The problem of heroin

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It is now widely believed that much of the recent increase in predatory crime is the result of heroin addicts supporting their habits; that heroin use has become a middle-class white as well as lower-class black phenomenon of alarming proportions; and that conventional law-enforcement efforts to reduce heroin use have not only failed but may in fact be contributing to the problem by increasing the cost of the drug for the user, leading thereby to the commission of even more crimes and the corruption of even more police officers. These generally held opinions have led to an intense debate over new policy initiatives to deal with heroin, an argument usually described as one between the advocates of a "*law-enforcement*" policy (which includes shutting off opium supplies in Turkey and heroin-manufacturing laboratories in France, arresting more heroin dealers in the United States, and the use of civil commitment procedures, detoxification centers, and methadone maintenance programs) and the partisans of a "*decriminalization*" policy (which includes legalization of the use or possession of heroin, at least for adults, and the distribution of heroin to addicts at low cost, or zero cost, through government-controlled clinics).

The intensity of the debate tends to obscure the fact that most of the widely accepted opinions on heroin use are not supported by much evidence; that the very concept of "addict" is ambiguous and somewhat misleading; and that many of the apparently reasonable assumptions about heroin use and crime—such as the assumption that the legalization of heroin would dramatically reduce the rate of predatory crime, or that intensified law enforcement drives the price of heroin up, or that oral methadone is a universal substitute for heroin, or that heroin use spreads because of the activities of "pushers" who can be identified as such—turn out on closer inspection to be unreasonable, unwarranted, or at least open to more than one interpretation.

"Punitive" vs. "medical" approaches

Most important, the current debate has failed to make explicit, or at least to clarify, the philosophical principles underlying the competing positions. Those positions are sometimes described as the "*punitive*" versus the "*medical*" approach, but these labels are of little help. For one thing, they are far from precise: Putting an addict in jail is certainly "punitive," but putting him in a treatment program, however benevolent its intentions, may be seen by him as no less "punitive." Shifting an addict from heroin to methadone may be "medical" if he makes the choice voluntarily—but is it so if the alternative to methadone maintenance is a criminal conviction for heroin possession? And while maintaining an addict on heroin (as is done in Great Britain and as has been proposed for the United States) is not "punitive" in any legal sense, neither is it therapeutic in any medical sense. Indeed, there seem to be no forms of therapy that will "cure" addicts in any large numbers of their dependence on heroin. Various forms of intensive psychotherapy and group-based "personality restructuring" may be of great value to certain drug users, but by definition they can reach only very small numbers of persons and perhaps only for limited periods of time.

But the fundamental problem with these and other labels is that they avoid the central question: Does society have only the right to protect itself (or its members) from the harmful acts of heroin users, or does it have in addition the responsibility (and thus the right) to improve the well-being (somehow defined) of heroin users themselves? In one view, the purpose of the law is to insure the maximum amount of liberty for everyone, and an action of one person is properly constrained by society if—and only if—it has harmful consequences for another person. This is the utilitarian conception of the public interest and, when applied to heroin use, it leads such otherwise unlike men as Milton Friedman, Herbert Packer, and Thomas

Szasz to oppose the use of criminal sanctions for heroin users. Professor Packer, for example, recently wrote that a desirable aspect of liberalism is that it allows people "to choose their own roads to hell if that is where they want to go."

In another view, however, society has an obligation to enhance the "well-being" of each of its citizens even with respect to those aspects of their lives that do not directly impinge on other people's lives. In this conception of the public good, all citizens of a society are bound to be affected—indirectly but perhaps profoundly and permanently—if a significant number are permitted to go to hell in their own way. A society is therefore unworthy if it permits, or is indifferent to, any activity that renders its members inhuman or deprives them of their essential (or "natural") capacities to judge, choose, and act. If heroin use is such an activity, then its use should be proscribed. Whether that proscription is enforced by mere punishment or by obligatory therapy is a separate question.

The alternative philsophical principles do not necessarily lead to diametrically opposed policies. A utilitarian might conclude, for example, that heroin use is so destructive of family life that society has an interest in proscribing it (though he is more likely, if experience is any guide, to allow the use of heroin and then deal with its effect on family life by advocating social services to "help problem families"). And a moralist might decide that though heroin should be illegal, any serious effort to enforce that law against users would be so costly in terms of other social values (privacy, freedom, the integrity of officialdom) as not to be worth it, and he thus might allow the level of enforcement to fall to a point just short of that at which the tutelary power of the law would be jeopardized. Still, even if principles do not uniquely determine policies, thinking clearly about the former is essential to making good judgments about the latter. And to think clearly about the former, it is as important to ascertain the effects of heroin on the user as it is to discover the behavior of a user toward society.

The user

There is no single kind of heroin user. Some persons may try it once, find it unpleasant, and never use it again; others may "dabble" with it on occasion but, though they find it pleasurable, will have no trouble stopping; still others may use it on a regular basis but in a way that does not interfere with their work. But some persons, who comprise a large (if unknown) percentage of all those who experiment

with heroin, develop a relentless and unmanageable craving for the drug such that their life becomes organized around it: searching for it, using it, enjoying it, and searching for more. Authorities differ on whether all such persons—whom we shall call "addicts," though the term is not well-defined and its scientific status is questionable—are invariably physiologically dependent on the drug, as evidenced by painful "withdrawal" symptoms that occur whenever they cease using it. Some persons may crave the drug without being dependent, others may be dependent without craving it. We need not resolve these definitional and medical issues, however, to recognize that many (but not all) heroin users are addicts in the popular sense of the term.

No one knows how many users of various kinds there are, at what rate they have been increasing in number, or what happens to them at the end of their "run." That they *have* increased in number is revealed, not only by the testimony of police and narcotics officers, but by figures on deaths attributed to heroin. Between 1967 and 1971, the number of deaths in Los Angeles County attributed to heroin use more than tripled, and although improved diagnostic skills in the coroner's office may account for some of this increase, it does not (in the opinion of the University of Southern California student task force report) account for it all. A Harvard student task force has used several techniques to estimate the size of the heroin-user population in Boston, and concludes that there was a tenfold increase in the decade of the 1960's. Why that increase occurred, and whether it will continue, are matters about which one can only speculate. The USC group estimated that there are at least fifty thousand addicts in Los Angeles; the Harvard group estimated that there are six thousand in Boston; various sources conventionally refer (with what accuracy we do not know) to the "hundred thousand" addicts in New York.

No one has proposed a fully satisfactory theory to explain the apparent increase in addiction. There are at least four speculative possibilities, some or all of which may be correct. The rise in real incomes during the prosperity of the 1960's may simply have made possible the purchase of more heroin as it made possible the purchase of more automobiles or color television sets. The cult of personal liberation among the young may have led to greater experimentation with heroin as it led to greater freedom in dress and manners and the development of a rock music culture. The war in Vietnam may have both loosened social constraints and given large numbers of young soldiers easy access to heroin supplies and ample incentive (the boredom, fears, and demoralization caused by the war) to dabble in the drug. Finally, the continued disintegration of the lower-income,

especially black, family living in the central city may have heightened the importance of street peer groups to the individual and thus (in ways to be discussed later in this essay) placed him in a social environment highly conducive to heroin experimentation. There are, in short, ample reasons to suppose (though few facts to show) that important changes in both the supply of and demand for heroin occurred during the last decade.

Heavy users of heroin, according to their own testimony, tend to be utterly preoccupied with finding and consuming the drug. Given an unlimited supply (that is, given heroin at zero cost), an addict will "shoot up" three to five times a day. Given the price of heroin on the black market—currently, about $10 a bag, with varying numbers of bags used in each fix—some addicts may be able to shoot up only once or twice a day. The sensations associated with heroin use by most novice addicts are generally the same: keen anticipation of the fix, the "rush" when the heroin begins to work in the bloodstream, the euphoric "high," the drowsy or "nodding" stage as the "high" wears off, and then the beginnings of the discomfort caused by the absence of heroin. For the veteran addict, the "high" may no longer be attainable, except perhaps at the risk of a lethal overdose. For him, the sensations induced by heroin have mainly to do with anesthetizing himself against withdrawal pain—and perhaps against most other feelings as well—together with a ritualistic preoccupation with the needle and the act of injection.

The addict is intensely present-oriented. Though "dabblers" or other episodic users may save heroin for a weekend fix, the addict can rarely save any at all. Some, for example, report that they would like to arise in the morning with enough heroin for a "wake-up" fix, but almost none have the self-control to go to sleep at night leaving unused heroin behind. Others report getting enough heroin to last them for a week, only to shoot it all the first day. How many addicts living this way can manage a reasonably normal family and work life is not known, but clearly many cannot. Some become heroin dealers in order to earn money, but a regular heavy user seldom has the self-control to be successful at this enterprise for long. Addicts-turned-dealers frequently report a sharp increase in their heroin use as they consume much of their sales inventory.

It is this craving for the drug, and the psychological states induced by its use, that are the chief consequences of addiction; they are also the most important consequences about which, ultimately, one must have a moral or political view, whatever the secondary effects of addiction that are produced by current public policy. At the same

time, one should not suppose that all of these secondary effects can be eliminated by changes in policy. For example, while there are apparently no specific pathologies—serious illnesses or physiological deterioration—that are known to result from heroin use *per se*, the addict does run the risk of infections caused by the use of unsterile needles, of poisoning as a result of shooting an overdose (or a manageable dose that has been cut with harmful products), and of thrombosed veins as a result of repeated injections. Some of these risks could be reduced if heroin were legally available in clinics operated by physicians, but they could not be eliminated unless literally everyone wishing heroin were given it in whatever dosage, short of a lethal one, he wished. In Great Britain, where pure heroin is legally available at low prices, addicts still have medical problems arising out of their use of the drug—principally, unsterile self-injections, involuntary overdoses, and voluntary overdoses (that is, willingly injecting more than they should in hopes of obtaining a new "high"). If, as will be discussed below, heroin were injected under a doctor's supervision (as it is not in England), the risk of sepsis and of overdoses would be sharply reduced—but at the cost of making the public heroin clinic less attractive to addicts who wish to consume not merely a maintenance dose but a euphoria-producing (and therefore risky) one.

Why heroin?

No generally accepted theory supported by well-established facts exists to explain why some persons but not others become addicts. It is easy to make a list of factors that increase (statistically, at least) the risk of addiction: Black males living in low-income neighborhoods, coming from broken or rejecting families, and involved in "street life" have much higher chances of addiction than upper-middle-class whites in stable families and "normal" occupations. But some members of the latter category *do* become addicted and many members of the former category do not; why this should be the case, no one is sure. It is easy to argue that heroin use occurs only among people who have serious problems (and thus to argue that the way to end addiction is to solve the underlying problems), but in fact many heavy users seem to have no major problems at all. Isidor Chein and his co-workers in their leading study of addiction in New York (*The Road to H*) found that between a quarter and a third of addicts seemed to have no problems for which heroin use was a compensation.

Though we cannot predict with much confidence who will and

who will not become an addict, we can explain why heroin is used and how its use spreads. The simple fact is that heroin use is intensely pleasurable, for many people more pleasurable than anything else they might do. Heroin users will have experimented with many drugs, and when heroin is hard to find they may return to alcohol or other drugs, but for the vast majority of users heroin remains the drug of choice. The nature of the pleasure will vary from person to person —or, perhaps, the interpretive description of that pleasure will vary— but the desire for it remains the governing passion of the addicts' lives. All of us enjoy pleasure; an addict is a person who has found the supreme pleasure and the means to make that pleasure recur.

This fact helps explain why "curing" addiction is so difficult (for many addicts, virtually impossible) and how new addicts are recruited. Addicts sent to state or federal hospitals to be detoxified—i.e., to be withdrawn from heroin use—almost invariably return to such use after their release, simply because using it is so much more pleasurable than not using it, regardless of cost. Many addicts, probably a majority, resist and resent oral methadone maintenance because methadone, though it can prevent withdrawal pains, does not, when taken orally, supply them with the euphoric "high" they associate with heroin. (The intravenous use of methadone will produce a "high" comparable to that of heroin. The oral usé of methadone is seen by addicts as a way to avoid the pain of heroin withdrawal but not as an alternative source of a "high.") Persons willingly on methadone tend to be older addicts who are "burned out," i.e., physically and mentally run down by the burdens of maintaining a heroin habit. A younger addict still enjoying his "run" (which may last five or 10 years) will be less inclined to shift to methadone.

The "contagion" model

When asked how they got started on heroin, addicts almost universally give the same answer: They were offered some by a friend. They tried it, often in a group setting, and found they liked it. Though not every person who tries it will like it, and not every person who likes it will become addicted to it, a substantial fraction (perhaps a quarter) of first users become regular and heavy users. Heroin use spreads through peer-group contacts, and those peer groups most vulnerable to experimenting with it are those that include a person who himself has recently tried it and whose enthusiasm for it is contagious. In fact, so common is this process that many observers use the word "contagious" or "contagion" deliberately—the spread of

heroin use is in the nature of an epidemic in which a "carrier" (a recent and enthusiastic convert to heroin) "infects" a population with whom he is in close contact.

A recent study in Chicago has revealed in some detail how this process of infection occurs. Patrick H. Hughes and Gail A. Crawford found that a major heroin "epidemic" occurred in Chicago after World War II, reaching a peak in 1949, followed by a decline in the number of new cases of addiction during the 1950's, with signs of a new epidemic appearing in the early 1960's. They studied closely 11 neighborhood-sized epidemics that they were able to identify in the late 1960's, each producing 50 or more new addicts. In the great majority of cases, not only was the new user turned on by a friend, but the friend was himself a novice user still exhilarated by the thrill of a "high." Both recruit and initiator tended to be members of a small group that had already experimented heavily with many drugs and with alcohol. These original friendship groups broke up as the heavy users formed new associations in order to maintain their habits. Strikingly, the new user usually does not seek out heroin the first time he uses it, but rather begins to use it almost fortuitously, by the accident of personal contact in a polydrug subculture. In these groups, a *majority* of the members usually try heroin after it is introduced by one of them, though not all of these become addicted.

Such a theory explains the very rapid rates of increase that have occurred in a city such as Boston. The number of new users will be some exponential function of the number of initial users. Obviously, this geometric growth rate would soon, if not checked by other factors, make addicts of us all. Since we are not all going to become addicts, other factors must be at work, though their nature is not well understood. They may include "natural immunity" (some of us may find heroin unpleasant), breaks in the chain of contagion (caused by the absence of any personal linkages between peer groups that are using heroin and peer groups that are not), and the greater difficulty of finding a supply of heroin in some communities than others. *Perhaps most important, the analogy between heroin use and disease is imperfect: We do not choose to contract smallpox from a friend, but we do choose to use heroin offered by a friend.*

The myth of the "pusher"

If heroin use is something we choose, then the moral and empirical judgments one makes about heroin become important. If a person thinks heroin use wrong, or if he believes that heroin use can cause

a serious pathology, then, other things being equal, he will be less likely to use it than if he made the opposite judgments. Chein found that the belief that heroin use was wrong was a major reason given by heroin "dabblers" for not continuing in its use. The extent to which the belief in the wrongness of heroin use depends on its being illegal is unknown—but it is interesing to note that many addicts tend to be strongly opposed to legalizing heroin.

The peer-group/contagion model also helps explain why the fastest increase in heroin use has been among young people, with the result that the average age of known addicts has fallen sharply in the last few years. In Boston, the Harvard student group found that one quarter of heroin users seeking help from a public agency were under the age of 18, and 80 per cent were under the age of 25. A study done at American University found that the average age at which identifiable addicts in Washington, D.C., began using heroin was under 19. Though stories of youngsters under 15 becoming addicts are commonplace, most studies place the beginning of heavy use between the ages of 17 and 19. It is persons in this age group, of course, who are most exposed to the contagion: They are intensely involved in peer groups; many have begun to become part of "street society," because they had either dropped out of or graduated from schools; and they are most likely to suffer from boredom and a desire "to prove themselves." It is claimed that many of those who become serious addicts "mature out" of their heroin use sometime in their thirties, in much the same way that many juvenile delinquents spontaneously cease committing criminal acts when they get older. Unfortunately, not much is known about "maturing out," and it is even possible that it is a less common cause of ending heroin use than death or imprisonment.

If this view of the spread of addiction is correct, then it is pointless to explain heroin use as something that "pushers" inflict on unsuspecting youth. The popular conception of a stranger in a dirty trench coat hanging around schoolyards and corrupting innocent children is largely myth—indeed, given what we know about addiction, it would almost have to be myth. No dealer in drugs is likely to risk doing business with strangers. The chances of apprehension are too great and the profits from dealing with friends too substantial to make missionary work among unknown "straights" worthwhile. And the novice user is far more likely to take the advice of a friend, or to respond to the blandishments of a peer group, than to take an unfamiliar product from an anonymous pusher.

An important implication of the peer-group/contagion model is

that programs designed to treat or control established addicts may have little effect on the mechanism whereby heroin use spreads. Users tend to be "infectious" only early in their heroin careers (later, all their friends are addicts and the life style seems less glamorous), and at this stage they are not likely to volunteer for treatment or to come to the attention of police authorities. In the Chicago study, for example, Hughes and Crawford found that police efforts directed at addiction were intensified only after the peak of the epidemic had passed, and though arrests increased sharply, they were principally of heavily addicted regular users, not of the infectious users. *No matter whether one favors a medical or a law-enforcement approach to heroin, the optimum strategy depends crucially on whether one's objective is to "treat" existing addicts or to prevent the recruitment of new ones.*

Crime and heroin

The amount of crime committed by addicts is no doubt large, but exactly how large is a matter of conjecture. And most important, the amount of addict crime undertaken solely to support the habit, *and thus the amount by which crime would decrease if the price of heroin fell to zero, is unknown.* Estimates of the proportion of all property crime committed by addicts range from 25 to 67 per cent. Whatever the true fraction, there is no reason to assume that property crimes would decline by that fraction if heroin became free. Some addicts are criminals before they are addicts and would remain criminals if their addiction, like their air and water, cost them virtually nothing. Furthermore, some addicts who steal to support their habit come to regard crime as more profitable than normal employment. They would probably continue to steal to provide themselves with an income even after they no longer needed to use part of that income to buy heroin.

Just as it is wrong to suppose that an unwitting youth has heroin "pushed" on him, so also it is wrong to suppose that these youth only then turn to crime to support their habit. Various studies of known addicts have shown that between half and three quarters were known to be delinquent *before* turning to drugs. In a random sample of adult Negro males studied in St. Louis (14 per cent of whom turned out to have records for using or selling narcotics), 60 per cent of those who tried heroin and 73 per cent of those who became addicted to it had previously acquired a police record. Put another way, one quarter of the delinquents, but only four per cent of the non-delinquents, became heroin addicts.

That addicts are recruited disproportionately from the ranks of those who already have a criminal history may be a relatively recent phenomenon. The history of heroin use in New York City compiled by Edward Preble and John J. Casey, Jr. suggests that in the period before 1951 heroin use grew slowly and often occurred through "snorting" (inhaling the powder) rather than "mainlining" (injecting liquefied heroin into a vein). The heroin used was of high quality and low cost, and its consumption took place in social settings in which many users were not criminals but rather entertainers, musicians, and the like. The heroin epidemic that began around 1951 was caused by the new popularity of the drug among younger people on the streets, especially street gang members looking for a new "high." (Indeed, one theory of the break-up of those gangs romanticized in *West Side Story* is that heroin use became a status symbol, such that the young man "nodding" on the corner or hustling and dealing in dope became the figure to be emulated, rather than the fighter and the leader of gang wars. A group of heavy addicts, each of whom is preoccupied with his own "high," will soon find collective action—and thus gang life—all but impossible.) Mainlining became commonplace, the increased demand led to a rise in price and a decline in quality of the available heroin, and the level of heroin-connected crime increased.

Some supportive evidence for the increase in the recruitment of addicts from among the ranks of the criminal is found in a study of white male Kentucky addicts carried out by John A. O'Donnell. He traced the careers of 266 such persons who had been admitted to the U.S. Public Health Service Hospital in Lexington from its opening in 1935. The earlier the year in which the person first became addicted, the less the likelihood of his having a prior criminal record. Only five per cent of those addicted before 1920, but 47 per cent of those addicted between 1950 and 1959, had a criminal record before they became addicted. Furthermore, the younger the age of a man when he first became addicted, the more likely he was to have committed criminal acts *before* addiction. The proportion of addicts with criminal records, and perhaps the rate of increase of those with such records, would probably be greater among a more typical population of addicts—for example, among urban blacks.

Once addicted, however, persons are likely to commit more crimes than they would have had they not become addicted. The common and tragic testimony of street addicts dwells upon their need to find the money with which to support the habit, and this means for many of them "hustling," stealing heroin from other users,

dealing in heroin themselves, or simply begging. The O'Donnell study in Kentucky provides statistical support for this view, though no estimate of the amount by which crime increases as a result of addiction.

The kinds of crimes committed by addicts are fairly well known. Selling heroin is perhaps the most important of these—the Hudson Institute estimated that almost half of the annual heroin consumption in New York is financed by selling heroin and related services (for example, selling or renting the equipment needed for injecting heroin). Of the non-drug crimes, shoplifting, burglary, and prostitution account for the largest proportion of addict income used for drug purchases—perhaps 40 to 50 per cent. Though the addict wants money, he will not confine himself only to those crimes where property is taken with no threat to personal safety. Muggings and armed robberies will be committed regularly by some addicts and occasionally by many; even in a burglary, violence may result if the addict is surprised by the victim while ransacking the latter's home or store.

The amount of property taken by addicts is large, but probably not as large as some of the more popular estimates would have us believe. Max Singer (in *The Public Interest*, No. 23, Spring 1971) has shown that those who make these estimates—usually running into the billions of dollars per year in New York City alone—fail to reconcile their figures with the total amount of property known or suspected to be stolen. He estimated that no more than $500 million a year is lost to both addicted and non-addicted burglars, shoplifters, pickpockets, robbers, and assorted thieves in New York each year. If *all* of that were taken by addicts (which of course it isn't) and if there were 100,000 addicts in the city, then the average addict would be stealing about $5,000 worth of goods a year—not a vast sum. Even the more conservative figure of 60,000 addicts would raise the maximum average theft loss per addict to only $8,000.

Despite the fact that many addicts were criminals before addiction and would remain criminals even if they ended their addiction, and despite the fact that the theft losses to addicts are considerably exaggerated, there is little doubt that addiction produces a significant increase in criminality of two kinds—stealing from innocent victims and selling heroin illegally to willing consumers. More accurately, the heroin black market provides incentives for at least two kinds of anti-social acts—theft (with its attendant fear) and further spreading the use of heroin.

Heroin and law enforcement

The critics of the "punitive" mode of attacking heroin distribution argue that law enforcement has not only failed to protect society against these social costs, it has in fact increased those costs by driving up the price of heroin and thus the amount of criminality necessary to support heroin habits. If by this they mean that law enforcement has "failed" because it has not reduced the heroin traffic to zero—and anything short of this will increase the price of heroin—then of course the statement is true. It would be equally true—and equally misleading—to say that most medical approaches have "failed" because the vast majority of persons who undergo voluntary treatment at Lexington or other hospitals return to heroin use when they are released.

Apart from methadone maintenance, which deserves separate discussion, existing therapeutic methods for treating heroin addiction are extremely expensive and have low success rates. Various investigators have found a relapse rate for addicts discharged from hospitals after having undergone treatment ranging between 90 and 95 per cent. Over time, a certain fraction of those treated will begin to become permanently abstinent—Dr. George Vaillant estimates it at about two per cent a year—but most of those *do not do so voluntarily*. The Kentucky males studied by O'Donnell displayed relatively high rates of abstinence after release from the hospital, but this was due mostly to the fact that heroin itself became more or less unavailable in Kentucky. The New York addicts studied by Vaillant who had been released from the same hospital showed much lower rates of abstinence, in part because heroin was easy to find in New York; those who did abstain tended to be those who were placed under some form of compulsory community supervision, such as intensive parole. And even these did not become entirely "clean"—typically they found a substitute for heroin, and most often became alcoholics.

The fact that medical approaches do not "cure" addiction, and especially do not cure it if the addict must volunteer for them, need not trouble the critics of the law-enforcement approach if they believe that only the tangible social cost of addiction (e.g., crime) and not addiction itself is a problem, or if they concede that addiction is a problem but think it wrong for addicts to be compelled to obtain help.

But if law enforcement at present fails to prevent the "external" costs of addiction (i.e., crime), or may in fact increase those costs, this will also remain true under any likely alternative public policy,

unless one is willing to support the complete legalization of heroin for all who wish it. Yet no advocate of "decriminalizing" heroin with whom we are familiar supports total legalization. Most favor some version of the "British system," by which heroin is dispensed at low cost in government-controlled clinics to known addicts in order to maintain them in their habit. Almost no one seems to favor allowing any drugstore to sell, or any doctor to prescribe, heroin to anybody who wants it.

The reason for this reluctance is rarely made explicit. Presumably, it is either political expediency (designed to make the British system more palatable to a skeptical American public) or an unspoken moral reservation about the desirability of heroin use *per se*, apart from its tangible social cost. We suspect that the chief reason is the latter: One's moral sensibilities are indeed shocked by the prospect of young children buying heroin at the drugstore the same way they now buy candy. And if one finds that scene wrong or distasteful, then one should also find the prospect of an adult non-user having cheap access to heroin wrong or distasteful, unless one is willing to make a radical (and on medical grounds, hard to defend) distinction between what is good for a person under the age of (say) 18 and what is good for a person over that age.

The total decriminalization of heroin would lead, all evidence suggests, to a sharp increase in its use. Indeed, precisely because of such an increase, the British in 1968 abandoned the practice of allowing physicians to prescribe heroin to anyone they wished.

The British system

Under post-1968 British policy, the sale of heroin to non-users or to novice users is illegal. In clinics authorized to prescribe heroin, the doctor must not do so unless he is certain the patient is addicted and truly needs the drug, and he should then prescribe conservatively. The aim is to maintain the patient with enough heroin to be free of withdrawal pains but not with enough so that he will have any surplus to sell or give to others.

The result is that a black market in heroin still exists in Britain. As Griffith Edwards (of the Addiction Research Unit, Institute of Psychiatry, London) has pointed out, the British system "in fact cuts down but in no way eliminates the potential population of black-market customers." That market, the size of which is unknown but in his view is not negligible, is made up of "customers" of the clinic system who want larger doses in order to get a "high"

(or a better "high"), present addicts who for various reasons do not wish to register with the government, and would-be or novice users who would like to try heroin.

If this is a problem in Britain, which has only two thousand or so addicts, it would be a much greater problem in the United States, where there are one hundred or two hundred times as many addicts, a large fraction of whom are quite young. Those who are willing to be maintained on low dosages in a government clinic are probably those who fear withdrawal pains more than they cherish the heroin "high"; in short, they are likely to be addicts who have passed beyond the stage of missionary zeal about an exciting new thrill. They may be quite similar to those addicts in the United States who volunteer for methadone maintenance. (This is all supposition, for we know of no detailed comparative studies of British and American addicts. We think it a reasonable supposition, however.) It is quite possible, in short, that the number of addict-zealots in the United States would be large enough to continue the spread of heroin to new users and to maintain an active black market, even if the United States were to adopt some version of the British clinic method.

It is important to bear in mind that the residual black market need not be large in order to supply novice users and thus continue the infection/recruitment process. Even if the vast majority of confirmed addicts registered to receive government heroin (which is unlikely, unless the government were willing to supply euphoria-producing rather than simply maintenance doses), the increase in the number of new addicts among suspectible groups could continue to be quite rapid and to be supplied out of a black market of modest proportions.

Furthermore, there is some reason to believe that British and American addicts are sufficiently different so that an American clinic system would not attract as large a proportion of the total addict population as have the British clinics. A member of the Addiction Research Institute in London is quoted by Edgar May as observing that the typical British addict is likely to be a "middle-class drop-out" rather than a lower-class "oblivion-seeker." The contemporary British addict, in short, may be more similar to the American addict before 1920 (when the use of opiates was increasing in the middle classes) than to the American addict of today. The difference, if correct, may have profound consequences for the efficacy of control techniques. The use of opiates among middle-class Americans *dropped* sharply after they were made illegal and

law enforcement got underway, just as the use of heroin by the British has apparently stabilized since heroin was made illegal except through licensed clinics.

This possibility is worth bearing in mind when we interpret accounts of the British system. The success of the plan (that is, the apparent stabilization in the number of addicts and the absence of addict-related crime) is in part the result of imposing on a middle-class addict population *stricter* controls than had once existed—and doing so after the rather easy availability of heroin had resulted in a *forty-fold* increase in the number of known addicts during the preceding 15 years. If the size of the American addict population grew rapidly when possession of heroin was already illegal, it is a bit hard to understand what there is in either the British experience or our own that would lead one to conclude that the number of addicts here would be stabilized or reduced if heroin were made easier to get. At best, decriminalization would reduce somewhat the size of the black market (while simultaneously lowering prices in that market) and reduce by an unknown but probably significant fraction the amount of crime committed by those addicts who were willing to avail themselves of the maintenance doses to be obtained at government clinics.

The effectiveness of law enforcement

Under any conceivable American variant of the British system, then, a law-enforcement strategy would remain an important component of government policy. Rather than simply rejecting law enforcement as "punitive" (and therefore "medieval," "barbarian," counterproductive, or whatever), one ought to consider what it might accomplish under various circumstances.

The assumption that law enforcement has no influence on the size of the addict population but does have an effect on the price of heroin (and thus on crime committed to meet that higher price) rests chiefly on the showing that the majority of known addicts have been arrested at least once; that during his life expectancy, any addict is virtually certain to be arrested; and that, despite this, the addict returns to his habit and to the criminal life needed to sustain it. These facts are essentially correct. The difficulty lies in equating "law enforcement" with "arrest."

Thousands of addicts are arrested every year; a very large proportion are simply returned to the street—by the police, who wish to use them as informants, or by judges who wish to place them on

probation or under suspended sentences because they believe (rightly) that a prison term will not cause their cure or rehabilitation. Only a few addicts are singled out for very severe punishment. We do not know for how many addicts arrest is simply a revolving door. In Boston, however, Wheat has done a careful study of the relationship between the level of law enforcement, defined as the "expected costs" of an arrest to the user, and the number of addicts in the city. By "expected costs," Wheat means the probability of being arrested multiplied by the probability of being sentenced to prison and the length of the average prison sentence. Though his numerical estimates are complex and open to criticism, the general relationship between the number of heroin users and the expected "costs" to the addict of law enforcement is quite striking—the "costs" declined sharply between 1961 and 1970 while the estimated number of addicts in Boston increased about tenfold. Furthermore, the largest increases in the number of addicts tended to follow years in which the certainty and severity of law enforcement were the lowest.

More specifically: (1) From 1961 to 1965, the estimated proportion of users arrested by the police declined (it started to increase again in 1966); (2) the chances that an arrested user would be sentenced to jail declined from better than one in two in 1960 to only one in 10 in 1970; and (3) the length of the average sentence imposed fell from about 23 months in 1961 to fewer than 15 months in 1969, though there were some intervening ups and downs. By 1970, the chance of a heroin addict being sent to jail during any given year was rather remote. We do not know whether similar changes occurred in other cities, though given the cause of the changes—the growing (and erroneous) view among legislators and judges that addicts should be referred to psychiatrists for (nonexistent) "help"—we suspect that many cities, influenced by the same sentiments, may have experienced the same changes. In Chicago, for example, Hughes and his colleagues have shown that the number of arrests of addicts, and the average sentence given to those convicted, rose dramatically during or just after the heroin epidemic of 1947-1950, but by 1955 the length of sentence had begun to fall again and by 1960 it was almost down to the pre-war level.

If there is a relationship between law enforcement and heroin use, it may result from one or both of two processes. An increase in legal penalties may deter the novice user from further use or it may deter the confirmed addict-dealer (or if he is jailed, prevent him entirely) from selling to a potential user. Lessening the "costs"

of the penalty may either embolden the novice user and potential users, or improve their access to a supplier, or both.

There is some clinical evidence that both processes are in fact at work. Robert Schasre's study of 40 Mexican-American heroin users who had stopped shooting heroin revealed that over half (22) did so *involuntarily* after they had lost their source of supply—their dealer had been arrested or had lost *his* source, or the user himself had moved to another community where he could find no dealer. Of the remaining 18, who stopped "voluntarily," most did so in response to some social or institutional pressure; in a third of these cases, that pressure was having been arrested or having a friend who was arrested on a narcotics charge.

Indeed, one could as easily make the argument that law enforcement has not even been tried as the argument that it has been tried and failed. Before making it, the authors must reassure the reader that we are under no illusion that prison sentences "cure" addiction and that we harbor no desire to "seek vengeance" on the addict. We would make the same argument if one substituted, for sentences to prison, sentences to Synanon, Daytop, methadone maintenance, or expensive psychiatric clinics. *The central point is that only a small proportion of heroin addicts will voluntarily seek and remain in any form of treatment, care, or confinement*—unless that care involves the free dispensation of heroin itself.

One can imagine a variety of law-enforcement strategies that would have a powerful effect on the number of addicts on the street, and thus on the number of street crimes they might commit and other harm they might do to others and themselves. One could arrest every known addict and send him to a "heroin quarantine center" with comfortable accommodations and intensive-care programs. Or one could arrest every known addict and send him back onto the street under a "pledge" system requiring him to submit to frequent urine tests which, if omitted or failed, would then lead to confinement in either center or jail.

American society does not do these things for a number of reasons. One is that, despite popular talk, we do not really take the problem that seriously—or at least have not until white middle-class suburbanites began to suffer from a problem only ghetto blacks once endured. Another is that we think that detaining addicts for the mere fact of addiction is violative of their civil rights. (It is an interesting question. We quarantine people with smallpox without thinking that their rights are violated. The similarities as well as the differences are worth some public debate.) Finally, we do

not do these things because *we labor under the misapprehension that law enforcement should concentrate on the "pushers" and the "big connections" and not on the innocent user.*

The last reason may be the weakest of all, even if among tough-sounding politicians it is the most common. In the first place, the "pusher" is largely a myth, or more accurately, he is simply the addict playing one of his roles. And the "big connections" and "top dealers," who indeed exist and who generally are not users, are in many ways the *least* important part of the heroin market system—because they are the most easily replaced. A new "connection" arises for every one put out of business. The amount of heroin seized by federal agents is only a fraction of what is imported.

This last fact has led many persons in and out of government to speak critically of the Administration's effort to eliminate the legal growing of opium poppies in Turkey. There is not much doubt that the present American heroin market could be supplied by alternative, and harder to control, poppy fields in Southeast Asia and elsewhere. One study suggests that the entire estimated American consumption of heroin would require fewer than 10 square miles of poppy fields! There may be compelling *political* reasons, however, for pressing the crop eradication program. It is hard to imagine a President launching a serious effort to constrain heroin users or heroin dealers if he were to ignore the foreign manufacture and importation of heroin. Indeed, he would run the risk of being accused not only of ignoring foreign producers, but perhaps even of actively helping them wage what some would no doubt call "chemical warfare" against America's ghetto poor. Some such criticisms are forthcoming even despite the crop eradication program: Witness the recent charge by a Yale scholar that the Central Intelligence Agency is assisting heroin traffickers in Southeast Asia.

But whatever politics may require, the key element in the heroin market will not be the poppy grower, the heroin smuggler, or the drug dealer. There are any number of alternative ways to perform each of these functions. The indispensable element is the heroin user. As William Burroughs wrote in *Naked Lunch*, "The addict in the street who must have junk to live is the one irreplaceable factor in the junk equation."

Containing the contagion

The novice or would-be heroin user is quite vulnerable to changes, even small ones, in the availability of heroin. For one thing, a person

who has not yet become a heavy user will not conduct an intensive search for a supply. Some studies have suggested that a "dabbler" may use heroin if it is immediately available but not use it if it requires two, three, or four hours of searching. Extending the search time for novices may discourage their use of heroin, or reduce the frequency of their use. In addition, a dealer in heroin is reluctant to sell to persons with whom he is not closely acquainted for fear of detection and apprehension by the police. When police surveillance is intensified, the dealer becomes more cautious about those with whom he does business. A casual user or distant acquaintance represents a threat to the dealer when police activity is high; when such activity is low, the casual or new customer is more attractive. Heroin customers can be thought of as a "queue" with the heaviest users at the head of the line and the casual ones at the end; how far down the queue the dealer will do business depends on the perceived level of risk associated with each additional customer, and that in turn depends on how strongly "the heat is on."

The price of heroin to the user will be affected by law enforcement in different ways, depending on the focus of the pressure. No one, of course, has the data with which to construct anything but a highly conjectural model of the heroin market; at the same time, we believe there is little reason for asserting that the *only* effect of law enforcement on the heroin market is to drive up the price of the product.

Enforcement aimed at the sources of supply may well drive up the price. The price of a "bag" on the street has risen steeply since the early 1950's and simultaneously the quality of the product has declined (which means that the real price increase is even higher than the nominal one). This was the result of a vast increase in demand (the heroin "epidemic" of the 1950's and 1960's) coupled with the increase in risks associated with dealing in the product. So the long-term effect of law-enforcement pressures on dealers is probably to force up the price of heroin by either increasing the cash price, decreasing the quality of the product, or requiring dealers to discriminate among their customers in order to avoid risky sales. But in the short term, anti-dealer law enforcement probably affects access (finding a "connection") more than price.

Suppose instead that law enforcement were directed at the *user* rather than the dealer. Taking users off the streets in large numbers would tend to reduce the demand for, and thus the price of, heroin. Furthermore, with many heavy customers gone, some dealers would have to accept the risks of doing business with novice users who,

having smaller habits or indeed no real habits at all, would consume per capita fewer bags and pay lower prices. (Law enforcement aimed merely at known and regular users would not, however, result in the apprehension of many novice users and thus would not take off the streets a large fraction of the sources of heroin "infection.") Suppose, finally, that coupled with law enforcement aimed at known users there were a selective strategy of identifying and restraining the agents of contagion. This was tried in Chicago on an experimental basis by Hughes and Crawford, with promising though not conclusive results. On spotting a neighborhood epidemic, they intervened by seeking quickly to identify the friends and fellow users of an addict. They found in this case that one addict led them to 14 other addicts and, most important, to seven persons experimenting with heroin. The doctors were able to involve 11 of the 14 addicts and five of the seven experimenters in a treatment program; the remainder of the experimenters apparently discontinued heroin use, perhaps because the social structure in which their drug use took place was disrupted.

There is, of course, an alternative way to get many confirmed addicts out of the heroin black market, and that is to offer them heroin legally at nominal prices. A black market would still exist for novice users, unregistered regular users, and registered regular users who wished to supplement their government-supplied maintenance dose with an additional dose that would produce a "high." Furthermore, this black market would be in many ways more attractive to the euphoria-seeking user because, due to competition from government suppliers, prices in it would be lower than the price in the existing market. And under this system, the government-maintained users would remain on the street and some fraction of them would continue to serve as contagion agents, thus causing the size of the addict population to continue to grow. Whether it would grow as fast as it has in the past, no one can say. There is little evidence of any rapid growth in England, but as pointed out above, this may be due to the fact that British addicts are different from American ones and that the illegal supply of heroin is much smaller there than it is here. Indeed, any estimate of the future size of the addict population under any set of legal constraints is almost meaningless. We simply do not know how many persons are susceptible to heroin use if exposed to it and what fraction of the population that is at risk is now using heroin. It is possible that even if nothing is changed, the rate of increase will slow down or even stop, because the potential market has been saturated.

Methadone maintenance

Methadone is an addictive synthetic opiate that has become the basis of the single most important heroin treatment program in the United States. Though methadone itself is addictive (after regular use, withdrawal produces pain), it has advantages over heroin: It may be taken orally; it produces no "high" if used orally; in large doses it "blocks" the euphoric effect of heroin and prevents the craving for heroin; these effects last for about 24 hours (as opposed to about six hours for heroin); and it has no significant harmful side effects. If methadone is injected (as is often the case in Britain), it can produce a "high" and a risk of a harmful overdose. And if taken orally in *small* dosages, methadone will not block the high that results from injecting heroin, though it may continue to suppress the craving for heroin. Because it will produce a "high" when injected, a black market in methadone has developed and some deaths from overdosage have been reported.

There are a number of controversies about the proper use of methadone and indeed about the ethics of using it at all. Doctors disagree over whether the addict should get the large "blockage" dose or only the small "anti-craving" dose, over whether the methadone patient should be required to accept various ancillary services (psychiatric help, job counselling, etc.), and over whether efforts can or should be made to withdraw the patient from methadone. Others argue over the morality of feeding an addiction and, inevitably, running the risk of addicting some persons who were not addicted when they entered the program. For this reason, most methadone clinics screen candidates carefully to insure that only confirmed heroin users are admitted; this means that young persons tend to be excluded.

The evaluations that have been made so far of methadone generally term it a success. By "success" is meant that the patients tend to stay in the program, that those who stay in the program tend to become employable, and that those who stay in the program do not return to the regular use of heroin (though some may experiment with it from time to time). The evidence as to whether persons on methadone abstain from criminality is not as clear. Dr. Frances Gearing of Columbia University, who headed the largest evaluation program, found that the number of arrests and incarcerations of persons who entered a methadone program fell dramatically. A study in the Bedford-Stuyvesant area of Brooklyn, on the other hand, found some evidence that many successful methadone patients remain employed in criminal occupations (shoplifters, prostitutes,

etc.), not only because that is the only trade they know, but also because, once they are freed of the need for heroin, that trade becomes even more profitable than before.

The central problem with methadone maintenance, however, is beyond dispute. So long as it remains a voluntary program, methadone is only attractive to those addicts who are tired of the life style of the addict, who no longer cherish the heroin "high" to the exclusion of all else, and who are otherwise "burned out." It is for this reason that the average methadone patient is between 30 and 35 years of age, while the average heroin addict is much younger. The typical methadone patient has been a heroin addict for 10 to 15 years and, as James V. DeLong has put it in his excellent summary of treatment programs, now finds methadone a more attractive choice than heroin. This means that the number of addicts who can be helped by a voluntary methadone program may be no more than one third or one half of the total addict population. And most important, it means that voluntary methadone maintenance holds little attraction for the kind of addict who is a contagion agent—young, excited by the heroin "high," and eager to convert his "straight" friends to its use.

Other forms of chemical treatment may be developed for heroin addiction. "Antagonists"—drugs that prevent subsequently-injected opiates from having any effect and that produce painful withdrawal symptoms in persons who have previously injected heroin—exist, but either have undesirable side effects or are not long-acting. Furthermore, since they do not produce a "high," and in addition do not reduce the craving for heroin, relatively few addicts are likely to volunteer for their use.

Possible policy directions

If nothing else, this discussion of the complexities of heroin use, marketing, and control should suggest the futility of arguments between the so-called "punitive" and "medical" approaches to addiction, the simplistic nature of unqualified recommendations that we adopt the "British system," and the imprecision of angry disputes between those who wish to "get tough" on "pushers" and those who wish to "decriminalize" heroin.

Beyond that, thinking about heroin requires one first of all to decide how one will handle the underlying philosophical issue—namely, whether the state is ever justified in protecting people from themselves, or whether it can only intervene to protect an innocent

party from the actions of someone else. Put another way, the question is whether the state has any responsibility for the quality of human life in those cases where that quality (or lack of it) appears to be the result of freely exercised choice with no external effects on other parties. It is our view that the state does have such responsibilities, though its powers in this regard must be carefully exercised toward only the most important and reasonable goals. Even John Stuart Mill, whose defense of personal liberty is virtually absolute, argued against allowing a man to sell himself into slavery, "for by selling himself as a slave, he abdicates his liberty; he foregoes any future use of it beyond that simple act."

The next question is whether heroin addiction is such a form of "slavery" or is otherwise a state of being which should not be left to free choice. This is a more difficult question to answer in general terms, for somewhat surprisingly, we know rather little about what proportion of all heroin users are seriously incapacitated (or "captured") by it. Obviously, a large number are; but some might remain heavy users and yet hold jobs, lead responsible family lives, and retain other attributes of their humanity. Nobody knows what fraction are in this category, though we do know that the advocates of decriminalization tend to give (with little or no evidence) very generous estimates of it while proponents of "stamping out" heroin give very small ones. The lives of British addicts have not been carefully studied. But Griffith Edwards of the Addiction Research Institute reports "the impression of many of the clinic doctors" that "the majority of young heroin takers do not settle to a job, or otherwise manage their lives responsibly, do not keep to the prescribed dose, and tend to acquire drugs other than those prescribed." Furthermore, the mortality rate of British addicts, even without the need to steal to support a habit, is 28 *times as large* as the death rate for the equivalent age group in the British population and *twice* that of American heroin addicts.

We think it clear that for a sufficiently large number of persons, heroin is so destructive of the human personality that it should not be made generally available. (Defending that view in the context of the current debate is not essential, however, because not even the most zealous advocate of decriminalization supports complete legalization.) We believe this to be the case, though we recognize the rejoinders that can be made. Alcohol, some will say, has consequences for many individuals and for society at least as destructive as those of heroin, yet no one would propose returning to a system of prohibition. Alcohol and heroin are different problems, however,

both medically and legally. A far smaller proportion of alcohol users than of heroin users become addicted in any meaningful sense of that term; the risks to the average individual of experimentation are accordingly far less in the former than in the latter case. And of those "addicted" to alcohol, there have been a larger proportion of "cures," though not as many as one would wish. Finally, alcohol use is so widespread as to be nearly universal, while heroin use remains an exotic habit of relatively few, and thus presents easier problems of control. Perhaps because of this, while no advanced society has been able to eliminate alcohol use, *virtually every society but ours* has been able to eliminate, or keep to trifling proportions, heroin use.

If one accepts the view that it is desirable and possible, not only to provide better treatment for present addicts, but to reduce the rate of growth of the addict population, then one must also accept the need for some measure of compulsion; for nothing is clearer than the fact that most young addicts enjoying their "run" will not voluntarily choose a life without heroin in preference to a life with it. Such compulsion will be necessary whatever disposition is made of the constrained addict—whether he be put on probation or sent to prison, to a quarantine center, to a methadone program, or to a heroin maintenance program. The compulsion will be necessary to achieve two objectives: to insure that he remains in the appropriate treatment without "cheating" (i.e., simply using the treatment center as a cheap source of drugs to be sold on the street) and to insure that while treated he does not proselytize among non-addicts and spread the contagion. Furthermore, there is some evidence (inconclusive, to be sure) that the possibility of arrest followed by some penalty deters at least some potential users and makes access to heroin more difficult for others.

Finally, to the extent that people voluntarily elect not to use heroin, the fact of its illegality may contribute to the belief that such use is "wrong" and therefore enhance the probability that a non-user will remain a non-user. Or put another way, it is difficult to see how society can assert that heroin use is a grave evil if it also must admit that its use is perfectly legal.

Heroin maintenance

A detailed consideration of the legal policies which might most effectively deal with the heroin problem is beyond the scope of this article. In general, there are two alternatives—"out-patient" programs (in which the addict is left in the community but under a legally enforced requirement to report periodically for tests and for chemical or other forms of treatment) and "in-patient" programs (in which the addict is separated from the community in detoxification, methadone, or other programs). Each kind of program must deal with both regular addicts and infectious, novice addicts. The legal, medical, and organizational issues involved in these alternatives are complex. The important thing, however, is to begin to consider them seriously—which means in turn to stop thinking of "legal" and "medical" approaches as mutually exclusive or separately viable.

Perhaps the most difficult of these issues is to decide what role heroin maintenance itself can play in an overall addict control program. It seems likely that offering low-cost, high-quality heroin is the one positive inducement that will prove attractive to most young addicts still enjoying their "run." Under the British system, the addict who obtains heroin from clinics is under no other obligations; no doctor or government official has the power to compel (and some doctors do not even have the desire to ask) an addict to accept, as a condition of heroin maintenance, any form of therapy, including the gradual substitution of oral methadone for heroin. In the British context, with a tiny addict population composed of persons apparently quite different from the typical American addict, that policy may work well enough, though experience with it is still too short to permit one to be confident of its value.

We would like to know more about the consequences of a carefully controlled heroin maintenance program such as the one proposed by the Vera Institute in New York City. If the federal government approves, heroin would be available to a small number of persons who have failed on methadone, but only on condition that they undergo various treatment programs and gradually shift off heroin.

But whatever the success of a small experiment, it seems likely that any larger program will involve real risks of sustaining the habits of contagion agents likely to recruit new addicts, and of supplying, through illegal diversions, the existing black market in drugs. With the best will in the world, it is probably impossible to devise a government program run by ordinary mortals that can provide heroin to a hundred or two hundred thousand addicts on an outpatient basis in a way that will avoid subsidizing the growth of the addict pool and supplying debilitating (as opposed to mere maintenance) doses. If that is true, and if our society believes that it has some responsibility for preventing addiction, then a substantial measure of legal compulsion will have to accompany any treatment program, *especially* one involving heroin maintenance.