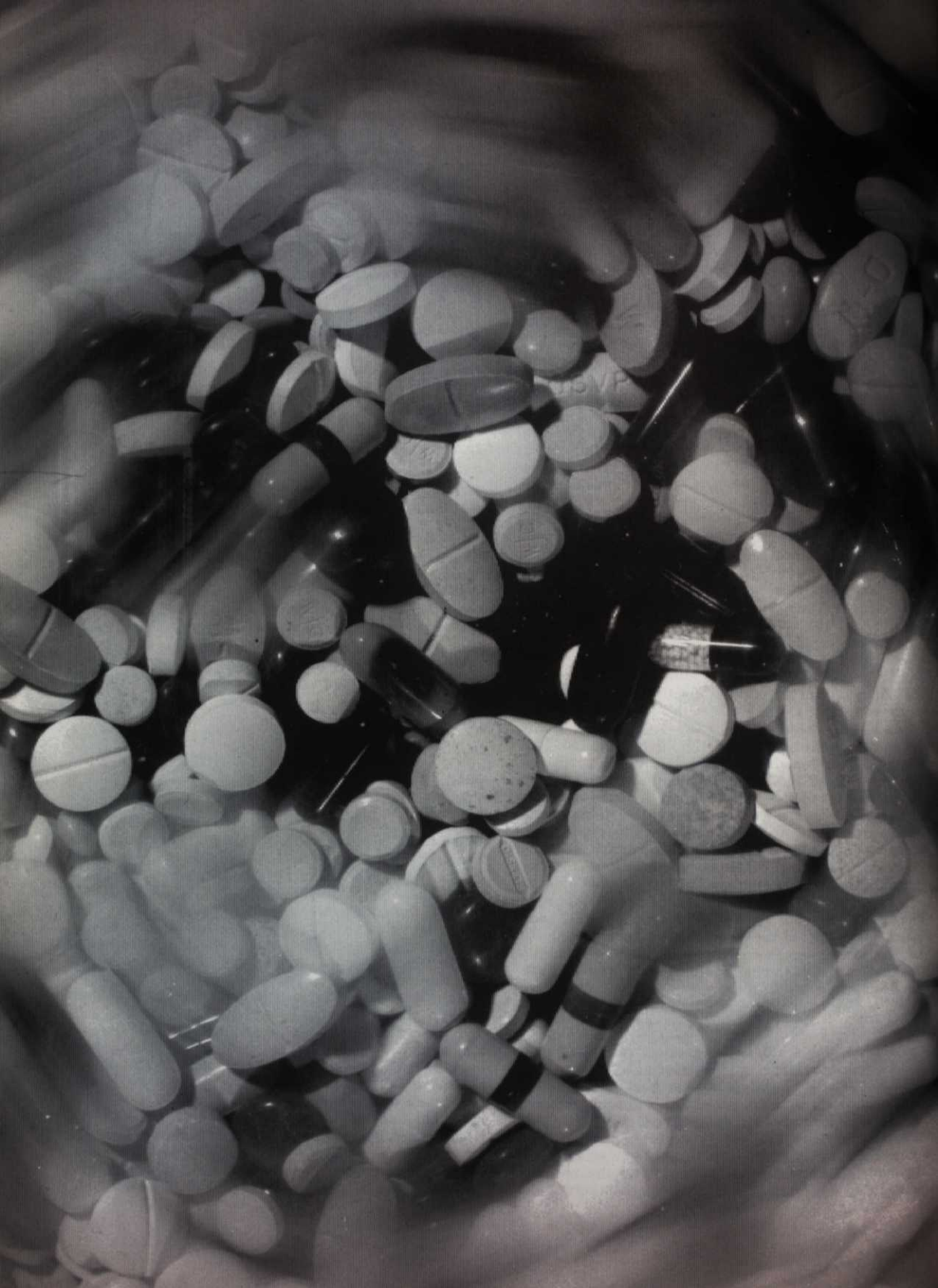

Drug Abuse

By Paul N. Seward

Almost all of us are drug users

EDITOR'S NOTE: The following commentary on drugs today, their medical effects, and the problems associated with their use originally appeared in the September-October "Harvard Medical Alumni Bulletin." Dr. Paul N. Seward, a first-year resident in pediatrics at H. C. Moffitt—University of California Hospitals, draws on his experiences in the Haight-Ashbury clinic where he spent his elective period of Harvard Medical School.

Because SOONER magazine does not circulate primarily to a medical audience, we have elided the highly technical portions of Dr. Seward's commentary. The copyrighted article is reprinted with permission.

(There is) a rapidly growing and severe public health problem in the United States today — the abuse of drugs by adolescents. Not that the use and abuse of drugs is new; America has long been and will probably continue to be a nation of pill takers. We smoke cigarettes, take pills to stop smoking cigarettes, and then more pills to make us lose the weight we gained when we stopped smoking. We wake up in the morning with aspirins and stimulants to offset the hangover of the alcohol and barbiturates we went to sleep with the night before. According to the mass media surrounding us, we are made elegant with our alcohol and sexy with our cigarettes, and we gain relaxation, freedom from anxiety, and promotions just from taking that little pill.

What is unusual about the present situation is that for the first time the children of today not merely emulate what they see in their society, but, as is the custom of adolescents, rebel against it. However, in rebelling, in seeking thus to solve all the traditional and unique problems of modern young people, they have turned away from their parents' drugs to new drugs of their own. In so doing they have encountered two dangers: first they have incurred the righteous wrath of their forefathers, delighted to find their children guilty of a sin which they themselves have not yet committed, and perhaps angry at their offspring for having so discourteously preceded them; and secondly, they have found in the drugs themselves, new difficulties, new dangers, and new disease. . . .

(The majority of my patients) were young, white, adequately educated and well spoken. They and their compatriots are not members of underprivileged minorities, seeking in drugs an escape from the miseries of social deprivation; they are members in good standing of white middle class America, children of a Michigan suburb and New York's upper west side. . . . They are your children's classmates; they are your children's friends. . . .

(In his article Dr. Seward cites a number of statistics from surveys taken in California.) . . . All of these studies are subject to criticism on a number of obvious grounds. However, even making all possible allowances, two facts remain clear. First, regardless of the exact amount, marihuana use among even the very young exists and is increasing. And second, drugs such as marihuana and . . . LSD, amphetamines and even heroin are available to all young people to a previously unimaginable degree, with increasing social acceptance of their use. Even those who do not use drugs will be faced with the decision, and they will need reasons to refrain, and legitimate reasons which they do not already know to be false. . . .

The physiologic effects of marihuana are still almost totally undocumented or unknown, due largely to the rather surprising lack of research on the topic; a result of the reluctance of most institutions to engage in it . . . Until the 1930s, when the preparation finally came under the disparaging and baleful eye of Mr. Harry Anslinger of the Federal Narcotics Bureau, Cannabis (the species name for the flower that produces marihuana) enjoyed wide use by physicians and as the active ingredient in various over-the-counter patent medicines as a mood elevator, a sedative-hypnotic, a mild anesthetic and an analgesic preferred in many instances over morphine despite its lower power, because of its non-addictive character.

Before discussing the abuse potential of the drug, it might be appropriate at this point to define the difference between drug abuse and drug use. Drug use is obvious — if you use a drug, you are a drug user. The lady who drinks champagne on her wedding day is a drug user; the man who smokes a cigar when his wife has a baby is a tobacco user. Likewise the high school student who tries a marihuana cigarette is a marihuana user. A habitual user is also reasonably obvious: one who uses a drug regularly, whether it is once a month or ten times a day. A drug abuser, however, is one who uses a drug in such a way that it interferes with his personal, social, or professional functioning, regardless of how great or frequent that use might be. The handyman at my Grammar School who used to drink a pint of Four Roses before he went to clean the cesspool is not a drug abuser; the New York business man who similarly drinks a pint of Four Roses before meeting his client is a drug abuser. Second, the use or abuse of a drug is related to a considerable degree to the abuse potential of the drug itself. The smoker of four or five cigars a day may be rather impolite in elevators and somewhat impoverished, but he is not a drug

abuser; the person who takes one trip on STP and is unfortunate enough to be one of those left with chronic personality disturbances as a result, is a drug abuser.

The possibilities for abuse with marihuana fall into two categories: first, acute psychotic reactions, dangerous primarily because of the possibility of self-inflicted damage, and second, more subtle personality changes in the chronic user, including the use of other drugs. The acute psychotic reactions, if they exist at all, are certainly a rare phenomenon. The customary effect of marihuana is, of course, lethargy, euphoria and sedentary behavior. . . .

(In 1968 in California 94 per cent of the juvenile arrests, or 14,760, were for marihuana and dangerous drugs — an increase of 176 per cent over the preceding year. Less than one per cent of those involved hard narcotics such as heroin. Among adult arrests, with 18 as the borderline between juvenile and adult, drug arrests rose over 87 per cent to a total of 42,032 in 1967. Dr. Seward notes that over two-thirds of those arrested were being charged with their first offense.)

. . . Marihuana is illegal, and where one illegal drug can be bought, so may another. While a child may not buy heroin with his cigarettes, he can with his marihuana, and, thanks to the large network of illegal traffic in dangerous drugs of which marihuana is the most widespread, so may his non-smoking friend. While it is unlikely that either of them actually shall, as evidenced by the fact that with new marihuana users numbering in the millions, there were only six thousand new heroin addicts registered last year, the possibility of heroin, or more importantly perhaps, methedrine, remains available. Second, marihuana is illegal. Therefore for the time being, one must include in the abuse potential of the drug its most important if not its only abuse potential, its ability to result in incarceration, loss of social status, educational and economic limitations, and permanent social handicap.

. . . LSD with the possible exception of marihuana, is the drug about which least is known and more is claimed than almost any drug today. . . . The incidence of LSD use in adolescent society, other than that it does indeed exist, is almost impossible to determine. . . . Arrest figures are very unreliable because of problems both in reporting the arrests and in enforcing the law. LSD, because of its effectiveness in incredibly small amounts, can be carried in a multitude of virtually undetectable ways; absorbed on the pages of a book, dropped on the back of a stamp, or any of a number of similar forms. For this very reason, the laws concerning LSD are much less severely enforced than those governing marihuana. . . .

. . . The toxicology of LSD is still unclear. Thanks to a brilliant and daring experiment performed at the St. Louis Zoo, we now know that 300 milligrams of LSD, or approximately one thousand times the hallucinogenic dose in man, will cause an aged and somewhat senile elephant to die in convulsions. . . . However there is no known case of an LSD fatality in man due directly to toxic properties.

What does LSD do? Anyone who has read his "Time" magazine can come to some sort of an answer. However, for those who have not kept up in this important journal, Stefaniuk and Osmund administered some LSD to a group of 17 students back in the days when this was considered an accepable pastime, and listed their responses: First, perceptual changes including visual changes, with changes in spatial perception, changes in form of faces or objects, color changes, outright hallucinations, changes in intensities of perception, perseverance of images and blurring of vision; auditory changes, with increase or decrease in acuity, poor localization of sound, poor comprehension of words, auditory hallucinations, and interestingly enough, cross sensation (i.e. "hearing" of objects, "seeing" of sounds). . . .

The therapeutic uses of LSD are . . . uncertain. Much was made of the drug in psychiatric circles during the fifties as a means of mimicking schizophrenia, and thus as a method of studying the disease. . . . All in all several thousand papers on the uses of the drug have been published. . . . Without going into the papers themselves, however, two areas of LSD use seem to me, if not proved to be worthwhile, at least worthy of further investigation. These are the work of McClean and others in the treatment of alcoholics, and the work of Kast and others in the use of LSD in the supportive care of the terminal patient.

What is the abuse potential of LSD? This can be divided into three categories; acute psychotic reactions, prolonged mental changes, and physical damage. By physical damage one refers of course to the possibility proposed by Cohen et al that LSD breaks chromosomes.

Unlike marihuana, acute psychotic reactions with LSD are probably not terribly uncommon, although again the true incidence is not known. Those severe enough to reach the attention of a physician generally take the form of an acute anxiety reaction, but occasionally include paranoid delusions with suicidal or homicidal behavior, although completion of such acts is quite rare, if only because of the difficulty of the LSD user in completing any involved series of actions. . . .

. . . The best method of diagnosis is to ask the patient if he took LSD, for only with the most severe reactions is the patient so irrational that he does not know. . . .

. . . Patients often complain that they feel as if they were going to disintegrate, that their thoughts will explode, that if they relax for an instant their mind will destroy itself in a wave of disorder, that their brain is about to enter another dimension. Equally important, the physician's own fear of the LSD reaction as something dangerous which he does not understand, and his own doubts as to his ability to treat it, are rapidly transmitted to the patient and often serve to augment the difficulty.

(Thus far the discussion has covered only the oral products — marihuana and the hallucinogens such as LSD. A third and very important group is the intravenous amphetamines — methedrine or speed. Like the other drugs, the use of injected drugs is on the rise.)

. . . In 1967 intravenous amphetamines were a peculiarity. By 1968 they were a recognized and growing pattern of behavior that provoked strong disapproval even among the Haight-Ashbury residents; the number of buttons on what passes for lapels that read "Speed Kills" did not refer to the traffic problem. Now,

'hopefully tomorrow is not too late'

methedrine is probably second only to marihuana and tobacco as the most commonly used drug in Haight-Ashbury.

. . . Of all the previously mentioned drugs, the diagnosis of methedrine abuse is probably the easiest, and its treatment the most unsatisfactory. . . . Treatment of the methedrine abuser is both uncertain and unsatisfactory. . . .

. . . Unlike the user of marihuana, LSD or other psychedelics, a large number of methedrine users will refer to methedrine as their drug choice. In the Drug Practices Survey, many of them claimed that the drug that best satisfied their expectations of the drug experience was LSD, yet they continue to be chronic methedrine users. Again in the manner of heroin addicts, they themselves are the most severe depreciators of the drug and the saying on the street that if you want to know how bad a drug "Speed" is, just ask a "Speed Freak," is certainly a true one. Nonetheless they rarely seem to ask for help with their habit, and treatment when offered . . . is rarely successful.

. . . To conclude so prolonged a discussion, two things are evident. First, in the last few years there has been an alarming increase in the incidence of drug use and abuse by adolescents, indeed a symptom of other problems in American society, but in turn a problem in itself. Second, we are faced with the fact that other than the existence of the problem as a problem we know almost nothing about it. With this appalling lack of information, we are in turn faced with the question of what to do about it.

The common reaction of this country, when faced with situations it doesn't like, is to pass a law about it. In many instances this is effective and worthwhile, and the effectiveness of the State of Connecticut in reducing traffic mortality by enforcing its traffic laws is a good example. Here too, our answer has been to pass laws, but here that response has been not merely ineffective, but detrimental. That it is ineffective is evidenced not merely by the rapid increase in the use of drugs, but by the still more amazing increase in their availability. If students in junior high school can be presented the opportunity to use drugs with little risk of discovery at the ages of thirteen and fourteen, then even if none of them actually does so, the law has been ineffective. That the laws as they are presently written and enforced are detrimental is evidenced by many factors. First, by making the use of drugs a severely punished crime, we have put them beyond the range of supervision, beyond the area of study, and beyond the range of rational discussion. Second, by making them illegal, we place their distribution in the hands of criminals who manufacture drugs of poor or dangerous quality and unknown composition, and distribute them to their markets in a Madison Avenue fashion without regard to their relative dangers or the problems of the population they might reach. Third, to justify the severity of our laws, specifically the laws regarding marihuana, we have created a horrifying mythology about the dangers of the drug that adolescents know to be false, thus making more reasonable warnings about more dangerous drugs untrustworthy. Finally, and most important, they have aided in the creation of a situation in which a widely accepted social practice, involving in action or assent most of urban middle class young people today, the smoking of marihuana, is a serious crime. This in turn has led to three new problems. First it has created thousands upon thousands of felons, convicts at worst, and at best, individuals permanently impaired in social, educational, and professional participation in society, out of people who in all other respects may be totally normal and useful citizens. Second, it has contributed to the creation among the majority of users who do not get caught, a little more sense that the violation of the law for merely personal enjoyment is permissible and acceptable behavior. Third, because of the inequities in the laws and the inequalities in their enforcement, the marihuana laws have helped to produce a disrespect for the law in general among user and non-user alike.

I do not mean by this to advocate either the condonement of illegal activities or the unrestricted distribution of dangerous drugs; other than in the case of marihuana, I am not at the moment even a particular advocate of major changes in the statutes themselves. What I do advocate is that the problem be seen for what it is, a social problem, and a medical problem, requiring research, understanding, and where necessary, treatment. It is a social problem in the sense that it is a complex and poorly understood reflection of the equally bewildering and widely felt disparity of values in modern American society, which is as much a cause and effect of rioting, poverty, the Vietnam war, and draft resistance as it is related to the smoking of marihuana and the abuse of dangerous drugs. In this manifestation however, it is a medical problem whose investigation and treatment is the responsibility of the medical profession. The function of the law, as in the rules governing other potentially hazardous activities, should be adjusted to the danger of the drug, and for those drugs which indeed are dangerous, should be designed to promote the medical treatment, rather than the legal punishment of the individuals involved.

Finally, it must be added that the reason for the present state of affairs lies not solely in the usurpation of the law, which has merely used traditional channels to fill a vacuum left by the abdication of other agencies. The other half of the reason is lack of enthusiasm on the part of the medical profession to become involved, either from indifference or from fear. However, with each passing day, the fear of seeming to be involved with a controversial topic should be counterbalanced by the severity of the problem itself. If members of the medical profession, both as parents and as physicians, and perhaps most important, as members of society, do not wish to see the drug habits of the Haight-Ashbury become the drug habits of Newton High School, then the time to begin dealing with the problem is today. One can only hope that it was not yesterday.