

DRUG ADDICTION IN THE UNITED STATES

PREVENTIVE MEDICINE

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TERM 1925.

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III

It is almost impossible at the present time to make an exact count of the persons addicted to narcotics in the United States, or even in one of our large cities because of the social and legal factors tending to make addiction a secret practice. It is believed, however that it is possible by utilizing all of the information now available to delimit the number by certain maximum and minimum figures. With this object in view, a number of the more important narcotic surveys made in recent years were analyzed; also the reports made by agents of the Bureau of Internal Revenue and other persons in the narcotic clinics conducted in different parts of the country; statistics in dose of addiction, world production of narcotics and the quantities imported into this country were compiled and studied. Numerous Physicians in different parts of the country were interviewed in person to ascertain the number of addicts they were treating in the course of their practice. The results of these analyses and studies are as follows.

Treasury Department survey:- a special committee appointed by the Secretary of the Treasury in March 1918, made the most comprehensive survey of drug addiction that has yet been made in the United States. One of the means used by this committee for securing information consisted of sending out questionnaires. For the purpose of ascertaining the number of addicts under treatment, questionnaires were sent to every physician registered under the Harrison Act,

and replies were received from approximately 30 2/3% of of them. A total of 73,150 addicts were reported. If these had been 100% replies with the same average maintained there would have been shown to be 237,655 addicts under ~~tre~~ treatment for the entire country.

Pennsylvania Survey: In 1917 there was created in Pennsylvania a bureau of drug control, operating under the state narcotic law. A survey made by this bureau shows that in 1922 there were treated in the hospitals and state institutions 1,652 addicts. For five years this bureau collected the names and addresses of drug addicts living in Pennsylvania, and in that time they obtained less than 9,000 names. The chief of the bureau estimated that, counting the aged and infirm addicts and all persons who necessarily used narcotics for incurable disease - there were more than 20000 habitual drug users in the United States.

On the basis of the 1922 census and 20,000 addicts for Pennsylvania there would be a total of approximately 242,000 addicts in the United States.

During the mobilization of the army for the World war 3,284 drug addicts were recommended for rejection. The army rate if applied to the entire population of this country as shown by its 1920 census would give a total of approximately 99,500 addicts in round numbers; but, this rate for obvious reasons can not be applied to the country as a whole.

Clinic reports made by revenue agents early in 1919: there was a feeling among some members of the medical prof-

ession and officers in different parts of the country that it would relieve the suffering and distress of addicts who had been deprived of legal means of securing narcotics if a cheap source of supply was made available to them. In response to this feeling a number of clinics were opened and operated in different parts of the country for variable lengths of time. Some were operated for a few months only while others remained in operation several months. Thirty four of these clinics reported their number treated to the narcotics division of the Bureau of Internal revenue. The report being 4,123 addicts in 34 cities with a total population of 4,182,952. So that at this rate of 0.98 addicts per 1000 persons there would be 104,3000 addicts in the United States. Using the 1920 census as a basis for computation the New York clinic rate alone would give approximately 140,600 addicts for the entire addicts for the entire country.

Considered individually, the estimates of the total number of addicts in this country made on the basis of these surveys and reports might justly be characterized as unreliable. However, when it is considered that these surveys were made within several years of one another by persons using various methods and working independently of each other in different sections of the country it would seem that for the period from 1915-1922, 215,000 is about correct for the beginning and about 110,000 the approximate number for the end of the period.

It is believed that drug addiction in children below 15 years of age is practically nil. The addiction age varies with different surveys as is shown by the two following reports. In the New York survey 66% of the entire number were below thirty years of age. Brown however in reporting on 2,370 cases reports the average age was 37 years 10 months for males and 37 years 6 months for the females. In the New York survey 25% of the addicts were females while Browns reported 66.9 per cent. were females .

The addiction dose :- addicts using morphine or heroin take from 2 to 60 grains daily; but the number using the two extremes is comparatively small. Many take regularly from 15-20 grains when they can obtain these drugs in the quantities desired. The average daily dose of morphine given at the clinics however was 7 and one-fourth grains but, in nearly all cases the dose was smaller than the appetites of the addicts, because it was the policy to maintain comfort only at first and then to reduce the amount when possible.

Addicts who take opium as gum or in the form of laudanum consume smaller quantities expressed in terms of alkaloids than those who take the drug or morphine or heroin. Reduced to terms of morphine the average daily dose of the laudanum users is 3.3 grains, and the gum opium users 15.3 grains. The quantity of opium consumed by opium smokers is about 2 and one-half pounds per capita per year. Heroin is

now being used in certain sections of the country particularly along the Atlantic seaboard from Washington northward more than the other drugs. Besides these addicts there are about 18,000 cocaine addicts. The cocaine addict is as a rule a mixed type, using both opium and cocaine. The cocaine addict consumes about six grains of cocaine hydrochloride per day, or 2,190 grain per year.

It is believed that the trend of addiction in the country for the past six decades has paralleled very closely the quantities of narcotics available, as represented by the average annual importation in proportion to the population. It has been shown that at no time have the annual importation of narcotics drugs into this country been greater than would be necessary to supply 264,000 addicts, assuming that they were used in their entirety for the satisfaction of addiction. It is not so centralized however, but at least seventy five per cent. of the quantities imported are used for this purpose. The trend of addiction was upward until about the year 1900, when it took a downward course, which it has maintained up to the present time.

It is realized that some of the addicts who were deprived of narcotics as a result of the decrease in the quantities of the drugs imported legally turned to the use of smuggled material after 1915 but, in the opinion of the treasury department of the United States public health service the number that obtained their supplies from this source

was at no time large enough to affect the direction of the trend of addiction.

The factors which have influenced the trend of addiction in this country, some of which are still operative are many: but, it is desired to call attention to only the more important ones in this paper.

Among the factors which have operated to increase addiction may be mentioned the advent of the hypodermic method of administration of drugs, which came into general use about the time of the civil war. It was at that time claimed to be a method of administering morphine without ~~the~~ danger of causing addiction. In so far as addiction is concerned, this deceiver proved to be a curse rather than a blessing. In 1884 the local anesthesia properties of cocaine were discovered and it was not long thereafter until cocaine was widely used especially in catarrh snuffs and nasal sprays. Many cocaine addicts were created in this way and no doubt a large proportion of these became secondarily addicted to opium just as they do today. In 1898 heroin was put on the market and advertised as an opiate that would not cause addiction. It was soon discovered that this was not the case; but, it was nearly ten years before the medical profession fully appreciated the dangers of the drug. It has been claimed that the laws which have been

enacted to curb the use of narcotics have increased addiction by making illegal traffic in these drugs profitable. Although this factor is to be thought of, the continuous decrease in the prevalence of addiction shows that it is not so important as is claimed.

Among the influence which have been tending to lessen addiction is to be mentioned the enormous advances which have been made in medical science and medical education during the last 30 years, and the specific information that has been gained about narcotic addiction during that time. As a result there has come about a better understanding of the dangers and the therapeutic limitations of opium and cocaine, and these drugs are no longer used in many of the disease for which they were at one time commonly prescribed. Another factor which has caused addiction to take a downward course is the enforcement of the restrictive laws enacted by the state and Federal Governments.

Practically all antinarcotic legislation in the United States has been enacted since 1897. By 1913 every State, except Delaware and many large cities, including the city of Wilmington in Delaware, had laws or ordinances designed to regulate in some way the prescribing or selling of the opiates or cocaine, or both of these products.

The Federal Laws, pure food and Drugs act, enacted in 1906 required manufacturers to state on the label the amount

of opium, opium alkaloids or derivatives and cocaine the preparation contained. In addition to other benefits, this provision did away with numerous opium cures that contained opium or opium alkaloids as the chief ingredient and were habit forming in themselves. In 1909 the importation of smoking opium was prohibited. Prior to that time, curiosity about this form of opium indulgence started many people in addiction arreers. Opium smoking is rare at present in the United States, but former smokers now taking opium or heroin are occasionally met with.

The committee appointed to investigate the extent of the use of habit forming drugs in Massachusetts reported in 1917, that 78 of 267 addicts supplied with morphine, or morphine and cocaine by one physician had originally been opium smokers. Simon reports 876 opium smokers, mostly Chinese, among 8,174 addicts arested in New York in three years. The Harrison Act became effective March 1, 1915. Since then other laws designed to regulate still further the traffic in narcotics have been enacted and at the present time the Federal Governement has a check on these drugs at every step in their handling from the time a permit is issued to the manufacturer to import the crude drugs until the finished products reach the ultimate consumer.

The first result of the Harrison Act was to cause a large number of addicts throughout the country to seek treatment. Many who were relieved of their addiction then have no

doubt remained cured. The rigid enforcement of the laws continues to impel addicts even those who stated the habit unconsciously in recent years to seek relief. It is common for this type to give as a reason for seeking a cure that they are tired of dodging the police and occasionally an addict comes for treatment because the peddlers have grown suspicious and refuse to supply him or her with the drug. The superintendent of the Norfolk State Hospital reported in 1917, that over 90 (ninety) % of the addicts who applied for treatment did so because they were having difficulty in securing their supplies of narcotics. Most of such cases relapse, but in the course of time those among them who are fairly normal are permanently cured.

Efficient as the laws have proved to be from a curative stand point their greater value lies in their effectiveness as preventive measures. When opium and its alkaloids could be bought anywhere, either in pure form or in proprietary medicine not known by the purchaser to contain narcotics, and when prescriptions for opium could be refilled, self medication was a common cause of the drug addict. This, now doubt, explains in part the great prevalence of the addiction formerly noted in rural communities. Addiction by self-medication is now almost impossible, as narcotics in concentrated form can be obtained only on a physicians prescription and exempt preparations contain too small an amount of the drug to create the habit unless taken in enormous quantities. For the fiscal year 1923 the quant-

of taxable narcotic drugs purchased by manufacturers of non-taxable preparations was equivalent to approximately 3,300 ounces of morphine sulphate, an amount too small to permit of these preparations being used for the satisfaction of addiction to any great extent.

Physicians now make very few addicts unnecessarily. The numerous reports and forms which physicians are required to make out in order to prescribe narcotics in any form tends to keep them alert to the dangers of these drugs, and mild forms of addiction now caused by a few weeks or even months of necessary prescribing quickly clear up after a few days of restlessness on the part of the patient and he is no wiser or worse off because of it. Formerly he could experiment further with his "doctors prescription" and become strongly addicted without realizing it until too late. To illustrate this point attention is called to the following facts. The Tennessee survey made before the Harrison law became effective showed, showed according to Brown that physicians were responsible for about 50% of the cases of addiction. In a recent report Simon states that less than 2% of approximately 10,000 addicts arrested or committed to hospitals in New York city during the past three years (1922-23-24) owed their addiction to physicians. Comparison of New York city with the state of Tennessee is not altogether fair, because a certain type of addict tends to congregate in large cities, but the percentage is

so near that found in the examination of addicts from all parts of the country that it is thought that they may be taken as fairly representing conditions as they exist today.

An illustration of the effect produced by the tremendous drive against narcotic addiction which has been going on in recent years is given by the answers to the questionnaire sent out by Simon in 1923 to the physicians of New York state asking how many addicts they had treated in 1922. The 51.6% who replied treated only 775 cases of addiction; and from the information furnished it appears that these were mostly old people or persons suffering from incurable diseases. In the Treasury Department survey made in 1918, 37% of physicians in New York state were treating 12,365 addicts.

Summary and conclusions.

The evidence seems to show that a maximum estimate for the number of addicts in the United States would be 150,000. The estimates based on actual counts and on the available supplies of narcotics, together with the conditions reported by physicians interviewed, point to about 110,000 which number is believed to be more nearly correct.

The number of addicts has decreased steadily since 1900. Before this decrease set in there may have been 264,000 addicts in this country.

The greater number of addicts in prison at present as compared with former years is due to the rigid enforcement of the recently enacted laws and not to an increase

in the prevalence of addiction.

The average daily addiction dose of the opiates in terms of morphine sulphate or heroin hydrochloride is not less than 6 grains. The dose of cocaine hydrochloride is practically the same.

The quantities of narcotics imported by this country at the present time are believed to be only slightly in excess of the amounts required to supply medicinal needs.

Physicians have been credited with being responsible for the creation of many addicts in the past but few cases of recent addiction can be so attributed.

Before the enactment of the restrictive laws in this country there was much opium smoking and addiction and addiction to gum opium and tincture of opium. Today addicts use the alkaloids or their derivatives almost exclusively. Cocaine hydrochloride was used alone by a large ~~xx~~ number of addicts prior to 1915, but is now used only in conjunction with the opiates except in a few cases.

The proportion of the delinquent type of addict is gradually increasing. This is apparently not due to an increase in the number of this type, but to a gradual elimination of normal type.