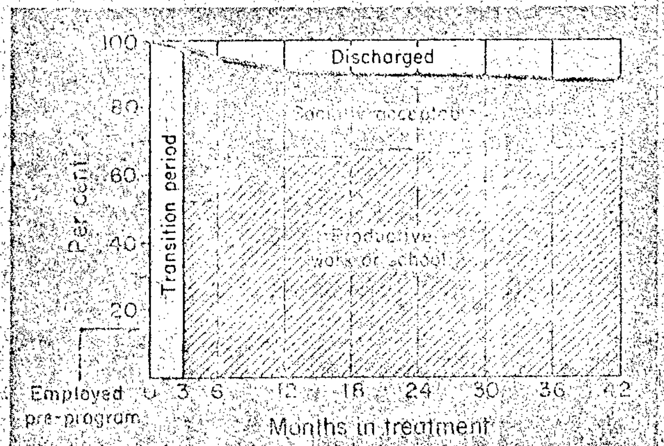
The supportive services provided by the methadone program and community agencies have been related to the needs of the patients. Some patients, when freed from the burden of heroin addiction, have ceased all antisocial activity; they obtained jobs without further assistance and began to support their families. These exceptional individuals needed nothing from the program except medical supervision. More frequently, the slum-born, minority group criminal addict needed help to become a productive member of society. Many of these individuals came to us from jail with no vocational skills, no family, and no financial resources. They were further handicapped by racial discrimination and by their police records.

Results

Drug-related crime has been sharply reduced by the blockade of narcotic drug hunger. Prior to treatment 91% of the patients had been in jail, and all of them had been more or less continuously involved in criminal activities. Many of them had simply alternated between jail and the slum neighborhoods of New York city. The crimes committed by these patients prior to treatment had resulted in at least 4,500 convictions (for felonies, misdemeanors, and offenses), a rate of 52 convictions per 100 man-years of addiction. The figure is obviously a minimum estimate of their pretreatment criminal activity since convictions measure only the number of times an addict has been caught. For every conviction, the usual addict has committed hundreds of criminal acts for which he was not apprehended.



2. Reduction in criminality of 912 former heroin addicts, as measured by 90% drop in rate of convictions.



3. Status of 723 male addicts admitted to methadone treatment. Rehabilitation was measured by productive employment and crime-free status over four-year period.

Since entering the treatment program, 88% of the patients show arrest-free records. The remainder have had difficulties with the law. Some of these individuals, however, were arrested merely on suspicion, on charges such as loitering, or by inclusion in a group arrest. In such cases, if the charges were

Table 2.—Convictions* of 912 Patients on Methadone Therapy, January 1964 to May 1968 (939 Patient-Years)

	Felony	Misdemeanor	Lesser Offenses
Narcotics	3	10	0
Dangerous drugs	0	4	0
Nondrug crimes	0	27	7
Rate per 100 patient-years	0.3	4.4	0.7

*Convictions for offenses committed while patients were receiving treatment. Pretreatment conviction rate (all offenses) was 52 per 100 patient-years.

subsequently dismissed, the episode has not been considered a criminal offense in our statistics. The remainder, 5.6% of the patients, were guilty of criminal offenses, and were convicted. In all, there have been 51 convictions in 880 man-years of treatment experience (a rate of 5.8 convictions per 100 man-years). Table 2 shows a more detailed analysis of these data.

We believe that the record of convictions of patients in treatment is essentially complete since a patient receiving methadone cannot absent himself for longer than a week without being missed. Moreover, legal representation is available for arrested patients. It provides both an accurate definition of the charge, and an incentive for the arrested person to report his difficulty. As to the estimate of arrests and convictions of patients before treatment, we have only a minimal and incomplete figure. The reduction in crime, therefore, is at least 90% (Fig 2).

All patients convicted of crimes and removed from treatment by imprisonment were discharged from the program. Some of them have been, or will be, readmitted on completion of their jail sentences. A few other patients were discharged voluntarily. Of a total of 863 admitted to treatment, ten (1.2%) were discharged from methadone treatment at their own request because they wished to leave New York; these patients are not considered either successes or failures since their outcome is not definitely known. The remainder (12%), all of whom we report as failures of the program, can be classified both by the length of time in treatment and the reason for discharge (Table 1). In most cases the misconduct that led to discharge involved uncooperative or antisocial behavior, or nonnarcotic drug abuse (including alcoholism). For these individuals—fortunately the minority—stopping heroin use with blockade treatment was not enough to open the way for rehabilitation. Possibly more elaborate programs, combining blockade treatment with psychotherapy and sheltered environment, might have succeeded.

Since blockade with methadone makes heroin relatively ineffective, a patient cannot use heroin for the usual euphoria, nor will he experience abstinence symptoms after an experiment with the drug. He can, however, remain drug-oriented in his thinking, and be tempted to return to heroin. Many patients have made sporadic attempts to use heroin again, especially during the first six months of treatment. Their habits of association with addicts, and of heroin taking in certain environments, were not eliminated by the blockade. For such individuals, the negative experience of experimenting with heroin and feeling little or no euphoria may contribute to the extinction of conditioned reflexes that underlie drug-seeking behavior.[6] Needless to say, the staff does not encourage such dangerous experiments, but we recognize that for some individuals this type of self-experimentation might be a necessary step in reeducation and should not be regarded as a failure of treatment. Fortunately, experiments of this kind were the exception rather than the rule. The majority of patients have stopped heroin use completely after starting methadone treatment. This fact has been verified by repeated analyses of urine. For example, in a group of 174 patients, in which the analyses were done three times weekly for the first year of treatment, 55% did not show a single positive for self-administered narcotics. On the other hand, a minority of these patients, about 15%, continued to use heroin intermittently (eg, on weekends) even though the euphoric effect was blocked. These tended to be isolated, schizoid individuals who were unable to find new friends or participate in ordinary activities.

The greatest surprise has been the high rate of social productivity, as defined by stable employment and responsbile behavior (Fig 3). This, of course, cannot be attributed to the medication, which merely blocks drug hunger and narcotic drug effects. The fact that the majority of patients have become productive citizens testified to the devotion of the staff of the methadone program—physicians, nurses, older patients, counselors, and social workers. The success in making addicts into citizens also shows that an apparently hopeless criminal addict may have ambition and intelligence that can work for rather than against society when his pathological drug hunger is relieved by medical treatment.

This investigation was supported by grants from the Health Research Council (City of New York Department of Health) and the New York State Narcotic Addiction Control Commission.

Generic and Trade Names of Drug

Methadone hydrochloride—*Adanon Hydrochloride, Althose Hydrochloride, Amidone Hydrochloride, Dolophine Hydrochloride.*

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TESTIMONY PREPARED FOR ASSEMBLY COMMITTEE ON HEALTH AND WELFARE ON AB 360

By Dorothy J. Button, R.N.

My name is Dorothy Button. I live at 1590 Hillside Drive in Reno, Nevada. I am chairman of the Nevada Nurses' Association Committee on Legislation.

Nevada Nurses' Association is the professional organization of registered nurses. In 1970 our Association had 601 members. Membership in the Association is voluntary.

Nevada Nurses' Association opposes AB 360. We(NNA) believe all children should receive routine immunizations; however, there have been problems with the immunization program conducted by Public Health Nurses employed by the Nevada State Division of Health. Because of these problems and until they are resolved, The NNA does not believe that Nevada should be passing a law such as AB 360.

I would like to read an announcement which was made by the physicians of the Elko Clinic relative to this situation in Elko County. This announcement was received November 18, 1970. I quote.

Our Committee on Legislation had a request for similar legislation from the Registered Nurses employed by the Washoe County Schools which was considered at our meeting on December 7, 1970. Because of the problems in some of the outlying counties and because legislation passed here applies Statewide, our recommendation to these nurses was that they

explore the possibility of implementing the proposals in Washoe County through meetings with the Washoe County Commissioners. They are in the process of doing this now and are glad that we suggested this to them. This same avenue could be explored in Clark County. I note that two of the sponsors of AB 360 are from Clark County.

The Nevada Nurses' Association has named an ad hoc committee to determine the legal status of the nurse who gives immunization injections when a Medical Doctor is not present. It has been suggested that such a nurse may be practicing medicine without a license. This Committee met the first time March 4, 1971. At the next meeting we shall involve the State Attorney General.

As Chairman of the NNA Committee on Legislation and speaking for the Association, I urge that your committee gives AB 360 a "Do Not Pass" recommendation. Thank you.

H. R. Mayern, M.D.

Phone (702) 738-3111

Elko Clinic

762 Fourteenth Street
Elko, Nevada 89801

Rec'd NOV 18 1970

The physicians of the Elko Clinic believe all children should receive routine immunizations. If parents wish their children to receive the immunizations from nurses of the Public Health Service, it is perfectly all right with these physicians. However, the individual physicians assume no legal responsibility for immunizations or immunization programs conducted by Public Health nurses.

It is our understanding the Nevada State Department of Public Health has given authorization to Public Health nurses to conduct immunization programs.

The original document is of poor quality, but is readable upon careful inspection.
Library staff has transcribed the original document, the text of which follows.

Elko Clinic
Phone (702) 738-3111 | 762 Fourteenth Street | Cark H. Shuck
Elko, Nevada 89801 | Business Manager

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It is our understanding the Nevada State Department of Public Health has given authorization to Public Health nurses to conduct immunization programs.

Heckethorn

A. B. 499

ASSEMBLY BILL NO. 499—COMMITTEE ON HEALTH AND WELFARE

FEBRUARY 25, 1971

Referred to Committee on Health and Welfare

SUMMARY—Creates cause of action in department of health, welfare and rehabilitation against third parties for medical aid to indigent persons. Fiscal Note: No. (BDR 38-654)

EXPLANATION—Matter in *italics* is new; matter in brackets [ ] is material to be omitted.

AN ACT relating to liability of third parties in state medical aid cases; providing subrogation rights for the welfare division of the department of health, welfare and rehabilitation; establishing lien rights on the proceeds of recovery; and providing other matters properly relating thereto.

The People of the State of Nevada, represented in Senate and Assembly, do enact as follows:

1 SECTION 1. Chapter 428 of NRS is hereby amended by adding
2 thereto a new section which shall read as follows:
3 *1. When a recipient incurs an illness or injury for which medical*
4 *services are payable under this chapter and which is incurred under*
5 *circumstances creating a legal liability in some person other than the*
6 *recipient or the division, to pay all or part of the costs of such service:*
7 *(a) The division or its fiscal intermediary or both of them may pro-*
8 *ceed against that person to recover costs of the service;*
9 *(b) If those who provide medical service receive compensation under*
10 *this chapter, the division or its fiscal intermediary, or both of them, by*
11 *whom the compensation was paid, shall have a right of action against the*
12 *person so liable to pay costs, and shall be subrogated to the rights of the*
13 *recipient or of his dependents to recover therefor; but:*
14 *(1) In any action or proceeding taken by the division or its fiscal*
15 *intermediary or both of them under this section, evidence of the amount*
16 *of compensation, illness or accident benefits and other expenditures which*
17 *the division or its fiscal intermediary or both of them have paid or become*
18 *obligated to pay, by reason of the illness or injury of the recipient, shall be*
19 *admissible; and*

(2) That if in such action or proceedings the division or its fiscal intermediary shall recover more than the amounts it has paid or become obligated to pay for medical services, it shall pay the excess to the recipient or his dependents.

(c) The recipient, or in case of death, his dependents, shall first notify the division in writing of any action or proceedings, pursuant to this section, to be take by the recipient or his dependents.

1 *2. In any case where the division is subrogated to the rights of the*
2 *recipient or his dependents as provided in subsection 1, the division shall*
3 *have a lien upon the proceeds of any recovery from such persons, whether*
4 *the proceeds of such recovery are by way of judgment, settlement or*
5 *otherwise.*