

Medicalization of Psychoactive Substance Use and the Doctor–Patient Relationship

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SUPPOSE THE UNITED STATES ADOPTED A POLICY OF medicalizing cocaine, heroin, marijuana, and other substances commonly called “psychoactive substances of abuse.” Under such a policy these substances could be obtained on the prescription of a physician; when thus acquired, their possession or use would no longer be considered criminal offenses. What effect would such a new policy have on the practice of medicine? Are there features of the norms and traditions of medical practice that might thwart the implementation of such a policy? Are there reasons to believe that physicians or patients would or should either welcome or resist the medicalization of psychoactive substances of abuse? In this essay I will attempt to respond to these questions.

Let us first imagine a patient walking into a doctor’s office today and making a straightforward request that the doctor supply him with heroin, cocaine, or marijuana. The doctor is entitled to respond by refusing this request without offering any explanation beyond a simple statement that it is against the law. A good doctor would, of course, go beyond this minimal requirement and would engage the patient in a conversation designed to explore at least the patient’s reasons for making this request and what he intends to do if the doctor refuses to cooperate. She would then proceed to offer advice on alternative courses of

action that are available to accomplish the patient's objectives. At the end of this conversation, however, the prudent doctor must refuse to cooperate or else risk being penalized by the criminal justice system, losing her license to practice medicine, and being censured by colleagues.

The situation is, to some extent, analogous to that presented in some of the United States in 1970 (before *Roe v. Wade*) by women who requested elective abortions, or in 1960 (before *Griswold v. Connecticut*) by patients who requested contraceptives. It is analogous to the extent that doctors were entitled to refuse such requests without offering any explanation beyond simply stating that they were against the law.

Some doctors, however, found ways to respond without violating the letter of the law. They advised patients of the availability of elective abortions in other countries or performed "therapeutic abortions" justified by highly tenuous "diagnoses." For example, as head of a hypertension clinic I was often asked to certify that a pregnant woman who had one isolated diastolic blood pressure measurement of 91–95 mm Hg required a therapeutic abortion in order to avoid a serious complication of pregnancy known as eclampsia, a condition characterized by convulsions and coma; all parties to the discussion knew the probability of developing this complication was very small. Some patients had uterine dilatation and curettage (D&C) performed, ostensibly for the diagnostic evaluation of menstrual irregularities. The gynecologists always feigned shock at finding that their patients were pregnant because "their" pregnancy tests had been negative; the gynecologists had advised these women to submit a sample of their husband's urine rather than their own for pregnancy testing. In the late 1950s, a bus service was provided from the city in which I did my residency to a neighboring state where doctors could lawfully prescribe contraceptives.

I do not mean to suggest that surreptitious violation of the law is generally acceptable ethically. Rather, I am committed to the position that professionals should conduct their practices according to socially established norms. In this regard, I affirm principle 3 of the American Medical Association's *Principles of Medical Ethics*: "A physician shall respect the law and also recognize a responsibility to seek changes in those requirements which are contrary to the best interests of the patient" (1982). Accordingly, doctors who feel a moral obligation to violate a law governing medical practice because it is contrary to patients' best interests assume a *prima facie* obligation to make their disobedience to the

law a public act; covert violations do not accomplish the moral purposes of civil disobedience (Madden and Hare 1978).

My purpose in recalling earlier experiences with contraceptives and abortion is twofold. First, they remind us that simply because the law forbids something does not necessarily mean that no doctor will do it. There are, for example, doctors who now prescribe narcotics for patients who are addicted to them primarily to prevent symptoms of withdrawal; such doctors typically pretend that the purpose of their prescriptions is to relieve pain.

Second, these experiences remind us that not all people and not all doctors believed before *Roe v. Wade* was decided that elective abortion was absolutely and invariably wrong any more than they later believed it to be absolutely and invariably right. I suggest that there may be the same diversity of perspectives on the moral legitimacy of doctors providing prescriptions for cocaine, heroin, marijuana, and other so-called psychoactive substances of abuse. Doctors holding various perspectives on this subject will differ in their reactions to medicalization of access to these substances.

The Purpose of Medicine

Under a medicalization policy, the only lawful mode of access to cocaine, heroin, marijuana, and other psychoactive substances of abuse would be on the prescription of a physician. Are there any reasons for a physician not to cooperate with requests for such prescriptions?

It can be argued—and it often is—that doctors should refuse to cooperate because these requests are either contrary to or disconnected from the purposes of medicine. The traditional purposes of medicine are, according to the distinguished medical historian Henry Sigerist, to promote health, prevent illness, restore health, and rehabilitate those whose functioning or well-being is impaired (1951, 7). In the twentieth century the focus of the medical profession has centered on diseases: on the treatment of patients with diseases with the aim of providing cure, remission, restoration of impaired function, or palliation, and on the prevention of diseases (R.J. Levine 1978). Professional encounters between doctors and patients are seen most securely as legitimate if their purpose is to treat or prevent disease.

This raises the question of whether the use or abuse of heroin, cocaine, marijuana, or other drugs with abuse potential can properly be seen as a disease. In the mainstream of Western medicine a condition is identified as a disease if its presence can be verified objectively (R.J. Levine 1978). The identification is established most securely if the requisite objective verification is accomplished using the devices of the natural sciences, such as anatomy, chemistry, physiology; diseases relying on the behavioral or social sciences for their identification or diagnosis, or both, tend to be more problematic. It is unclear whether some maladaptive deviations from "normal" behavior should be considered sins, crimes, or diseases (Fox 1989, 28ff). Such is the ambiguity of some of these classifications that deviant persons may be offered a choice between the sick role and the criminal role (Burt 1978; R.J. Levine 1978; Murphy and Thomasma 1981).

What about the use of cocaine, marijuana, heroin, and other psychoactive drugs of abuse? The American Psychiatric Association (APA) states:

In our society, use of certain substances to modify mood or behavior under certain circumstances is generally regarded as normal and appropriate. Such use includes recreational drinking of alcohol, in which a majority of adult Americans participate, and uses of caffeine, in the form of coffee or tea, as a stimulant. On the other hand, there are wide cultural variations. In some groups even the recreational use of alcohol is frowned upon, whereas in other groups the use of various illegal substances for mood-altering effects has become widely accepted. In addition, certain psychoactive substances are used medically for the alleviation of pain, relief of tension, or to suppress appetite. (1980, 165)

The APA distinguishes "recreational" and "medical" uses from "pathological" use, which is characterized by "symptoms and maladaptive behavioral changes":

[These] would be viewed as extremely undesirable in almost all cultures. Examples include continued use of the psychoactive substance despite the presence of a persistent or recurrent social, occupational, psychological, or physical problem that the person knows may be exacerbated by that use and the development of serious withdrawal symptoms following cessation or reduction in use of a psychoactive substance. These conditions are here conceptualized as mental disorders. . . . (1980, 165)

Thus the use of psychoactive substances in and of itself is not regarded as disease. Only when such use is associated with maladaptive behavioral changes and persists for more than a month does it become eligible for the diagnosis of "psychoactive substance abuse" (APA 1980, 169). A more advanced condition, "psychoactive substance dependence," is characterized by such attributes as loss of control over when and how much of the substance is to be used, partial or complete loss of important social, occupational, or recreational activities, and, with some substances, the development of withdrawal syndromes.

According to the American College of Physicians (ACP), "Chemical dependence is a medical illness requiring medical diagnosis and treatment" (ACP 1985). The Presidential Commission on the HIV Epidemic (1988) states: "Drug addiction is a disease of the whole person involving multiple areas of function."

At this point there appears to be a *prima facie* case against authorizing physicians to write prescriptions for recreational or pathological use of psychoactive substances. Recreational use appears at best to be foreign to the purpose of medicine and may lead to the development of a disease; pathological use is itself identified as a disease. Further light can be shed on this problem by considering another dimension of the purpose of the medical profession. The medical profession responds not only to disease but also to the sick role.

The Sick Role

Sickness is not merely a biological or behavioral condition or disturbance. It is a social role characterized by certain entitlements, obligations, and exemptions from social obligations; this social role is shaped by the society, groups, and cultural tradition to which the sick person belongs (Fox 1989, 21ff). Talcott Parsons (1951, 1972), in his highly influential description, identifies four aspects of the institutionalized expectation system regarding the sick role:

1. There is an "exemption from normal social role responsibilities, which . . . is relative to the nature and severity of the illness. This exemption requires legitimation . . . and the physician often serves as a court of appeal as well as a direct legitimating agent . . . being sick enough to avoid obligations cannot only be a right of the sick person but an obligation upon him. . . ."

2. "The sick person cannot be expected by 'pulling himself together' to get well by an act of decision or will. In this sense also he is exempted from responsibility—he is in a condition that must 'be taken care of' . . . the process of recovery may be spontaneous but while the illness lasts he can't 'help it.' This element in the definition . . . is crucial as a bridge to the acceptance of 'help.'"
3. "The state of being ill is itself undesirable with its obligation to want to 'get well.' The first two elements of legitimization of the sick role thus are conditional in a highly important sense. It is a relative legitimization as long as he is in this unfortunate state which both he and alter [authority] hope he can get out of as expeditiously as possible."
4. There is an obligation upon the sick person "to seek technically competent help, mainly, in the most usual sense, that of a physician and to *cooperate* with him in the process of trying to get well. It is here, of course, that the role of the sick person as patient becomes articulated with that of the physician in a complementary role structure."

To a large extent the social purpose of the medical profession is to respond to the needs of persons in the sick role. Persons in the sick role need "technically competent help" in dealing with their diseases. They also need "legitimation" of their exemptions from normal social role responsibilities. In general, this legitimation is completely dependent upon the diagnosis of a disease (R.J. Levine 1978, 1991; Siegler 1979).

Doctors and patients working together in relationships of the sort implied by Parsons's description of the sick role find themselves on familiar ground. Within these familiar relationships they can confidently appraise the behaviors of themselves and each other. The doctor, for example, may think that a patient is a "good patient" for wanting to get well as expeditiously as possible. Within this familiar social system, the good doctor finds support for her attempts to persuade or admonish the patient to lose weight, stop smoking, or take all of his pills. This familiarity and social support contribute to the successful conduct of medical practice—to the realization of the purposes of medicine. Doctors and patients understand and try to play their roles as "good doctor" and "good patient."

Recreational Use

Those who support making drugs like heroin, cocaine, and marijuana available by prescription for recreational use do so because it will, in their view, yield several important advantages over the current system (Nadelmann 1989). They anticipate that it would, for example, reduce the crime rate associated with drug abuse and reduce the health hazards to individual drug users.

Let us first consider briefly the prediction of a reduction in the crime rate associated with drug abuse. If recreational use of these drugs were decriminalized, persons who use them would cease to think of themselves as criminals. Currently, possession or use of these drugs is regarded as criminal behavior. Because users already perceive themselves as criminals, or at least as being so labeled, it is for them a relatively small step to engage in other activities considered criminal. Moreover, in order to secure supplies of drugs, they must encounter persons who are possibly more committed to the criminal role and more familiar with the range of activities available to those willing to assume the criminal role. Recreational drug users often find it necessary to engage in criminal behavior in order to pay the high prices charged for the drugs. The vendors are often able and willing to offer advice on how to become a prostitute, drug pusher, robber, and so on.

Parenthetically, it is often predicted that one of the benefits of medicalizing recreational drug use would be a decrease in the price of the drugs. This would have the advantage of reducing pressure on drug users to assume the criminal role. Musto (1990) provides historical evidence that we cannot confidently predict a medicalization policy to bring about a reduction in the retail price of drugs. He studied the price of illicit cocaine "on the streets" of New York during a period (1907–1914) when this drug was made available to all persons (regardless of diagnosis or lack thereof) on the prescriptions of doctors. When expressed as a multiple of the average industrial hourly wage, the street price was somewhat higher than it was from 1982 to 1989 when there was no legally authorized access.

Let us next consider the proposition that a medicalization policy would reduce the health hazards of recreational drug use. This salutary objective would be realized by standardizing the doses or concentrations of drugs and regulating their purity, thus avoiding the very severe and occasionally lethal adverse effects associated with inadvertent overdoses

or reactions to mixtures represented as single agents. It would also reduce exposure to toxic agents such as paraquat sprayed on marijuana crops in an effort to destroy them (Nadelmann 1989). Moreover, medicalization would entail providing prescriptions for clean needles and other apparatus, which would reduce the likelihood both of contracting infections like bacterial endocarditis and of transmitting diseases like AIDS and hepatitis.

All of these advantages could be achieved at least as efficiently by adopting a policy of legalization rather than medicalization. Standardization of doses and purity of products could be reasonably assured by treating these drugs as the Food and Drug Administration (FDA) now regulates over-the-counter products available for purchase without a doctor's prescription. Clean needles and other apparatus could similarly be made available over the counter. The only reason that prescriptions are now required for needles and syringes is fear that they will be diverted to illicit use. The desired reduction in price of drugs could be accomplished more efficiently if one did not have to pay fees to doctors for writing prescriptions.

Other putative advantages of a medicalization policy—in contrast with those just mentioned—are dependent on the professional skills of physicians. As recreational drug users reported periodically to their physicians for refills of their prescriptions, they could be monitored for adverse effects of drug use. They could be queried about whether drug abuse was becoming involuntary (e.g., cocaine binges) and advised of strategies for maintaining control of their substance-using behaviors. They could, for example, be counseled about the hazards of smoking “crack” cocaine, which are disproportionately higher than snorting the more traditional preparation; cautioned against escalating from cannabis to narcotics; and monitored for adverse drug reactions or “complications” like hepatitis resulting from intravenously administered drugs.

Thus, a medicalization policy could provide advantages that would not be realized through a policy of legalization. To the extent that such a policy would draw upon the skills of health professionals to assist persons in their efforts to prevent or avoid diseases, it appears to be legitimate. However, if the reasoning that causes us to accept this as a legitimate activity for physicians is applied consistently, what else must we consider legitimate?

I can think of no true analogies in the current practice of medicine. No drugs intended for recreational use are available only on prescription

by a physician. A truly analogous situation would obtain if a prescription were required for cigarettes and alcoholic beverages. Prescribing doctors could monitor their clients' recreational use of these products, offering counseling for their safer use and monitoring through repeated histories, physical examinations, and laboratory tests for early signs of emphysema, lung cancer, cirrhosis of the liver, and peripheral neuropathies, to cite some examples. As grotesque as this proposition might appear, there are good reasons to predict that it would be far more efficient in the early detection of remediable disease than a similar policy directed at marijuana, cocaine, heroin, and other psychoactive substances.

Let us now consider the reasons for rejection by physicians of any policy that would call upon them to write prescriptions for recreational drug use. As already noted, the fact that such prescription writing is not directed at the treatment or prevention of disease suggests that it lies outside the proper domain of the medical profession.

In writing prescriptions for recreational drugs, the doctor is responding to the nonmedical wants or desires of the person rather than to his medical needs. This does not necessarily disqualify such prescription writing from the proper domain of the doctor. Our society offers general social support for doctors to "treat" nondiseases like pregnancy by performing abortions, infertility by providing artificial insemination or in vitro fertilization, and fertility by prescribing contraceptive drugs and devices. Those who oppose these practices do so because they regard the actions themselves as immoral, whether performed by physicians or others. Those who view the actions as socially acceptable support the performance of these procedures by health professionals because they are the ones who exclusively have the skills necessary for performing them safely and effectively.

Certain other activities of physicians are generally accepted, although they are not directed at the treatment or prevention of disease. These include the prescription of minoxidil (Rogaine®) to combat male pattern baldness as well as many of the activities of cosmetic plastic surgeons. Opposition in such cases is concentrated on whether activities directed toward patients' wants and desires rather than their medically defined needs should be covered by third-party payors. Although some may consider the goals of such activities to be frivolous, the authority of well-informed adults to assume the risks entailed in their pursuit is generally affirmed. Furthermore, it is necessary for doctors to cooperate in

the pursuit of these goals because no other profession has the requisite skills to perform the cosmetic surgery or to assure the safety of minoxidil administration.

Much more likely to be considered dubious are prescribing behaviors directed toward questionable goals when the prescribed drugs are perceived as having substantial risks. Examples include the use of anabolic steroids by athletes to increase strength and human growth hormone (hGH) to increase the height of smaller-than-average children (Walker et al. 1990; Werth 1991). Contributing to their negative image is the recognition that the purpose of such activities is to gain a competitive advantage by resorting to means not equally available to all contestants.

In sum, doctors' activities that are designed to assist patients in pursuing goals unrelated to treating or preventing disease are most likely to be approved socially if the goals are worthy (or at least neutral), if the risks are commensurate with the worth of the goals, and if their safe and effective pursuit requires the professional skills of a physician. The prescription of psychoactive drugs of abuse fails the first two of these tests because the goal is generally perceived as unworthy and the risks are seen as substantial. These activities only marginally pass the third test and probably not by so comfortable a margin as would the prescription of cigarettes and alcohol.

Primum non nocere is commonly said to be the first principle of medical ethics. Literally it means "first," or "above all, do no harm." This principle is not intended to be interpreted and applied literally (Jonsen 1978); to do so would preclude almost all therapeutic activity in which risks of harm are customarily justified by expectations that the benefits will be greater in probability or magnitude (preferably both) than the harms. The principle is intended to serve as a powerful barrier to doctors' activities that are likely to be harmful without expectation of benefit.

Because the recreational use of drugs is widely perceived as harmful and the benefits of such use are generally regarded as dubious (at best), writing prescriptions for them is likely to be viewed as violating the first principle of medical ethics. Doctors who were willing to cooperate in such prescription-writing activities might try to justify their behavior in terms of the expected benefits or by arguing that they were not introducing their clients to dangerous substances. Rather, they were cooperating with clients who had already chosen to use such substances. "If they get their drugs from me, it's safer than getting them in the street," thinks such a doctor. "Besides, if they don't get them from me they'll

just get them from the doctor across the street." This is a familiar "justification" used, for example, by doctors who capitulate to their patients' insistence upon receiving antibiotics for febrile illnesses by prescribing penicillin for viral infections. It is easier to write a prescription than to educate the patient. Their colleagues regard such practices as undesirable but understandable.

Prescription-writing doctors might also respond to allegations of violation of the do-no-harm principle by asking, "What harm?" What is the harm of cannabis usage? It is not addicting. It may impair judgment but the order of magnitude is about the same as it is with alcohol. Most casual snorters of cocaine do not appear to develop any serious problems (Gawin and Ellinwood 1988).

Attempted medicalization of the recreational use of psychoactive drugs of abuse would encounter yet another formidable obstacle. Because there would be no sick role for the client to assume or to which the doctor could respond, there would be some of the same problems already noted in connection with the lack of a disease to treat or prevent.

In addition, both members of the doctor-client dyad would feel uncomfortable or awkward, as one does in unfamiliar social settings. Although each participant tries to understand and play his or her role as "good doctor" or "good patient," how can the recreational drug user "want to get well," or "cooperate with technically competent help"? How will these people know whether they are succeeding in their social roles, or at least making a praiseworthy effort?

Of further concern to some observers is the fact that in our social system the doctor is expected to perform as a legitimizer. She has the authority and the responsibility to decide, for example, whether any individual claim to the entitlement and exemptions of the sick role are legitimate. The medical profession's power to direct or endorse behavior is perceived by the public as very great indeed. "Doctor's orders," says the *New York Times*, are the reason that President Bush suspended his beloved jogging routine for over six weeks until another headline proclaimed, "Doctor Says He's Normal." The advertising industry capitalizes on this authoritative image. One product we are told repeatedly is "like a doctor's prescription." Journalists and the advertising industry reinforce many times daily the public's impression of the medical profession as a powerful and authoritative legitimizer. There is, therefore, good reason to be concerned that, if doctors write prescriptions for drugs for recreational use, such use will tend to be perceived as legitimate—"just what the doctor ordered."

Medical Use

Given the purpose of this article, there is little need for extensive discussion of medical use of psychoactive drugs. It is worth noting that it shares with other socially approved categories of medical therapy the goal of ameliorating the manifestations of diseases. The patients thus are considered legitimate claimants to the entitlements and exemptions of the sick role. Doctors and patients understand whether they are measuring up to good doctor or good patient standards.

These points notwithstanding, there are many manifestations of strong prejudice against certain of the drugs with the primary reputation of being illicit. The safe and effective use of amphetamine and methylphenidate (Ritalin®) for treating minimal brain dysfunction in grammar-school-aged children provoked a loud public outcry, hearings in Congress, and the appointment of a high-level panel to investigate the matter (Stoufe and Stewart 1973; U.S. Department of Health, Education, and Welfare 1981). Tetrahydrocannabinol, an alkaloid derived from marijuana, is generally regarded as the best safe and effective therapy for the highly pernicious and disabling nausea and vomiting associated with cancer chemotherapy; its distribution to patients in need of it is obstructed persistently by the federal Drug Enforcement Administration (Nadelmann 1989). Other examples of obstructing the development or distribution of agents such as heroin, cocaine, and psychedelic drugs have been reviewed recently by Nadelmann (1989).

Many physicians are extremely conservative in their writing of prescriptions for the use of narcotics like morphine and meperidine (Demerol®) for the relief of pain because of their concern about causing addiction. This attitude often works to the detriment of patients' legitimate interests. Oddly, such physicians may prescribe inadequate amounts of narcotics even for terminally ill patients for whom the development of addiction is a matter of no practical consequence.

Pathological Use

Should physicians provide prescriptions for psychoactive substances for persons having the attributes of psychoactive substance dependence? Let us consider first whether the physician should function as a mere supplier of such prescriptions for persons who do not intend to try to discontinue their use. The relevant considerations on this topic are, I believe, almost identical to those bearing on the question of physician

prescribing for recreational use. The main difference is that in consideration of recreational use it was necessary to calculate or speculate on the probability that such use might lead to the development of disease. Now there is no need for speculation; the user already has a disease. Thus, I conclude once again that physicians should not cooperate as mere suppliers of psychoactive substances. Some of these persons may have symptoms or signs associated with their drug-taking behavior and may request the physician's services in dealing with those. Even though it would be compatible with the purpose of the medical profession for physicians to assume responsibility for taking care of such persons, to help them manage the manifestations of their disease, the physician still should not prescribe the psychoactive substances. Most of the important goals of legalizing access to psychoactive drugs of abuse can be accomplished without requiring doctors to serve as legitimizers or vectors of disease-causing agents.

In passing it is worth noticing that some physicians prescribe drugs for ostensibly legitimate indications knowing or suspecting that they will be used recreationally or pathologically. Among the drugs for which such prescriptions are said to be relatively common are diazepam (Valium®) barbiturates, narcotics, dextroamphetamine (Dexedrine®), and methylphenidate (Ritalin). These activities reflect the diversity of opinion that exists within the medical profession about the legitimacy of affording access to such drugs. Although I cannot estimate confidently the prevalence of such prescription writing, I believe this practice is less frequent than the earlier practice of offering of advice about obtaining what were at the time illegal contraceptives and abortions.

Finally, let us consider patients with one of the mental disorders categorized as psychoactive drug dependence who want to assume the sick role. If such patients seek out the services of a physician for technically competent help in coping with their diseases, should the physician provide access to psychoactive drugs? In contexts defined by four essential features I believe the answer should be yes:

1. The drug-dependent person must recognize his dependency as undesirable and must want to cooperate with the physician in a mutual effort to end the dependency or, if this is not feasible, to mitigate its destructive effects. In short, the patient must be willing to play the role of good patient as defined within the sick role.
2. There should be a reasonable expectation of success. That is to say, there should be satisfactory scientific evidence that, in most indi-

- viduals having the same type of drug dependence, administration of the prescribed drug is likely to have the desired effect.
3. The role of the physician should surpass that of mere prescription writer. There should be a fully developed doctor–patient relationship in which the doctor offers the full range of professional services typical of such relationships appropriate to the requirements of particular patients. Otherwise, there is no need to involve the physician.
 4. The physician must be qualified by virtue of her professional education (C. Levine and Novick 1990) and personal disposition to serve patients with psychoactive substance dependence. Many physicians have extremely negative attitudes about patients whom they consider self-abusive or self-destructive; they reflect these negative reactions by avoidance or punishment (Groves 1978; R.J. Levine 1991; Mizrahi 1986). As a consequence of highly negative attitudes toward drug addicts—attitudes that are already well established in third-year medical students (McGrory, McDowell, and Muskin 1990) and in medical residents (Mizrahi 1986)—few physicians have developed the professional competence necessary to provide appropriate care for addicted persons (C. Levine and Novick 1990). Consequently, the American Society of Addiction Medicine is examining the possibility of creating a specialty board in addiction medicine (Pinkney 1990).

Specification of these four essential features of appropriate context in which to write prescriptions for pathological users of psychoactive drugs is, in effect, requiring that this prescription writing conform to the norms of medical practice. Thus, the drug use thereby authorized would conform to the definition of medical rather than pathological use, even though the patients are pathological users.

The first of these essential features calls upon the patient to cooperate with the physician. This is not to be construed as an appeal for a return to the paternalistic or authoritarian model of the doctor–patient relationship. Rather, according to the shared decision-making model (President's Commission 1982), the doctor and patient negotiate agreements about their goals and the means they will employ to pursue them. The patient is expected to cooperate within the framework defined by these negotiated agreements.

The preferred goal is, in general, to end the dependency. For some patients this goal may be unattainable, either permanently or tempo-

rarily. In such cases the doctor and patient may reach an agreement to strive for mitigation of the destructive consequences of the chemical dependency. For some heroin addicts, for example, this might entail the use of methadone maintenance. Such treatment has been validated in appropriate scientific studies and calls upon the physician to assume responsibilities for much more than mere prescription writing in accord with features 2 and 3, respectively.

Methadone, of course, is not precisely the drug on which these heroin addicts became dependent. Although closely related, it has attributes that make it preferable to heroin for long-term-maintenance therapy. Would it make a difference if the drug prescribed by the doctor were precisely the one to which the patient had become addicted?

I believe that it would not, so long as the requirements of the four essential features were satisfied. A credible example of such a drug is nicotine polacrilex (Nicorette®) available by prescription only to cigarette smokers who are seeking to quit smoking "while participating in a behavioral modification program under medical or dental supervision" (Medical Economics Company 1991, 1299-1302). Nicotine, the actual drug to which these persons became addicted, is said to be as addictive as heroin (*Lancet* 1991; Nadelmann 1989, 944). Although it has all of the adverse drug affects that the smoker experiences from smoking cigarettes, it differs in that it does not cause cancer or chronic lung disease. Moreover, it is not intended for long-term use.

With regard to other pathologically used psychoactive substances, given the nature of cocaine dependency (Gawin and Ellinwood 1988), there seems to be no place for writing prescriptions for cocaine or any of its presently known congeners because success is not a reasonable expectation. Nor is there a rational basis to consider prescribing cannabis for those dependent on this drug. The American Psychiatric Association's manual of mental disorders (DSM-III-R) does not recognize dependence on such drugs as phencyclidine and related substances or hallucinogens (APA 1980).

Summary and Conclusions

If my assumptions and analysis are correct, any attempt to medicalize cocaine, heroin, marijuana, and other psychoactive substances of abuse in the United States is likely to encounter the strong opposition of many responsible physicians. Such opposition would be grounded in their per-

ceptions that medicalization would be contrary to the two primary purposes of medical practice: (1) to prevent diseases or to treat persons with diseases with the aim of providing cure, remission, restoration of function or palliation, and (2) to respond to the needs of persons in the "sick role." Resistance would further reflect physicians' concerns about avoiding actions that could harm patients and refraining from creating the appearance of legitimizing the recreational or pathological use of substances of abuse.

Most, but not all, of the advantages anticipated by proponents of medicalization could be secured even more efficiently by adopting a policy of legalization. For various reasons, which are beyond the scope of this essay, I do not think it likely that the United States will adopt such a policy. I mention legalization only to show that the most weighty arguments supporting medicalization of cocaine, marijuana, and heroin apply at least as forcefully to tobacco and alcoholic beverages. Thus, to be consistent, those who use these arguments to support adoption of a medicalization policy for cocaine, heroin, and marijuana must also support making tobacco cigarettes, and whiskey available only on a doctor's prescription.

I believe that most responsible physicians would resist medicalization of all recreational use of psychoactive substances. Many of them would, however, be willing to consider prescribing such substances for pathological users within the context of a fully developed doctor-patient relationship in which the patient recognized his dependency as undesirable and wanted to cooperate with the physician in a mutual effort either to end the dependency or, at the very least, to mitigate its destructive effects. In short, the patient must be willing to play the role of good patient as defined within the sick role. Under such conditions, physicians who are suitably qualified by virtue of their professional education would be willing to consider prescribing psychoactive substances when there was available satisfactory scientific evidence that their administration would be likely to have the desired therapeutic effect.

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