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Report on Morphinism to the Municipal Court of Boston

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REPORT ON MORPHINISM TO THE MUNICIPAL COURT OF BOSTON

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INTRODUCTION

Whatever the usefulness of a physician attached to a court of justice may be in examining and giving an opinion on individual cases, he has a broader and more difficult task, namely, that of trying to throw some light on problems which may have, at the same time, a medical and a legal aspect.

The more we dwell on these problems the more we are aware of their difficulties which, however, are, to a great extent, not inherent to the problems themselves, but are due to the way in which they are approached. The main difficulty, I believe, is the lack of mutual understanding between physicians on one hand and, on the other, those who have to deal with the law or the criminals. The aim of this paper is to bring about a mutual understanding on the question of morphinism, which I consider as medico-legal and, next to that of insanity, the simplest with which we have to deal.

I hope that what I have to say will arouse sufficient interest to cause its discussion and, above all, that it will be of some practical value.

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Narcotic Drugs

In its current acceptation drug addiction is a term applied to the habitual use of so-called *narcotic drugs,* in particular of "opium and coca leaves, or any compound, manufacture, salt, derivatives or preparation thereof" (Harrison Narcotic Law).

Opium, which has been known since antiquity for its narcotic properties, is the dried, milky exudation obtained by incising the unripe capsules of a poppy grown chiefly in the East and Far East. It is a mixture of various substances which have no particular action on the organism (about 85 per cent) and several narcotic substances (about 15 per cent) which bear the generic name of opiates. The most important from a practical point of view are *morphine* and *codein,* of which opium contains 9 per cent and 3 per cent, respectively. These two substances are very similar and the remaining 3 per cent of narcotics contained in opium have much in common with them. This explains why the action of morphine and that of opium are very much the same when the doses are equivalent. Chemistry has prepared from morphine a few derivatives, the action of which is not very different from that of morphine. The best known is *heroin* (di-acetyl morphine).

Opium in medicine is used in powdered form, as extract, or in alcoholic solution (*laudanum*). *Paregoric* is a very weak pharmaceutic preparation of opium, so weak, in fact, that it is excepted from the provisions of the Federal and the Massachusetts Anti-Narcotic Laws.

Addiction to opiates takes different forms, both concerning the particular drug used and the way of using it. The most prevalent are *opium smoking, heroin sniffing* and *hypodermic injections of morphine.* Opium smoking is at present, in this country, less of a problem than the two latter forms of addiction. Heroin sniffing is much more frequent among addicts of the underworld in certain cities, New York in particular, than in Boston where we rarely see a case of heroinism. Addiction to any opiate in any form will produce about the same symptoms and the final results will be similar. Therefore, and in order to limit my subject, *I shall speak of morphinism alone and it shall be well understood that what is said about it holds true, to a very large extent, of addictions to other opiates.*

Cocaine is a narcotic which is very different from opiates, both in regard to its origin and its action on the organism. It is obtained from the leaves of a South American bush. Cases of cocainism, pure and simple, are relatively rare. It is generally an accompaniment of morphinism. Cocaine is usually taken by sniffing or by hypodermic injection (commonly with morphine). Though its use is extremely deleterious to health, both mental and physical, I shall not dwell on it because it differs in important aspects from addiction to opiates and does not lead, as does morphinism, to a condition of bondage which is

so clear cut and peculiar that it deserves a place apart, both from a medical and a criminal point of view.

Action of Morphine, Morphinism

The widely spread belief that morphine brings about an uncanny mental condition accompanied by fantastic ideas, dreams and what not, is wrong, notwithstanding certain popular literature on the subject. *The most striking thing about morphine, taken in ordinary doses by one who is not an addict, is that it dulls general sensibility, allays or suppresses pain or discomfort, physical or mental, whatever its origin, and that disagreeable sensations of any kind, including unpleasurable states of mind, are done away with.* In fact, the suppression of pain is the only *outstanding* effect of morphine when given for that purpose. The more normal a person feels the less marked, as a rule, this effect will be.

But, though morphine dulls general sensibility, it rather stimulates intellectual processes. Under its influence ideas seem to flow freely in agreeable channels, while at the same time bodily relaxation takes place. This creates a feeling of unusual well being, a pleasurable state of mind which is more or less marked according to individual disposition, but which has nothing weird about it. This condition of euphoria (well-being) and relaxation is conducive to sleep. There are, however, people who exhibit an idiosyncrasy toward morphine and react to an ordinary dose with so-called *"untoward effects"* which are not present in the average case (nausea, vomiting, palpitation of the heart, excitement, mental confusion, etc.). In such persons the effect, as a whole, may be anything but agreeable. If an individual has obtained relief or a feeling of unusual well-being he will naturally have a tendency to repeat his experience with morphine. If he is suffering from chronic pains, is easily out of sorts or simply craves a stimulant, there will be great danger of his taking it again and again. So that we may say that the *very action of morphine works towards the establishment of a habit.*

It is only when morphine is taken in large doses that its narcotic action manifests itself plainly and that all mental functions become markedly depressed. If the dose is extreme, a progressive paralysis of the brain can bring about death. But, even when a deep sleep is induced by morphine and the patient can be aroused, he behaves much more normally, appears less confused, than the man sleeping equally heavily under the influence of alcohol.

The action of a dose of morphine on the brain is the one which is most important from our point of view. It is not necessary to dwell upon the fact that, besides, it brings about certain bodily symptoms, but I might mention that it contracts the pupils of the eyes, influences circulation and perspiration of the skin, checks different secretions and diminishes the motion of the intestines.

Of course, the effect of morphine wears off after a certain number of hours and the condition returns to what it was before, provided the cause for which morphine was taken has not, in the meantime, disappeared. A new dose then brings new relief. *If, for one reason or another, morphine is taken repeatedly for a continuous period* (say, every day for several weeks), *the following things happen: The duration of the effect of morphine is shortened. Whatever untoward effects were present at the beginning disappear. The same dose will become less and less effective or it must be increased in order to obtain the same effect.* More than that, the original feeling of unusual well-being can no longer be obtained; *under the influence of morphine the chronic user will simply feel "normal."* So, in the long run, it will be possible to take, without any immediate bad effects, a quantity of morphine which, at the start, would have been fatal.

These facts are expressed by saying that a *"tolerance"* towards morphine is acquired by the body. This tolerance can be developed to a very high degree, as shown by the following facts. The ordinary medical dose of morphine is one-eighth to one-fourth of a grain. It is considered dangerous to give more than one-half a grain at one time or two grains a day to a patient not accustomed to it. Now, the average morphinist consumes ten to fifteen grains a day, but in the worst cases much more is taken with no immediate bad consequences. Cases are reported in which as much as one hundred and ten (Jelliffe), one hundred and eight (Pouchet) and even two hundred and ten grains were taken daily. Lambert saw a patient take a single dose of forty-five grains hypodermically and only become comfortably drowsy; another patient took forty-seven grains within two hours and showed no effect except satisfied contentment. So, progressively, a condition (mithridatism) can be established in which the morphinist will not be killed, or even much affected, by a dose of morphine, no matter how large.

But if tolerance can be acquired, it can also be lost. In fact, in a case of extreme addiction where the habitue has broken his habit and has kept away from morphine for months, small doses will be very effective. If, ignorant of this fact, he starts again where he left off,

he will experience severe symptoms of intoxication or even be killed.

The theories which try to explain the mechanism of tolerance differ, and, since they imply technical knowledge, I shall not attempt to discuss them. It seems certain, however, that the organism develops the ability either to destroy or to eliminate morphine more rapidly and also that the organs, especially the brain, adjust themselves in some way to the presence of morphine, which, as we have seen, no longer has its original effect upon them. More than that, the adjustment goes so far as to make the presence of morphine in the body a condition necessary for its smooth functioning. We can express this by saying that an *"organic habit" has been contracted.* This leads us to a further point on which too much emphasis cannot be laid, since it is the main factor which prevents "breaking" of the morphine habit. *In anyone who has taken morphine for a long time, the attempt to stop the use of the drug is followed by a very characteristic and distressing condition due to the appearance of so-called withdrawal or abstinence symptoms.* The time of appearance of these symptoms, their intensity and duration are very different according to the case. Individual disposition plays a rôle, but the main factor is the amount of morphine which is habitually taken. The greater it is, the more rapidly the symptoms appear, the more intense they are and the longer they last. In the average case they begin to appear about five to six hours after the last dose and increase in intensity until they reach their climax in about twenty-four to forty-eight hours, the patient then being in a pitiful state. They gradually disappear in the course of a few days or perhaps a week.

A typical picture of the morphine habitue having *withdrawal symptoms* is this: His appearance and bearing change gradually, he becomes very pale, the expression of the face and eyes changes, the pupils dilate until they are remarkably large, he perspires freely, especially in the armpits where perspiration often reaches the dripping point. He feels chilly and tired, sneezes or yawns constantly. He complains of choking sensations and palpitations, feels faint and often does faint. The pulse is weak and rapid and, in the worst cases, it sometimes happens that the heart becomes so weak that a collapse, or even death, occurs. Pains in the stomach, nausea and vomiting are generally present to such a degree that to take or keep down food is impossible. Pains, twitching and cramps appear in different muscles, especially in the legs. Mentally there is some confusion, distressing restlessness, a feeling of fear, great irritability; the excitement can become extreme and is sometimes combined with convulsions. In rare

cases hallucinations and a severe disturbance of consciousness develop. We have then to deal with a condition which closely resembles delirium tremens.

Enough has been said to show that the morphine habitue having withdrawal symptoms feels very miserable and is sick. Nevertheless, it will be useful to dwell on this point because a certain skepticism towards this sickness is often met with. Even if the sickness is acknowledged, the idea is too often expressed that it is due simply to a desire for the drug which could be overcome by the display of will power. This error is based partly on ignorance of the facts, but there is another source for it. There are all degrees between the cases in which the symptoms do not go beyond a certain discomfort and those in which they are so severe that death ensues. Furthermore, any case begins with light symptoms. Now, as long as the suffering is moderate, the patient can pull himself together and refrain from exhibiting too much distress. He does so, too, if it is in his interest, as when it is a question of not betraying that he is a morphine habitue. It is also true that the average case is a weakling who has a tendency to whine and to exaggerate his symptoms, especially if he knows that by so doing he will obtain relief or pity. This being granted, it should not blind us to the fact that most withdrawal symptoms cannot possibly be created by a mental attitude. The wildest desire or craving for anything else has never been observed to cause a condition resembling that of a person suffering from withdrawal symptoms from morphine. Besides, the following facts show clearly that we have to deal with a diseased condition which has its root in bodly changes:

1. In every case the symptoms are in the main the same, so much so that from these symptoms alone, provided one is familiar with them, the diagnosis can be made.

2. People who have acquired the morphine habit and do not know about withdrawal symptoms sometimes do not realize that the latter are due to the want of the drug when they try to stop its use, but will attribute them to some other cause and perhaps consult a physician. Occasionally, in these cases, the physician himself does not suspect or recognize morphinism and interprets the symptoms as due to some other diseased condition.

3. Certain animals can be chronically intoxicated by morphine and, when injections are discontinued, they develop withdrawal symptoms similar to those in men.

4. When a pregnant woman uses morphine, the drug circulating in her blood goes over into the child's, so that babies of morphinist

mothers show, some hours after birth, withdrawal symptoms identical with those of adults and which are often so severe that they die. Furthermore, cases are on record in which morphine, habitually taken by the mother after the birth of the child, has created in the latter a condition of morphinism which manifested itself by withdrawal symptoms when feeding at the breast was discontinued.

5. Whatever may be the intensity of the withdrawal symptoms, no matter how long they have lasted and whether they are recognized as such or not by the patient (as in the case of newly born babies), a sufficient injection of morphine will bring about their prompt cessation and a feeling of well-being. The relief, and especially the duration of the relief, is roughly proportional to the dose given. One does not succeed in deceiving the patient by an injection of some indifferent solution.

This possibility of removing at any time any withdrawal symptoms by means of a new dose of morphine is a further point which should always be kept in mind when the question of morphine addiction is discussed. It is a well-nigh irresistible inducement for the addict who suffers from withdrawal symptoms to give up his decision to leave the drug alone.

Although, through prolonged use, morphine becomes absolutely necessary for the comfort of the individual, this does not mean that it does him no harm. *On the contrary, it is a poison which, if taken over a long period in large doses which, severally, do not produce striking symptoms, brings about a condition of chronic intoxication. This manifests itself in changes both mental and physical.* The mental changes affect all three aspects of the mind: intellect, emotions, and will, especially the two latter. The memory becomes unreliable, particularly in regard to the sequence of events. Intellectual efficiency, above all that requiring initiative, decreases, but can be spurred on by morphine. The emotional tone shows marked ups and downs. Morphinists are now cheerful, hopeful, good-natured, now without ambition, irritable, arrogant, despondent. Despondency may even be so marked that it leads to suicide. They become easily tired and will sometimes be overwhelmed by a sudden drowsiness which makes them fall asleep in the middle of an occupation or conversation. They experience constant changes between times of relative well-being with relaxation and times of nervousness and restlessness. These changes are partly dependent upon whether the last dose of morphine is still acting sufficiently or not. This makes a regular and purposeful activity impossible and is one of the reasons why morphinists go down hill

economically. But the main cause of this is perhaps the modification of their character. They become weak willed, mentally "flabby," shirk any effort, exhibit oversensitiveness to pains and annoyances. They lose all sense of responsibility, neglect their duties and live from hand to mouth. The circle of their interest narrows until it is finally reduced to morphine and the means of obtaining it. In order to secure the drug they will, if necessary, lie, cheat, steal, or do anything. Even if a morphinist is otherwise trustworthy, to rely on his word or his actions in regard to morphine would be, and too often is, a fatal mistake. But lying, cheating and the like are often tendencies of morphinists in matters which have no connection with their habit and seem to be due to a loss or deterioration of moral feelings. However, concerning this latter point, there are divergencies of opinion among those who have had wide experience with morphinists. It is very possible that absence of ethical feelings in many cases is not a "loss" due to morphine but a primary "lack" which, in a large category of cases, is directly or indirectly at the root of morphinism.

The most striking bodily changes in morphinism concern nutrition. The patients lose weight, often becoming emaciated, the tissues are flabby, the skin is pale and sallow, the hair is dry and falls out, the nails are brittle and the teeth have a tendency to decay. These disturbances of nutrition are probably partly caused by a deficient function of the stomach and intestines, due to the checking influence of morphine on the digestive processes. A stubborn constipation is generally present. The appetite is usually bad, especially for meat, their favorite diet being sweets and fruit. Among the other symptoms of morphinism we can mention the following: sleeplessness, palpitations of the heart, accompanied by a rapid and irregular pulse, fainting spells, disturbances of respiration, especially asthma. Profuse perspiration or the opposite, an extreme dryness of the skin, chilliness, all sorts of disagreeable sensations in the region of the heart, stomach, bladder and in the limbs. A symptom which is very frequent in inveterate cases is a decrease or loss of sexual desires, accompanied by impotence in men and loss of menstruation in women.

However, the symptoms of chronic intoxication are more or less marked according to the cases, the amount of morphine taken and the duration of the habit being the main factors in its severity. Individual disposition and other factors, such as the mode of life, also seem to play a great rôle. Certain morphinists apparently withstand remarkably well the effects of prolonged and intense use of morphine, while others are very sensitive to it. All degrees are found between those

who are wrecks after a few months and those who, in spite of large doses, do not show striking changes after several years or even decades. So that, contrary to the current belief, *the appearance of a morphinist does not always betray his condition.* There are cases, even of long standing, in which a morphine addict looks well and does not, when satisfied with morphine, suggest drug addiction. It is true that, in most inveterate cases, morphinism is suggested by the looks, but, even then, these have nothing so characteristic about them that they can be differentiated at first sight from the appearance of numerous other people who look sickly for a different reason. *That which is characteristic of the morphine habitue is the changes which his condition and attitude undergo during the course of a day, according to whether he is in need of the drug or not.* After a "shot" he will look and act at his best, but when the effect of the morphine wears off he begins to break down. If a new dose is then taken the crestfallen individual undergoes a sudden revival and feels and looks a different being. If not, clear cut and distressing withdrawal symptoms gradually develop. In contradistinction with other poisons then, cocaine and alcohol in particular, *it is not when under the influence of the drug that the morphinist looks very abnormal and is easily recognized; it is, on the contrary, when he must go without it.*

This state of affairs is peculiar and should be well understood in order to avoid false impressions in regard to morphinists. If, for instance, an addict appears before the Court after a period of abstinence in the detention house and shows withdrawal symptoms, his appearance will be striking and the conclusion may easily be drawn that he is a "bad case." If the same addict should appear after having taken a "shot," the Court would probably have the feeling that there was nothing very abnormal about him.

We have thus far passed in review medical facts about morphinism which are fully recognized by all authorities on the subject and which must always be borne in mind if we want to take a correct view of the whole question. *Since these facts are so important we shall sum them up here:*

1. Morphine, in the average person and in ordinary doses, allays or suppresses pain and discomfort, mental and physical, and creates a sensation of well-being, a pleasurable state of mind.

2. If it is used often the dose must be increased in order to obtain the original effect or finally even "to feel normal."

3. In the long run, morphine becomes an absolute necessity for comfort. The wearing off of a dose is accompanied by discomfort

followed by distressing symptoms of withdrawal which disappear if a new dose is taken.

4. The prolonged use of morphine produces a condition of chronic intoxication, morphinism, which manifests itself in symptoms both physical and mental. The latter consist chiefly in a deterioration of character.

In morphine addiction there are all degrees between the lightest cases and the most severe. There are probably individuals who take morphine from time to time without ever developing a habit. These should not, however, be called morphinists any more than men who drink occasionally should be called alcoholics. Among those who have developed a habit some have insight and energy enough to break it before it is too strong and others manage to halt the progress of addiction by struggling not to increase their doses or, when a certain increase has taken place, by going through a period of "reducing," even submitting to a regular cure, after which they start again on a "lower level." Numerous cases are known in which, after years or even decades, only a very few grains a day were used and very little deterioration was shown. These cases, however, seem to be in a great minority and the average morphinist, with or without resistance, constantly increases his dose until after a few years he takes daily ten to fifteen grains or more. The worst addicts take incredible quantities.

We have seen before that the damage to health is not the same in all cases. Morphinism may be more or less rapid in its course, its degree and the wretchedness reached may vary, but it is probable that, in the average case, the addict goes down hill and, often, according to external circumstances, becomes a family skeleton, a "bum" or a criminal, and that his life is ruined.

All authors agree that *most morphinists who come under observation are relatively young,* the bulk of them between 20 and 30 years of age. We give here the statistics of the Narcotic Clinic of New York:

Age grouping, years.	Number of addicts within age group.	Percent of total in age group.
15 to 19 years	743	10
20 to 24 years	2,142	29
25 to 29 years	2,218	30
30 to 34 years	1,155	15
35 to 39 years	766	10
40 to 50 years	365	5
50 years and over	75	1
Total	7,464	100 *

The proper explanation of the young average age of the morphinists coming under observation probably is not that, after several years of intoxication, they are cured and definitely keep away from morphine, or that, after the habit has become inveterate, the deterioration ceases to be progressive or even much of a handicap. An interpretation of the statistics quoted above may substantiate this. Among the addicts who flooded the New York Clinic, there were undoubtedly many who went there not with the idea of getting cured but simply in order to obtain the drug more easily or less expensively. This seems to be granted, even by physicians of the clinic. I, personally, have seen several cases who have told me that they did this. Now, why should we find among these 7,464 addicts only 6 per cent over 40 years of age? If individuals over 40 existed among addicts in the same proportion to the young as they do in the population at large, they would, it seems, have turned up in greater numbers. The more plausible explanation for the young age of morphinists is that they die young. Their poor physical state, the miserable hygienic conditions under which many of them live make them particularly susceptible to disease, especially tuberculosis. Suicide and unintentional death through an overdose of morphine, when tolerance has been lost after a "cure" or through accidental injections of the drug into a vein, are not rare among them. Many of the addicts I see know all this very well.

In certain respects the morphine "habit" resembles other habits, alcoholism in particular, but the resemblance is a superficial one. Only a small percentage of those who habitually take alcohol in average quantities develop a condition which can be called alcoholism. Most of them are able to give it up easily when necessary. Almost without exception the worst alcoholics, when obliged to go without alcohol, are all the better for it. It is otherwise with morphinism. The use of the drug, if continued long enough, leads almost inevitably to a bondage from which there is no escape without an amount of suffering beyond ordinary "will power."

The question, *"Is morphinism a vice or a disease?"* is often raised, but is obscured or its issues are confused by the moral feelings involved. Now the definition of morphinism, not only in medical parlance but according to Webster is a "morbid condition produced by the habitual use of morphine; morphine habit." In the first meaning morphinism *is* by definition a "morbid condition," i. e., a disease. In the second, we must realize that when there is a morphine habit, i. e., when morphine is taken regularly, the diseased condition described before necessarily develops. The more inveterate the habit, the more

marked, as a rule, the diseased condition will be. *Morphinism, then, is always a disease and must be considered as such.* The only question which can logically be asked is: "Is it a vice besides?" Vice means, among other things, "indulgence of degrading appetites," "state of being given up to evil conduct or habit," "a physical taint." It is plain that, in all these acceptations, *morphinism is a vice as well.* We can, then, say that morphinism is necessarily both a disease and a vice at the same time. But vice has, also, the meaning of "moral failing" or "wickedness." Is morphinism a vice in this sense? If it is, is it always so and in the same degree? This is a moot point closely linked with another question: "Is morphinism *brought about* by a vice or by a disease?"

Now, in order to obtain an unprejudiced view of the origin of morphinism, one category of cases should be considered first, namely, those in which medical treatment is its most obvious cause, the *"medical cases."*

Opium and opiates have long been used in medical practice and drug addiction has existed ever since these drugs were known. Things, however, took a sudden turn for the worse in the seventies after the invention of the hypodermic syringe. It was found then that the effect of an injection of a solution of morphine under the skin was so prompt and satisfactory that a more extensive use of the drug in medicine resulted. At the same time morphinism began to spread with appalling rapidity. Physicians, not realizing the dangers of the long repeated use of morphine, administered it freely and allowed their patients to take their own injections, with the result that the original relief of their sufferings was often paid for by a well-nigh unconquerable slavery. It would seem that, after the danger had been clearly recognized and emphasized by many writers of all countries, physicians would have had their eyes opened and that morphinism, as a by-product of medical treatment, ought to have disappeared. Strange as it is, such has not been the case and physicians still continue to raise new crops of morphinists. The Narcotic Drug Control Commission of the State of New York says in its Second Annual Report, 1920, that the carelessness of doctors in prescribing opiates to patients suffering from various illnesses is a very grave source of addiction. They quote W. Thomas Blair, Chief of the Bureau of Drug Control of the Pennsylvania Department of Health, as follows: "As regards the use of narcotics in medical practice, the reports we receive in the Pennsylvania Bureau covering purchases of narcotics by physicians and prescriptions filled by pharmacists show, without dispute, that the rank

and file of medical practitioners in the State are employing narcotics vastly in excess of what the standard text-books teach to be justified in legitimate therapeutics. I am not referring to physicians who cater to drug addicts, but to the average hard-working physician. He gets into a rut and comes to prescribing narcotics under a host of trifling indications. So far as our findings in Pennsylvania are concerned, the free prescribing of narcotics in ordinary medical and surgical cases is one of the main etiological factors in the production of drug addiction." This state of affairs, which is not limited to Pennsylvania, must be almost incomprehensible to the layman and implies a grave accusation against the medical profession as a whole. It is difficult to break a lance in its defense. However, the following can be said: Though the danger of morphine is mentioned in text-books and by teachers in medical schools, sufficient stress is not laid upon it and too many physicians have no vivid idea of it. They are not likely to fully recognize the danger through their own experience because, after all, a relatively small number, out of all those to whom morphine is given medically, develop the habit and it is only in the gathering places for morphinists, the clinics or sanitoria, that the appalling number of medical cases stands out. It might be interesting to note here that many cases of morphinism developed during the war in soldiers who were wounded or gassed. Under war conditions there are many inducements to give morphine freely. ("The Use of Habit-Forming Drugs by Enlisted Men," Military Surgeon, Sept.-Oct., 1916.) The fact that morphine given repeatedly under whatever conditions is likely, sooner or later, to create a need for it should make physicians extremely cautious in prescribing it. *Morphine should never be prescribed for chronic cases unless the disease is fatal and especially never in so-called nervous conditions.*

The relative number of cases of morphinism of medical origin cannot be accurately estimated. Figures on this subject differ widely, no doubt because different groups of morphinists are studied. While some authors claim that the bulk of their cases have their origin in medical treatment, among 1,506 addicts observed at the Narcotic Relief Station of New York (Med. Journ., Vol. 69, p. 776) only 21 per cent charged their habit to illness or to attempts to relieve pain or insomnia. *Whatever the figures are, there can be no question that medical cases are by no means rare and they should be clearly remembered when the question of morphinism in relation to vice is raised.* If one goes through a long and painful illness, is given morphine for weeks or longer and finally, when the disease is over, continues to take it be-

cause he suffers when he tries to stop its use, he will hardly be called a vicious individual (in the sense of immoral or wicked). He evidently shows a lack of will power, but will power is relative to the difficulty to be overcome, and "medical cases" who have succeeded in breaking the habit will all agree that, without personal experience, no one can realize how difficult the task is. Not all patients run an equal risk of falling a prey to morphinism. Certain people who complain all the time of various ailments to account for which no disease can be discovered, who are emotionally unstable, despondent, easily tired, etc., seem to be exposed to the danger of morphinism much more than others, both because they often have reason to want a stimulant and because they seem to be less able than the average to support suffering. We might, perhaps, say that they have neurotic constitutions which account for the ease with which they take to morphine. Most of the best authors express this opinion under one form or another. But, important as a neurotic constitution may be in the development of "medical cases," people who are normal from every point of view, even superior, have had their lives wrecked by the morphine habit contracted during medical treatment.

If vice (still in the sense of immorality) plays an unimportant rôle, if any, in medical cases, it is evidently the main factor in all purely so-called *"sporting" cases.* In these, morphine is taken first at the instigation of some friend met in an environment in which licentiousness prevails and drugs are used as a means of enjoyment. The case is then plain, vice has led to morphinism and this is, in its turn, a cause for ever closer contact with vice. Taking morphine as a means of enjoyment has spread with appalling rapidity in all civilized countries. At the start it was limited to the well-to-do, and Kraeplin wrote, as late as 1914, that in Germany morphinism was almost exclusively a disease of the upper classes. This certainly is not true now in this country where the "underworld" furnishes so large a proportion of the addicts that some people believe them to be found only in this special environment. But morphinism in America exists as a "sporting" disease among all classes. Among 7,464 addicts treated at the Narcotic Clinic in New York City, about seventy per cent were listed among those who had acquired the habit through bad associates.

But all cases cannot be placed under one of the two captions, "medical" or "sporting." *Many people have taken morphine simply because they knew of its wonderful action in suppressing discomfort, physical or mental, and their desire to "brace up" by means of it has been their ruin.* The relatively large proportion of physicians and

nurses among addicts is noted by many authors and some claim that the number of morphinists among physicians is appalling. Crothers, for instance (Morphinism and Narcomanias, 1902), says that, among 3,244 physicians, he found ten per cent who were drug users, and that this figure is sustained by a great variety of material from many sources. Oppenheim found, among 250 patients of both sexes, 93 having a medical activity, while out of 100 of his male patients, 42 were physicians. The generally accepted explanation for this is that the "nerve-racking" activity and responsibility of the average practitioner make him often crave a "stimulant." This appears to be more important than the fact that morphine is easily available for him since druggists, who can obtain it still more easily, seem to become addicts less often. The high percentage of medical men among morphinists is interesting since, as a class, they can hardly be said to be morally inferior. Unusual strain in other professions, also, or a life of excitement may be conducive to morphinism. Speculators, business men with great responsibilities, politicians, actors, women of the leisure class seem to be, next to persons connected with the medical profession, the most numerous among the drug users of the higher type. Drug addiction is found in all sorts of people and under all sorts of conditions and the report of the New York Commission says: "In its work, the Department has had occasion to help physicians, ministers, teachers, college professors, nurses, public officials, actors, literary men of repute and men anl women in all classes, creeds and walks of life, who to the ordinary observer appear to be normal and respectable citizens."

Very *often morphinism is begun through simple curiosity* on the recommendation of some friend or acquaintance who is a morphine habitue without other undesirable characteristics. Morphinists, not only in sporting circles, have a great tendency to spread their habit with incredible thoughtlessness and seem possessed by the desire to initiate others. So it happens that wives of addicts are often dragged into this slavery by their husbands, and conversely. The most pathetic instances of such contamination are those in which morphinist mothers drug their children (independently from morphinism acquired in Utero or through mother's milk). These cases are not very rare, since the Narcotic Drug Control Commission of New York had in 1920 fifty-seven cases of infant addiction on their list, a number which was increasing. Physicians who are addicts are particularly dangerous from that point of view because of the readiness with which they prescribe morphine, and it is one of the reasons why the right to practice ought

to be, and in many places is, withdrawn from them. *This tendency of morphinists to spread their habit and the ignorance of practically everybody of what morphinism really is, are, no doubt, the main factors in the appalling increase of this condition.* In order to understand the evil of drug addiction, it is necessary to consider, not only the havoc it plays with the individual but, also, its spread in society. *It is a social plague affecting all civilized countries, but the United States seems to lead all others in this respect* since, from the report of the New York Special Commission, it consumes 13 to 72 times as much opium (which contains nine per cent morphine) as other countries, the records of which are available. Annual consumption per capita: Austria ½ grain, Germany 2 grains, France 3 grains, *United States* 36 *grains.*) Thirty-six grains of opium contain about three grains of morphine. The ordinary dose of morphine being one-eighth of a grain to one-fourth of a grain, *it represents annually twelve to twenty-four doses of morphine for every human being in this country.* Since a very small percentage of the whole population is given opium or morphine for medical purposes it is certain that the bulk of the opium is consumed by drug addicts. Official figures do not take into account the quantities of opium and morphine which are smuggled in on a large scale, and the underground traffic was estimated by the New York Special Committee in 1919 as being equal to that carried on through legitimate channels. "This trade is in the hands of the so-called 'dope peddlers' who appear to have a national and even international organization for procuring and dispensing their supplies. This illegitimate traffic has developed to enormous proportions in recent years and is a serious menace at the present time. It is through these channels that the addict of the underworld now secures the bulk of his supplies."

The above figures and facts concerning the consumption of opium give a clue to the extent of addiction in the United States. The fact that the Narcotic Drug Clinic in New York treated 7,464 addicts during a period of 9 months and that the Department of Narcotic Drug Control had 13,000 registered addicts in its records in 1920 shows the extent of the evil in that city. That drug addiction flourishes in smaller centers, too, is certain. The Health Officer of Jacksonville, Fla., reported 887 addicts in that city in 1913, i. e., 1.31 per cent of the population. An endeavor has been made by the Special Committee of Drug Investigation of New York to obtain reliable figures for the whole country. They sent, in particular, a questionnaire to all physicians registered under the Harrison Narcotic Act (practically all physicians are). Only 30 per cent of them answered. Their replies showed a

total of 73,150 addicts under treatment by them. On the basis of 100 per cent replies, if the average had been maintained, there would have been under treatment at that time in the whole country 237,665 addicts. Was the number of addicts treated by the 70 per cent of the physicians who did not answer relatively greater or smaller? Were not those physicians who cater to addicts perhaps less anxious to answer than the others?

The figures given above are not fanciful. They emanate from reliable sources. If we want to appreciate them, we must bear in mind that by no means all addicts, perhaps only a minority, are registered or being taken care of by physicians. If all were, there would be no underground traffic, the existence and importance of which cannot be seriously doubted. It is impossible, of course, to know how many addicts there are in this country. No statistics have been established on a sufficiently extensive and satisfactory basis to allow of even a close approximation. One finds all sorts of estimates. The lowest guess I have come across is about 9,000 males and less than that number of females, the highest is 4,000,000. Both are incredible, especially the former. Probably the most reliable figures are those established by the New York Special Committee on drug investigation by interpreting statistics from various sources. They reach the conclusion that the number of addicts in this country exceeds *one million,* about one per cent of the population. The Massachusetts Committee on habit-forming drugs estimated in 1917 that there were, in this state alone, 60,000 addicts, i. e., 1.6 per cent of the population. Granted that these figures are mere estimates and that they are possibly too high, they are, nevertheless, eloquent enough and clearly indicate that *morphinism is a national danger.*

"Cure" and Outlook

The word "cure," as currently used in connection with morphinism, may mean three different things: 1. The "breaking" of the "habit," with or without medical help. 2. The fact that a former morphinist has not, in the course of time, relapsed. 3. Medical treatment given in order to help the morphinist stop the use of the drug, and the care of him during the period of withdrawal symptoms. Since much confusion results from these different uses of the word, we shall speak of treatment instead of cure in the third sense. The word "weaning" seems to be adequate to cover the first, while the term "cure" should be reserved for a permanent result, without relapse into the former habit.

Weaning, in a case of full-fledged morphinism, has practically no chance of success unless the patient is willing or forced to be confined under such conditions that he can be strictly controlled and supervised. Every author whose authority deserves full credit insists that one of the chief difficulties of treatment is the fact that most patients, even if they come to an institution of their own accord, will endeavor to obtain morphine in roundabout ways while there. Very often they arrive in the institution with a supply of the drug hidden in some cunning way. There is no cheating trick to which a morphinist will not have recourse while under treatment and all sorts of means are devised by which morphine is smuggled in by friends or acquaintances. Attempts to bribe the personnel of the institution are frequent. Another generally recognized difficulty is that the patient, voluntarily confined and determined to be weaned, very often demands his release when he realizes what endurance the process involves. Under these conditions, weaning of the morphinist in an ordinary hospital or at home has very little chance of success and if it succeeds it is only in the most favorable cases. This is still more true of out-patient clinics where so-called ambulatory treatment is given.

In this connection, the results of the clinic established in New York by the department of health have been so bad that a physician who was connected with this work, Dr. S. Dana Hubbard (Some Fallacies Regarding Narcotic Drug Addictions, Am. Med. Journ. V. 72) comes to the conclusion that a cure (weaning in our sense) is so rare by the method of ambulatory treatment as practically to stamp such practice as improper. He adds: "The method should not be permitted. It should be interdicted by law."

In regard to weaning, three different main principles have been recommended, each of which has found warm supporters and equally warm opponents. The first, *sudden withdrawal,* consists in stopping the use of morphine abruptly and altogether from the start. The patient must go through the whole gamut of his withdrawal symptoms without finding in morphine the much-longed-for relief unless a dangerous condition, collapse in particular, threatens. Then, and only then, morphine is given, and only in so far as is necessary to remove the danger.

The principle of the second, *gradual withdrawal,* is to reduce the strength and the number of morphine injections, not allowing the patient to suffer and making the weaning period as long as is necessary.

The first principle has been called dangerous and cruel, while, at first sight, the second seems to be safe and humane. However, the

dangers of sudden withdrawal, in most cases, are not great and can easily be avoided if a physician is available, ready to intervene if necessary. The suffering is, it is true, acute and extends over a period of several days, but, after that, the patient recovers very rapidly and after a few weeks not only feels entirely well but shows a striking change in his physical appearance. Sudden withdrawal is by no means an antiquated or purely German method; it has still warm advocates and Dr. Hubbard in the article quoted above writes: "In the vast majority of instances, 99 per cent, excellent results may be obtained by simple, abrupt withdrawal, without medication other than catharsis (purging)." With the method of gradual withdrawal, on the other hand, there is no actual suffering, but the patient is constantly uncomfortable for weeks and it is very difficult to reach the point where he is willing to renounce morphine altogether. The chances of his "sticking it out" are lessened because the struggle is too long. It seems easier for human beings to stand acute pains of relatively short duration than to be uncomfortable for a long time. We must remember, too, that during weaning a strict supervision is necessary and the longer it lasts the more chances there are for cheating. With both principles there is a struggle between the patient, who constantly begs for morphine, and the physician, who does not want to yield. It is easier for the latter not to give in if he knows that he will have to resist the patient's supplications for only a short while. A weighty argument in favor of sudden withdrawal is that, as the time which can be spent in an institution is generally limited, it is a great advantage to get through quickly with weaning, properly speaking, since, afterwards, the patient still desires morphine and should be strictly supervised for as long a time as possible. It seems, then, that much can be said for and against each of these principles, but that, everything taken together, the first is perhaps preferable and should be resorted to if there were no other choice.

But there is a third principle, a compromise between the first two, that of *"rapid withdrawal,"* which is most in favor at present and seems to be satisfactory. Morphine is administered in a systematic way in rapidly decreasing quantities so that after a few days none at all is given.

Medical treatment aims at alleviating the suffering or discomfort which is necessarily connected with weaning, whatever its principle, sudden, rapid, or gradual. Several drugs have been used and are still given to obtain this result; none seems to be entirely satisfactory, some are dangerous. The need for morphine is not satisfied by anything

else except, to a certain extent, opium, codein, heroin, etc. These drugs are still used by some physicians, but, since their nature and effect are akin to that of morphine, their prescription does not seem rational. Of all the drugs used in the treatment of morphinism, cocaine has the saddest history. It was very popular at one time, but the only result was to make of morphinists cocainists besides. Other drugs, such as trional, veronal, chloral hydrate, paraldehyde, bromides, etc., which are relatively harmless, are frequently administered, but they do not give much relief. Hyoscyamus and belladonna are used in a treatment which is now very popular in this country. They are powerful drugs which easily cause mental confusion and one of my cases, speaking from experience, said: "The idea is to make you crazy while you suffer." Whether this is the last word in the treatment of morphinism remains to be seen.

Different procedures aiming at eliminating morphine from the body, alleviating sundry symptoms of withdrawal and keeping the patient in the best possible physical condition are: washing out of the stomach, purging, prolonged warm baths, cold douches, tonics, stimulants of the heart, substantial food as soon as the patient can eat, etc., etc. These measures are certainly beneficial, but, whatever can be done for the patient, it is inevitable that he should suffer and not the least important part of the treatment is for the physician to encourage him and give him his moral support. Morphinism, from that point of view, resembles many other diseases.

Whether one principle of weaning or another is employed, whether a special treatment is resorted to or not, *it is possible, in the overwhelming majority of cases, to wean a morphinist from his drug, provided both physician and patient show sufficient determination.*

A morphinist, after having been weaned and no longer needing morphine, will still for weeks and even months feel a desire for it. It is a matter of experience that *a considerable number of relapses take place a short time after the patients are discharged.* In many cases, in spite of all they have gone through, almost the first thing they do after release is to take to the syringe again. *So, the longer supervision is extended after the habit has been broken, the better the chances are for a lasting cure.* It is probable that, if the final results are so often unsatisfactory, it is due partly to the fact that patients are too soon allowed to shift for themselves. But, *even if they succeed in keeping away from the drug for months, there still remains the danger of relapse into their former habit.* The most frequent external cause for this is the resuming of associations with drug habitues. Many who

would not take active steps to obtain morphine yield to temptation under these circumstances and this practically always means a rapid return to the former condition of chronic intoxication.

It is difficult to establish statistics concerning the frequency of cures of morphinism and when figures are given they should be examined critically. We find in the literature all sorts of statements. Some authors claim excellent results, others consider cures so extremely rare as practically never to take place. These divergencies are partly due to the fact that certain physicians, whose results are apparently very good, are willing to call it a cure if the patient has abstained from morphine for a short length of time, while others are more discriminating, some even going so far as to speak of cure only if the abstention has extended over many years. Most critical authors hold the view, which seems to be correct, that *relapses occur sooner or later in the great majority of all cases and that the outlook for a permanent cure is very dark.* A source of error in statistics is the fact that some authors take at their face value the reports of the patients as to their condition. Figures based on such statements are not to be taken seriously. As a rule, morphinists who have relapsed not only do not confess it but boast of their cure. An amusing instance is that of the man who relapsed the moment he was dismissed, but set out to show himself as a living advertisement for the institution where he had been treated. The percentage of cures, furthermore, is bound to vary with the material. If one deals chiefly with "medical cases" or people who, before acquiring the habit, had an average character make-up, the results will be better than those of one who sees chiefly or exclusively morphinists of the underworld. And yet, Kraepelin, who evidently did not deal with the latter category, says that he estimates the lasting cures among his patients as from only six to eight per cent. He comes to the conclusion, which is no doubt correct and is generally accepted, that the physician should by no means consider his task at an end when, after a few months, the patient is well and fit to be trusted at large. The latter should be asked to come afterwards once or twice a year to the institution, willing to be observed closely for a day or two. If, under observation, all precautions having been taken to prevent his getting morphine, he shows no withdrawal symptoms, he can then, and only then, be considered as still cured.

In the last analysis, *the main obstacle to the cure of morphinism is the patient's evident inability to renounce the use of the drug.* He has not the so-called will power either to undergo the agony of withdrawal

symptoms or, if weaned, to resist, in the long run, the lure of morphine. The logical conclusion is that, *for his own good and for that of society, any morphinist ought to be considered irresponsible and, as such, committable.* Commitment should cease when both mental and physical condition give hope of voluntary abstinence, but a provision ought to be made that, for years, he should submit periodically to a short time of confinement for observation and should be recommitted in case of relapse. Special institutions, which we do not possess, would be required. If morphinism continues to spread as it is now doing, the moment may come when laws will be enacted for this purpose. In fact, a step in that direction has been taken in Massachusetts by the enactment of Chapter 139 of the Acts of 1918 (Chapter 123, Sect. 62, General Laws, 1920), which provides, among other things, for the commitment to hospitals for the insane of persons who are "so addicted to the use of narcotics or stimulants as to have lost the power of self-control." I understand that this law is seldom made use of. It would be difficult, no doubt, to make it cover any case of morphinism, since "intemperate use" and "loss of self-control' are things difficult to establish satisfactorily.

Summary: Weaning is possible in practically every case. The principle of weaning, whether sudden, rapid or gradual, and the medical treatment given, if any, are of secondary importance as far as final results are concerned. The great obstacles to the cure of morphinism are the inability of addicts to submit to weaning or to "stick it out" and their tendency to relapse. A legal control over them would be desirable and, in most cases, necessary.

Recognition of Morphinism

As we have seen, the peculiar changes that the addict undergoes during the course of the day and his looks, even when his need for morphine is satisfied, will very often betray his habit. A description of the addict's condition by relatives or friends may give a clue to the presence of morphinism. A history of former morphinism (lasting cures being rare) or the possession of morphine, a hypodermic syringe, etc., will strongly suggest morphinism. In any of these cases the *suspicion of morphinism* will be strengthened by the appearance of mild withdrawal symptoms. It goes without saying that denial on the part of the person suspected does not remove the suspicion. On the other hand, his admission will settle the question, although he will often minimize the severity of his addiction.

A diagnosis, properly speaking, of morphinism can be made when withdrawal symptoms become so marked as to be unmistakable. Such a diagnosis *from withdrawal symptoms* can be made only under special circumstances since they do not appear unless the addict has abstained from the drug for a long enough time. But morphine is generally taken hypodermically and an *examination of the skin* will almost always allow a diagnosis. In relatively rare cases drug addicts are very careful in their use of the hypodermic needle, inject deep into the flesh and follow the rules of asepsis. The skin may, then, show remarkably little, the only traces left being punctiform round scars which are difficult to differentiate from the pores of the skin, even by means of a magnifying glass, but a careful examination will often reveal the places of the last injections through either a slight swelling or a tiny blood crust. Most morphinists, however, are occasionally or generally careless in taking their "shots," often preparing their solutions without sterilizing them and using old or dirty needles. If an addict is short of needles he will even go so far as to bore a hole in the skin with a safety pin and use an eyedropper for injecting morphine through the hole. He will thrust the needle through his clothes when circumstances do not, at that moment, allow him to bare the skin. The result of all this is that infections and abscesses very often develop and that the *skin shows innumerable indurations, scars and pigmentations which tell the story at a glance.* Old traces left by hypodermic injections can be differentiated from recent ones and this makes it possible to say whether there is still drug addiction or whether it is an affair of the past. Cocaine injections often leave blue marks which indicate the use of this drug.

If heroin or cocaine is habitually sniffed there is often a *change of the mucous membrane of the nose* and, after long use, a *perforation of the septum* is not rare. If drugs are taken exclusively by mouth the body will, of course, show only symptoms of a general nature. It is often possible to detect the presence of morphine in the urine, but the methods are too complicated and unreliable to make them useful in practice.

In short, a diagnosis of morphinism cannot be made either on the addict's appearance or on other suspicious factors alone. Only clear cut withdrawal symptoms or physical findings, especially the condition of the skin, will settle the question.

Addicts as Seen in the Municipal Court of Boston

It should be well understood that in this Court *we have to deal with a selected class of addicts.* They are not representative of mor-

phinists in general nor, perhaps, even of the whole of the correctional class of addicts. It might very well be that, if we had to deal with the morphinists appearing before the Superior Court, we should find that these show, as a class, certain traits not seen in our cases, and conversely. Though conditions are such that we cannot examine every morphinist, I believe that our cases are fairly representative of all morphinists appearing before this Court.

In 1920 we came across 130 cases, 97 men and 33 women. *This does not begin to give an adequate idea of the number of drug users appearing before the Court and must be considered far below the reality.*

The following bears out this statement. *In* 1920 *we had before the Municipal Court* 245 *arrests for V. D. L.* (the usual abbreviation, which we shall use, for Violation of the Drug Law). Now, morphinists are frequently arrested for other offenses. In fact, the records of our cases show that they have been arrested 3.01 times as often for other offenses as for V. D. L. Applying this proportion to the 245 cases of 1920 for V. D. L., *we should have, besides, about* 837 *arrests of morphinists for other offenses, a total of* 1,082 *arrests.* This calculation starts from the assumption that a person charged with V. D. L. is always an addict, but we believe this to be very nearly true. Officers are very wary in arresting for V. D. L. and they generally know morphinists as such before they are able to find a cause for so doing. Although it is often difficult for them to obtain satisfactory evidence, only 10.8 per cent of the Court's findings were "not guilty." Among this number there were some whom we knew to be addicts but who were found "not guilty" because of lack of proof. A question could be raised as to whether, among those arrested for V. D. L., there are not peddlers who are not drug users. However, the peddlers whom we see here, the so-called "small fellows," are practically always addicts themselves, in contradistinction to the "big fellows," the unspeakable individuals who deal in drugs on a large scale, making big profits by exploiting the weaknesses of others and using the "small fellows" as their distributing agents. If, then, the figure of 245 should be discounted at all it should be to a very limited extent.

It might be that the proportion of 1 to 3.01 found in our 130 cases, between the number of arrests for V. D. L. and that of arrests of morphinists for other causes, does not hold true for all the cases which have appeared before the Court in 1920, but it corresponds almost exactly to the proportion obtained from Dr. V. V. Anderson's figures in his study of 70 cases of morphinists appearing before the

Municipal Court. (Drug Users in Court, The Boston Medical and Surgical Journal, 1917.) The margin of error cannot be very great and my conclusion is that *about* 1,082 *is the approximate number of arrests of morphinists in* 1920.

But addicts are often arrested more than once a year. I find in our 130 cases an average of 1.8 arrests a year (for the years in which they have been arrested at all). *At that rate* 1,082 *arrests would represent* 600 *addicts.* These figures cannot be exact, but they do give an idea of the extent of morphinism in connection with criminality as dealt with in the Municipal Court.

That morphinism and criminality are often found together is certain, but statistics are scarce. Few penal institutions keep records on this subject. In 1916 the addicts in the City Prison (Tombs) at Manhattan constituted 5 per cent of the total number of prisoners. (Report of the Special Commission, 1918.) The percentage of drug users among criminals varies widely with institutions. In a recently published book (A Study of Women Delinquents in New York State, by Mabel P. Fernald, Mary H. G. Hayes and Almena Dawley) the authors have found among the inmates 14 per cent drug users in Bedford State Reformatory, 13 per cent in Auburn State Prison, 33.9 per cent in the Penitentiary, 22.8 per cent in the New York Workhouse. In 1918, among 272 people committed by the courts for drug addiction to the workhouse in New York and 116 who went there voluntarily for treatment, a total of 388 addicts, 50 per cent had criminal records. Some had bad records prior to the use of the drug, more had gone into criminal life as a result of it. (Hamilton, Drug Addiction and Crime.)

The more cases of morphinism I see here, the more I am struck by their similarity. *Almost all seem to belong to a certain type* whose composite picture is more adequately conveyed by description than expressed by figures, which, however, are valuable because more objective. The type is a "bad one" from more than one point of view, as will be apparent from the exposition of the following facts.

The habit is generally of several years' standing and the doses taken are large. In 60 cases, fully studied, we have information on this subject.

TABLE I

Male: 38 Cases.		Females: 32 Cases.	
DURATION			
Shortest	1 year	Shortest	1 year
Longest	20 years	Longest	15 years
Average	6.62 years	Average	5.45 years

QUANTITY OF MORPHINE

Lowest .....½ grain a day	Lowest ..... 1 grain a day
Highest .....60 grains a day	Highest .....90 grains a day
Average .....14.17 grains a day	Average .....15.78 grains a day

Our addicts are relatively young people, as shown by this table:

TABLE II

Males: 97 Cases.	Females: 33 Cases.
Youngest .....16 years	Youngest .....19 years
Oldest .....49 years	Oldest .....40 years
Average .....30 years	Average .....26.1 years

If the average duration of the habit was 6.62 years in the men and 5.45 years in the women, *morphine was first taken at the average age of* 24.08 *years and* 20.65 *years, respectively.*

Our cases are mostly of "sporting" origin, 75 per cent of the men and 83.4 per cent of the women frankly giving "bad company" as the reason for having taken to drugs. The remainder offer a different explanation. Almost all of these claim that they acquired the habit during a disease, but their statements could not be verified. Even if morphinism was of medical origin, it was very often evident from the history, or even from the criminal records, that these cases were so-called "inferior characters" before they acquired the habit.

A further fact which points to the bad quality of our addicts *is that few were, from the start, cases of morphinism pure and simple or remained so. There are, or have been, other bad habits besides.*

Addiction to cocaine ("coke," "snow"), in addition to morphine, was granted by 55.3 per cent of the men and 68 per cent of the women. In contradistinction to morphine, cocaine brings about a condition of excitement which easily turns into mental confusion with hallucinations. This mental disturbance is known by addicts as the "leaps." Cocaine, then, is a worse poison than morphine and when both drugs are used their effects are combined. *But, whatever the share of cocaine, it does not, as morphine, create an organic need.* Its use can be stopped abruptly at any time without any withdrawal symptoms appearing. Our addicts express this by saying "there is no habit to cocaine." They consider morphine as a necessity, cocaine as a luxury. *In fact, the use of cocaine is sheer dissipation and the frequency of cocainism among them is significant.*

In some cases *opium was smoked* for months or years in underworld "joints." When opium was not available, morphine was resorted to as a substitute and proved more satisfactory. In other cases *heroin was sniffed* as a prelude to morphine addiction. Still other cases were

intemperate in their use of alcohol before becoming morphinists. The desire to relieve the disagreeable after-effects of heavy drinking is often the first inducement to take morphine. When the morphine habit is established, alcohol is generally dropped. In spite of the widely spread belief that many alcoholics would take to morphine after prohibition, I have not yet seen such a case. Both our men and women are *inveterate smokers.*

Our cases are *generally in a poor physical condition,* corresponding to the previous description of chronic intoxication. But, no matter how "run down" they are, their power of recuperation is *extraordinary if they are kept away from the drug.* I have seen several who, after having been confined for a few months, had so much changed for the better that I hardly recognized them. The majority of our cases boast about the remarkable improvement in their condition when they have abstained from the drug for longer or shorter periods in the past, usually while sentenced.

The tendency of morphinists in general to relapse is particularly pronounced in our cases. The recovery of their health after great suffering and the knowledge that a relapse means a return to misery are not sufficient to keep them away from morphine. They are doomed to yield to temptation if they resume their former associations. I am told that drug peddlers are aware of this fact and will tempt "cured" addicts by offering them a dose of morphine, "a bang for pleasure," without compensation. They know that, if it is accepted, it means a relapse and, consequently, an increase of their profitable business. Many "dope fiends" have told me that the mere sight of strangers addicted to morphine is enough to stir them up. Addicts of that class recognize each other, not only by their appearance and bearing, but by signs also.

The mental state and attitude of our cases are rather typical. *First of all, they are, of course, very anxious not to have their habit discovered* and they always deny it as long as they can. Even when they feel uncomfortable, they put up a brave front so as not to give rise to suspicion, but they show, then, a mixture of nervousness and irritability which has a stamp of its own. They are not easy to approach and are much more difficult to coax into a better mood than the alcoholic who feels "nervous." However, when they know that concealment is impossible, they "let go" and, if they have the impression that their condition is thoroughly understood, they are willing enough to discuss it. But it remains a case of matching wits. Our *morphinists are keen and accomplished in the arts of lying and "bluffing."* They

will grant just enough to make things plausible and are never embarrassed if you prove them liars. If, after their denying a thing, you tell them your reasons for not believing them, they will grant that you are right. For instance, a morphinist will tell you that he was addicted in the past, but that he has taken no morphine for months. Now, you detect on his skin very recent marks and you tell him so. He will still stick to his statement and offer some fanciful explanation, scratching or what not, for your findings. You retort that there is no mistaking a puncture covered with a red blood crust. Then he will admit his lie and, impressed by the idea that he cannot "fool you," he will tell you much more than you expected. And so it goes on the whole line. They are *very well informed about all questions pertaining to morphinism, very critical, and appreciate meeting with understanding.*

They show more or less "insight" into their condition as far as the past is concerned, but, generally, bad judgment about the future. Most of them realize their bondage and its consequences. If their lives were not all they should have been before their addiction, they know how much worse they have become since. Many claim that, if they could only get the morphine they need without coming into conflict with the law, they could get along without serious drawbacks. However, when it comes to drawing the proper conclusions from the past, they are generally not logical and it is difficult to say in how far they are sincere. Some of them, it is true, are logical enough and say, "There is no hope, there is no cure for morphinism; I have broken, or been obliged to break my habit so and so many times; I relapsed the first thing when free again and I know scores of cases like mine." They will add, "Besides, I am all right when I have morphine; look around you and see how many prominent people use it," etc., etc. But the majority of them take another attitude. They claim to be very anxious to break their habit. They intended to before they were arrested; they have done so in the past, will be able to do so again and, this time, will not relapse. Some of them claim that they can break the habit by themselves, without any restraint, and offer, if they are allowed at large, to come regularly for examination. If the request is granted they seldom come back and, if they do, there is evidence that the habit is still going on. The majority beg to be sent to a hospital where they can "really be cured" and add that the cause of former relapses is that they were weaned in jail, "cold turkey" (a slang phrase which means without special treatment), or that the cure did not last because it was forced upon them. They claim that a week or two in a hospital will do the trick and that, afterwards, they will be all

right forever. But this is practically never true. It is natural that they should prefer to be sent to a hospital rather than to prison, that they dread the acute suffering of sudden withdrawal, but I doubt very much that they believe in the efficacy of hospital treatment as it can actually be had. Only a few recognize that, given the lack of special institutions for the serious and prolonged handling of drug addiction, a sentence is, after all, the best thing that can happen to them. These, either because they are sincere or because they cannot hope to escape it, declare themselves willing to go to prison, provided the time is not too long. I have seen cases, however, who changed their minds on the way from our office to the court room and who, after telling me that they would "take their medicine," appealed a sentence of two or three months. Most addicts seem to take for granted that, if they don't "get a chance" before the Municipal Court, they can rely on more leniency in the Superior Court.

They are well posted about their legal status and about each others' cases. I have been struck more than once, when some notorious "dope fiend" was tried, to see among the Court audience many more people than usual whose appearance made me strongly suspect that they were morphinists. Once my suspicion was confirmed by a policeman who knew some of them as members of a gang of drug addicts. Many of them know by hearsay of the Medical Service of the Court and several times I have had good reason to believe that an unusual degree of coöperation on the part of the addict during the examination was due to the fact that he knew of an exceptional case which, on my recommendation, the Court had allowed to go somewhere for treatment.

It is very difficult to resist the supplications of our morphinists for a recommendation of leniency so that they can show their alleged ability to cure themselves or may go to a hospital to be treated. When it is a question of obtaining that, they are on their mettle and, if one has not seen again and again the futility of granting their wishes, one is inclined to yield, thinking that, after all, the case is a particularly favorable one, since he makes such a good impression. They are never at a loss to find a way to appeal to one's sympathy. *When at their best our morphinists have very winning ways, are very quick in finding which attitude to take in order to influence you. If you react to their pleading by bluntly telling them that you have heard the same thing over and over again and have regularly been disappointed, they will answer that there are always exceptions and that they are among them.*

I find that the great majority of our cases show mental changes due to chronic intoxication, but that they are intellectually alert when

not uncomfortable from withdrawal symptoms. Of course, when morphine is needed, they are not intellectually at their best. I am convinced that native inferior intelligence or "feeble mindedness," properly speaking, is much too often diagnosed and made responsible for addiction. This diagnosis is made chiefly on the results of routine psychological tests. Now, when these results are unsatisfactory, it is impossible to tell in how far chronic intoxication is responsible for them. Furthermore, in giving these tests, it would be necessary to keep the patient satisfied with morphine in order to eliminate the mental disturbance due to the need of the drug. I do not know that this has ever been done when the tests were applied to a series of morphinists. But, even under these circumstances, when rated by means of a routine test, a large proportion of our type of addicts have undoubtedly a good intelligence and certainly, in these, feeble mindedness cannot be made responsible for addiction. In the others, a more or less inferior intelligence does not necessarily mean that it is the cause of addiction. We must remember that intelligence is never the whole of personality and that what we call disposition, character, etc., is far more important from the point of view of behavior. Now, in anyone, the level of intelligence may be high while that of character may be low, and conversely, but it is true that defects of intelligence and of character are often found together. *That which I find most consistently in our cases is a defect of character which was present prior to addiction and which has probably been one of the main factors leading to morphinism. If, then, inferior intelligence is also found, it should not be considered as the cause of morphinism, but as one index more of an inferior personality.* But, whatever the quality of the personality was at the start as to intelligence, feelings, moral tone, will, etc., *morphinism has been grafted onto the original constitution,* and it is not easy to tell, in the concrete case, what is the share of constitution and what is the share of morphinism in the final result. The distinction between original constitution and the effects of chronic intoxication is not purely academic, since the latter practically disappear if the addict remains away from the drug.

Mental disturbances which can be called "insanity" are very rare. Among our cases I have never seen any, but have heard from several of them that they, at times, had had hallucinations. These occurred either when morphine was withdrawn or when they were under the influence of a strong dose of cocaine and "got the leaps."

From a psychological point of view, *a trait which is remarkable in our morphinists is their "esprit de corps."* They form into gangs, have

their special slangs and habits, they are always ready to help each other, never tell on each other and, above all, are very careful not to give any indications about their sources of supply. This is very well known by the police. When in prison, the problem of getting the much-needed drug often finds a solution, thanks to the help of those outside, and if morphine is smuggled in, the ration is divided among the sufferers. They sometimes succeed in having a deposit of morphine in prison, a "plant," which they leave hidden for those who follow them. They are extremely clever at the game of hiding the drug. Recently a morphinist who came straight from the dock and had been searched gave us a proof of his skilfulness when he smilingly drew from his pocket a hypodermic syringe in its case and a package of morphine. *To prevent the smuggling of drugs into penal institutions is very difficult.* Houses of correction seem to be more reliable from this point of view than jails because of the more limited contact with outsiders. *As for hospitals or infirmaries which are not especially equipped for the handling of morphinists, they afford practically no barrier to the introduction of drugs.*

The *cunning of our addicts is well known to the police.* It develops under the feeling that they are constantly watched and they behave very much like hunted game. They always expect capture and have ready a line of retreat or a means of getting rid of damaging evidence.

Almost all our cases are below par from the point of view of economic efficiency. The majority are questionable individuals without serious occupation, if they work at all. Very few apparently make a good living legitimately. The statements of addicts in regard to their occupations and earnings are, for obvious reasons, particularly subject to doubt and I therefore did not compile figures on that point.

Now, the economic question is of paramount importance from a criminal point of view. Morphinism, in itself, does not necessarily lead to delinquencies other than to violating an anti-narcotic law. The addict who is well off has no special incentive to acquire money in illegitimate ways. Furthermore, he will, no doubt, be able to obtain the drug with little chance of being caught, since he is not reduced to wandering in the streets in search of a peddler who surreptitiously exchanges his wares for money, an operation which often leads to arrest. It is otherwise with poor addicts. One of the drawbacks of the anti-narcotic laws is that, because of the risks involved in the illegitimate traffic in morphine, its price through "underground" channels has soared to great heights. It is certain that our addicts spend,

to satisfy their need, sums which are always more than they can possibly spare and often superior to the wages they earn. It is difficult, however, to get accurate information from them on this point. They are exploited by the peddlers who "get all they can" and the price, no doubt, like all prices, varies with supply and demand. Now, unless the demand is less, which is not likely to be the case, the illegitimate supply is on the increase, since all agree that morphine now is cheaper than last year. They generally buy morphine by the "deck," for which they pay $2.50 and which is supposed to contain 15 grains of morphine, but the "stuff" is adulterated and contains only half that amount, or less. Since about 15 grains is the dose of our average addict, $5 *is a conservative estimate of what he spends daily for his morphine.* The price of cocaine is the same as that of morphine and the doses taken are frequently as large. Our worst case, who said she took 90 grains of morphine and 90 grains of cocaine a day, told me that she spent $27 a day on her drugs. *Now, since morphine is more essential for addicts than anything else, there is no other practicable alternative for those who have not the means and do not get cured but to turn to illegitimate ways of getting money. Logically, criminality is bound to begin in a case of morphinism the moment the economic margin above living expenses is not sufficient to cover the purchase of the habitual amount of the drug.* Things are made worse by the fact that increasing need of morphine goes hand in hand with decreasing earning power and, finally, inability to work. *In fact, prostitution in women, stealing in one form or another in men, are the rule in our cases.* When these things do not show from the records they are, nevertheless, generally present. Our addicts take them as a matter of course and are willing enough to speak about them if they have the feeling that their confidence will not be abused. *Confessions of that kind are impressive because they bring out very forcibly something which has a bearing, not only on cases of morphinist criminals, but on recidivism in general, namely, the discrepancy between the number of offenses which have actually taken place in a given case and the number of arrests in which they have resulted.* "I stole scores of times," "I steal practically every day," "I cannot tell how often I steal," "I steal what is necessary," are statements I hear frequently, while the records of these morphinists, who have lived here for years, show few, if any arrests for that kind of thing. This discrepancy between the avowed criminality and that revealed by the records shows that the latter are only valuable in giving a minimal idea of the criminality and, also, of the approximate time when it began.

An analysis of the 60 cases in which we know about the beginning of addiction yields the following table. Separate figures are given for those who were never arrested before addition and those who were.

TABLE III

RELATION BETWEEN ARRESTS AND BEGINNING OF ADDICTION

(The figures in parenthesis are the average number of arrests per individual)

NUMBER OF ARRESTS

	Before Addiction (None for V. D. L.)		*After Addiction*			
	For other offenses		For V. D. L.	For other offenses	For all offenses	
Men:						
24 cases	0		70 (2.9)	137 (5.7)	207	(8.6)
10 cases	21	(2.1)	43 (4.3)	44 (4.4)	87	(8.7)
Total.....34 cases	21	(0.7)	113 (3.3)	181 (5.3)	294	(8.6)
Women:						
18 cases	0		32 (1.7)	101 (5.6)	133	(7.3)
8 cases	29	(3.5)	14 (1.8)	49 (6.1)	63	(7.9)
Total.....26 cases	29	(1.1)	46 (1.7)	1.50 (5.8)	196	(7.5)
Men and Women:						
42 cases	0		102 (2.4)	238 (5.7)	340	(8.1)
18 cases	50	(2.8)	57 (3.1)	93 (5.2)	150	(8.3)
Total.....60 cases	50	(0.8)	159 (2.7)	331 (5.5)	490	(8.2)

RESUME OF NUMBER OF ARRESTS

Before Addition			*After Addition*		
	For V. D. L.	For others.	For V. D. L.	For other offenses.	For all offenses.
60 cases	0 (0)	50 (0.8)	159 (2.7)	331 (5.5)	490 (8.2)
Total arrests before addiction, 50 (0.8)			Total arrests after addiction, 490 (8.2)		

About 2/3 of these 60 cases, then, had clear slates before addiction, while, after addiction, the average individual number of arrests was 8.2, or 5.5 without counting the arrest for V. D. L. In the other 1/3, criminality was present before addiction, but distinctly increased afterwards.

Among the 70 cases in which we have no information about the beginning of addiction, a first arrest for V. D. L. indicates the mini-

mum duration of the habit. In most of these, the records plainly show that morphinism has had the same influence on criminality as in the 60 cases of Table III. However, there are cases in which criminality preceded morphinism and was so marked from the start that addiction could hardly make it worse.

The figures of Table III, taken at their face value, show that *we have to deal with two sets of addicts, the first and distinctly larger, consisting of law-abiding individuals who have become criminals through the use of morphine; the second, of criminals who have become morphinists.* I believe this to be true, but less clear cut than indicated by the figures, and that, *in reality, we have to deal with a series, the two ends of which correspond to the two sets in question.* At one extreme we have the perfectly respectable individual who would never have become a criminal if it had not been for morphinism, perhaps of "medical origin"; at the other, the incorrigible criminal in whom morphinism, acquired in bad company, does not make much difference. Between the two there are all degrees. Somewhere in the middle of the series and covering the largest space, we have inferior characters who might have come into contact with the law anyhow, but in whom morphinism has been the main factor in causing criminality. This restriction as to the eloquence of these figures being made, one thing stands out clearly and confirms the conclusion which we had logically reached: *Morphinism, in the majority of our cases, is the main determining cause of criminality.*

The corollary is that, no matter what the quality of the personality was before addiction, *a cure of morphinism would, at the least, decrease criminality.* The following tables show the criminality of our cases:

TABLE IV

CRIMINALITY (Arrest and Default)

Kind of Offenses	*Number of Arrests*		
	Men (97 cases)	Women (33 cases)	Men and Women (130 cases)
Property	314	12	326
Sex	23	47	70
Drunk	28	56	84
Miscellaneous	223	39	262
Defaults	30	35	65
Other than V. D. L.	618	189	807
V. D. L.	215	53	268
Total	833	242	1,075

PROPORTION OF ARRESTS FOR V. D. L. TO ARRESTS FOR OTHER OFFENSES

Men: 1—2.88 Women: 1—3.6 Men and women: 1—3.01

AVERAGE NUMBER OF ARRESTS PER INDIVIDUAL

Kind of Offenses	Men	Women	Men and Women
V. D. L.	2.22	1.6	2.06
Others	6.37	5.72	6.20
Total	8.59	7.32	8.26

If we knew all about the *"miscellaneous" arrests* the number of offenses against property and of sex offenses would be increased. We give here their detail:

Miscellaneous arrests classified:

MALE CASES

Surrendered	37	
Violation of Probation	6	
Probation Warrant	2	
Perjury	1	
Fugitive from Justice	3	
Contempt	1	
		— 50
Assault and Battery	23	
Carrying Revolver	6	
Carrying Loaded Revolver	4	
Carrying Concealed Weapons	2	
Assault	1	
Manslaughter	1	
Threats	3	
		— 40
Non-Support	16	
Stubborn Child	3	
Neglect of Child	3	
Neglect of Family	1	
Truancy	1	
		— 24
Vagrant	22	
Idle and Disorderly	18	
Suspicious Persons	8	
Vagabond	6	
Loitering	4	
Profanity	2	
Obscene Language	5	
Trespass	2	
Malicious Mischief	1	
Disturbing the Peace	2	
Violation Working Law	6	
		— 76
Gaming on Lord's Day	1	
Gambling	6	
Lottery	1	
Shooting Craps	1	
Gaming	2	
		— 11
Violation True Name Law	1	
Not Registered in Lodg. House.	1	
False Registry	1	
Violation Boarding House Rules	1	
		— 4
Violation Auto Law	7	
Violation City Ordinance	3	
Violation Spitting Law	1	
Dist. Public Assembly	1	
		— 12
Peddling	1	
Exp. and Keeping Liquor	1	
Track Walking	1	
Unlawful Appro. of Team	1	
Attempt at Extortion	1	
Conspiracy	1	
		— 6
		—
		223

FEMALE CASES

Surrender	21	
Idle and Disorderly	12	
Assault and Battery	2	
Stubborn Child	2	
Violation True Name Law	1	
Profanity	1	
		—
		39

The figures of Table IV speak for themselves and little comment is necessary. They show, in particular, that our cases are confirmed recividists and that there is a predominance of offenses against property in men, of sex offenses in women, if we take into account the fact that women, especially young women, arrested for drunkenness are very often sexual delinquents as well.

Concerning the offenses against property, stealing on a large scale seems to be rare. This is to be expected, since the Municipal Court has not, or often declines, jurisdiction over the more severe offenses. If we had to deal with the cases of the Superior Court we would, naturally, find morphinism combined with another sort of criminality; but I believe that we would also and, above all, find criminality combined with another sort of morphinism, a morphinism of a milder kind. It is probable that, in the Superior Court, there are more criminals who have become morphinists and fewer morphinists who have become criminals, the reverse of that which we find in the Municipal Court.

I cannot help feeling that a full-fledged addiction leads rather to petty crimes than to those which involve a great deal of sustained effort and careful planning, of foresight and, after all, a certain mastery of self. In fact, the majority of our cases steal from hand to mouth and are satisfied if they can get enough to scrape through. The important thing for them is to satisfy their immediate need for morphine; they do not care much for other things, neglect their food and their appearance and leave the future to take care of itself. It is very well possible, also, that in many of our cases the lesser degree of criminality is due to their original lack of criminal tendencies.

Stealing in our male and prostitution in our female addicts are the most frequent accompaniments of morphinism, but some women steal and some men are sexual delinquents. Men and women often associate closely and, from what several addicts have told me, it seems that morphine is a stronger bond between them than sexual instincts. They are "chums" more than lovers. I should not pay much attention to these statements if it were not known that morphinism impairs or destroys sexual desires. The result of this state of affairs is that morphinist men often exploit their female companions, even their wives, if they happen to be married.

I have compiled the criminal records of our cases in order to obtain an idea of the fate of the addicts who appear before the Court.

TABLE VI-A

Court Findings—Disposition

Men

97 Cases, 803 Arrests (30 Defaults Not Included)

Offenses:	V. D. L.	Offense against property.	Sex offense.	Drunk.	Miscel.	All offenses.
Guilty	185	206	20	25	164	600
Not guilty	17	36	3	3	27	86
No findings / Jurisdiction declined, etc.	13	72	0	0	32	117
	215	314	23	28	223	803

Disposition of the Cases Found Guilty

The figures in parentheses show in months the average length of sentence, suspended sentence and probation

Offenses:	V. D. L.	Offense against property.	Sex offense.	Drunk.	Miscel.	All offenses.
Sentences	117 (2.48)	132 (4.84)	7 (5.56)	1 (1.0)	59 (5.65)	316
Susp. sentence	26 (4.52)	18 (4.93)	3 (7.33)	0	11 (4.55)	58
Probation	20 (6.3)	29 (6.82)	6 (7.00)	5 (6.0)	32 (6.21)	92
Fined	5	8	2	5	40	60
Filed	17	19	2	14	22	74
	185	206	20	25	164	600

TABLE VI-B

Women

33 Cases, 207 Arrests (35 Defaults Not Included)

Offenses:	V. D. L.	Property.	Sex offense.	Drunk.	Miscel.	All offenses.
Guilty	44	10	39	42	36	171
Not guilty	4	0	3	0	1	8
No findings	5	2	5	14	2	28
Total	53	12	47	56	39	207

DISPOSITION OF THE CASES FOUND GUILTY

The figures in parentheses show in months the average length of sentence, suspended sentence and probations

	V. D. L.	Property.	Sex offense.	Drunk.	Miscel.	All offenses.
Sentense ...	16 (3.86)	3 (3.5)	8 (3.12)	13 (2.45)	11 (3.83)	51
Susp. sent..	*9 (6.6)	1 (3.0)	11 (3.22)	4 (1.5)	12 (3.0)	37
Probation ..	*9 (6.0)	3 (6.0)	9 (6.0)	10 (6.0)	8 (7.5)	39
Fined	4	1	2	0	0	7
Filed	6	2	9	15	5	37
Total ..	44	10	39	42	36	171

TABLE VI-C

RESUME—MEN AND WOMEN

130 Cases, 1,010 Arrests, 771 Convictions (65 Defaults Not Included)

Men (97) Offenses:	V. D. L.	Other offenses.	All offenses.
Confined	117	199	316
At large	68	216	284
	185	415	600
Women (33)			
Confined	16	35	51
Confined (Inside Probation)..	5	0	5
At large	23	92	115
	44	127	171

SUMMARY

Offenses:	V. D. L.	Other offenses.	All offenses.
Confined	138 (60.2%)	234 (43.2%)	372 (48.2%)
At large	91 (39.8%)	308 (56.8%)	399 (51.8%)
	229 (100%)	542 (100%)	771 (100%)
Individual average number of convictions	1.76	4.17	5.93

From our special point of view, the most interesting things brought to light by these figures are the *great number of cases which are allowed at large and the short average time of both sentences and probation.*

*Five of these cases were not allowed at large, but had "Inside Probation" at the House of the Good Shepherd.

Conclusion

We are driven to the conclusion that morphinism in a criminal is a factor well worth considering in the disposition of the case and, *if a policy or a rule could be agreed upon which would be satisfactory, both from a medical and a legal point of view, it ought to be adopted.*

From a purely medical standpoint, the problem appears to be fairly simple. Our morphinists are the victims of a habit which undermines their physical and mental health. Experience shows that, without confinement, they cannot break it. A relapse is the rule if confinement is not extended long enough after weaning. We have no medical institutions in which addicts without means are kept long enough to have a chance to be "cured." *Under these conditions a sentence of several months, the longer the better, is the best thing that can happen to them.* A minimum of six months' confinement and, if possible, six months' probation and medical supervision afterwards would be desirable. In prison they do not, it is true, have the benefit of systematic treatment, which is regrettable from a humane standpoint, but the main thing is accomplished—they are kept away from the drug. Besides, prison physicians can take what steps they see fit; they will, in particular, be at hand if severe symptoms develop. After having been weaned, an addict serving a sentence will be sheltered from relapse as long as he is confined and, after several months, he will be "steady" enough to have a fair chance to keep away from the drug if he really desires to do so. If he relapses, the probability is that, for one reason or another, he will be arrested again and there is no telling whether he will not finally leave morphine alone if he is sentenced often and long enough. In the meantime, every sentence will halt the progressive drug intoxication, a result which should be welcomed, unless one holds that the best thing for an inveterate addict is to go down slope and die as soon as possible, a standpoint which cannot be called medical even if it were, perhaps, common sense.

From a legal point of view, the question is more complex and, though I am not competent to solve it, I offer the following suggestions. Morphinism, as such, is taken cognizance of by the Massachusetts State Law (Acts of 1918, Chapter 139; General Laws of 1920, Chapter 123), but it is doubtful that, even if this law could be applied to our cases, the results would be satisfactory. Besides, our morphinists do not appear before the Court as such, but as criminals. Even though the charge is Violation of the Drug Law (General Laws of 1920, Chapter 175), the defendant does not, technically, appear before the Court because he is a drug addict but because he was in illegal

possession of morphine, etc. Though the spirit of the law evidently aims at suppressing morphinism, it goes at it in a roundabout way, punishing, not morphinism itself, but the means to morphinism. From a strictly legal point of view, then, the Court is not interested in the question whether the defendant is or is not a drug addict.

However, when a charge is proven in any criminal case, it lies within the discretion of the judge to show leniency or severity. In disposing of the case he will take into account, not only facts which have no direct bearing on the offense, but, also, the impression made on him by the defendant. Now, if morphinism is, in itself, sufficient in most cases to make the repetition of offenses practically certain and if the morphinist has undergone a change which makes him utterly unreliable, *morphinism should weigh heavily in the judge's mind on the side of severity and he should be wary of trusting any good impression made on him by the addict.*

If it be granted that morphinism ought to be taken into account in the disposition of the case, the logical conclusion is that the fact of morphinism should be discovered and established whenever present. This raises a question which has certain difficulties. In the majority of our cases the diagnosis of morphinism can be made in a reliable way only by means of a physical examination. But a physical examination is not something which can be imposed upon a defendant by law; he is at liberty to refuse it and will do so if he knows that it will make his case worse before the Court. If, on the other hand, he has reason to believe that a physical examination will help him to obtain leniency, he will readily submit to it. If the Court, then, is interested in the detection of morphinism, a satisfactory solution would be for the judge to show severity in every case in which, for one reason or another, there is a suspicion of morphinism and the defendant refuses to have the suspicion removed by a physical examination. If this policy were adopted it would be logical. Besides, under the present conditions, the position of a physician of the Court is not above criticism. When he discovers a case of morphinism which shows such marked nervous symptoms that the diagnosis is clear without the defendant's collaboration, he can feel at ease in drawing the attention of the Court to it and in recommending a sentence as a medical measure. But, if he does the same only after having induced the defendant to submit to a physical examination or because he obtained a confession of drug addiction, it does not seem fair to the addict, since others who are "wiser" or who have the advice of a lawyer will not have their cases made worse before the Court through the physician's interven-

tion. The fact that his report to the Court is in the defendant's interest from a medical point of view does not change this. If the policy suggested above were adopted, the physician could work on a much more satisfactory ground and all drug addicts would be on a basis of equality.

I do not claim that morphinism in a person who is guilty of any offense should invariably induce the Court to give a severe sentence. I only claim that, in the overwhelming majority of our cases, the outlook is so bad from a medical and criminal point of view that a severe sentence is indicated and ought to be given. Exceptions to the rule should be made, but only in exceptional cases. Whether one has to deal with such a case or not can be determined only by a special investigation and a careful examination. I believe that it is, above all, a medical question which can be best settled by him who has made a thorough study of morphinism.

I want to make it clear, also, that if I recommend a sentence, as a rule, in case of morphinism, it is for the want of something better. When the criminal aspect of the cases warrants leniency it would be desirable to have institutions, other than prisons, where morphinists could be taken care of. In fact, for women, inside probation in the House of the Good Shepherd, where the sisters are sometimes willing to receive them, is a very satisfactory substitute. I do not know of any other similar institution for women here or of any for men. Theoretically, a logical solution would be to continue cases of morphinism for a week or two in order to give them a chance to be weaned before being sentenced, if they are guilty. Practically, I doubt that it would prove satisfactory. Too many would default. Besides, they would often find it difficult to be admitted to public hospitals, which are loathe to receive such troublesome cases, even if they are allowed to do so. This solution could be recommended only when there are guarantees that there will be no default and when the defendant can enter a hospital. But the fact that the defendant has been weaned should not by any means induce the Court to let him go without a sentence. To do so would render the continuance before granted more than useless, since a relapse would practically always take place and the suffering have been for nothing.

For one reason or another, it might not be acceptable to the Court to endeavor to bring morphinism to the fore whenever present and to consider it a factor which ought, as a rule, to weigh in dealing with criminals, no matter what the offense. However that may be, *when morphinism is found in a case of V. D. L. there is another and broader*

point of view from which the question ought to be considered, namely, that of the law itself. I should not feel justified in speaking of it if the law, in the particular case, were not in the interest of social hygiene. As such, it concerns the physician also.

Laws to curb the drug evil have been enacted in the United States in State after State since 1885, after it was recognized that this plague had reached appalling proportions and was constantly spreading. These seem to have been of little avail and much hope was placed in Federal legislation. The Harrison Anti-Narcotic Law was enacted in 1914. Through its stringent and complicated regulations it is a hardship on physicians and others who legitimately deal in narcotic drugs. It is doubtful whether it has done much to decrease drug addiction. It is thought, now, that salvation lies in international measures and the question is in the program of the League of Nations. But all the laws in the world will not help if it pays to break them, if they are not sanctioned by adequate sentences. The more severely they are applied the more chance there is for them to be efficient, and it is difficult to see why an anti-narcotic law should not be applied severely. Certainly, it would not go against public opinion or feeling. I believe that, if courts in general would realize the importance of morphinism as a social evil, they would punish drastically, especially in the cases of "dope peddlers."

The Massachusetts Drug Law (Statutes of 1917, Ch. 275; General Laws, 1920, Ch. 123) equips the courts for such action. Here are the most frequent offenses against it with the penalties attached to them:

MAXIMUM PENALTY

Offenses.	Fine.	House of Correction or Jail.	State Prison.
Unlawful Possession	$1,000	3 years	
Sale and Delivery	2,000	2 years	3 years
Possession of Hypodermic Instrument	100	6 mos.	

If the Court, then, should find it objectionable to adopt the policy of showing, as a rule, no leniency in cases of morphinists convicted of other offenses, the question would still remain open whether V. D. L. should not, as a matter of principle, be treated severely. If this were done, it would partly accomplish the purpose of confining all addicts, since most of them, sooner or later, are arrested for V. D. L.

To sum up, I believe that it would be desirable, both from a medical and criminal point of view, to show, as a rule, no leniency in cases

in which the offender is a morphinist. An endeavor should be made to discover morphinism whenever present. A suspicion of morphinism which the defendant does not choose to have removed by medical examination should have the same weight as the established fact of morphinism.

If, legally, or for one reason or another, this policy cannot be adopted, I recommend at least a strict application of the Anti-Narcotic Law.

The problem of drug addiction, and especially its remedy, is so complex that to treat it fully is beyond the scope of this paper. The remedy can be summed up in the simple formula: *"Control the drug, control the addict."* This twofold control is, practically, extremely difficult and it is only if everyone concerned in any capacity "does his bit" that there will be hope of exercising it. The business of a physician attached to a Court is to consider the problem as far as his end of it goes. That is what I have tried to do. I believe, however, *that, if my conclusions were accepted and put into practice, this would incidentally have its influence on some aspects of the problem which do not concern us directly but on which I shall touch briefly.*

It is probable that, if great severity were shown by the Municipal Court in cases of morphinism, whether accompanying ordinary offenses or V. D. L., *the number of appeals would increase very much.* I do not know how these cases are dealt with by the Superior Court. If more leniency should be shown there than in the Municipal Court, it would seem, at first sight, that my recommendation of severity would defeat its own purpose. However, it can be argued that, in the long run, this would probably not be the case, since the Superior Court would be flooded with morphinists and would then, in its turn, recognize the importance of the problem and adopt another policy. Besides, an agreement with the Superior Court could, no doubt, be reached.

A severe application of the law would, by crowding prisons with morphinists, bring to the fore drug addiction as a penal problem and induce the authorities in charge to study the question and take more adequate steps to meet the situation. The number of criminal morphinists under detention would be sufficient to raise the question whether a *special penal institution* for them would not be warranted. From statements of addicts and officers, and from newspaper reports, conditions are now anything but satisfactory. Drug addicts are not always given sufficient attention while under detention. Few institutions, if any, are drug proof.

A different attitude on the part of the courts and the prison authorities would result in forcing upon public attention drug addiction as a criminal factor and *would help to bring about a series of much-needed reforms.*

Our laws aiming at the suppression of morphinism could perhaps be better, but, no matter whether they be improved or not, they will not have their maximal efficiency without *adequate appropriations* for their enforcement. Even with the insufficient funds now available, more could be reached. I understand, for instance, that there is *no special police force* (white squads) entrusted with the detection and arrest of cases of V. D. L. and that officers are very much hampered by not being allowed to follow suspected persons outside their particular districts. (By the way, the task of detecting and arresting cases of V. D. L. is an arduous one and a *severe enforcement of the law would encourage officers in their efforts.*)

In spite of all this, the Massachusetts Drug Law is, at any rate, a weapon with which to fight morphinism by controlling the means to it. But, with the exception of Chapter 123, Section 62, of the General Laws of 1920, we have no law which allows the control of the addict as such. It would, no doubt, be difficult to obtain the enactment of such a law now, but, when the facts of morphinism are widely known and correctly interpreted, public sentiment might well be aroused and bring its pressure to bear on the legislature.

Such a law, if enforced, would throw into relief *the need of special institutions* where addicts could be thoroughly weaned, sheltered for a sufficiently long time, and, afterwards, followed up systematically. *If such institutions were available many addicts could be saved and would not be left to swell the hosts of thieves and prostitutes.*

Boston, June, 1921.

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