This study reports the attitudes toward drug abuse of a group of Massachusetts physicians in leadership positions. The findings are reported and discussed.

Attitudes of the Medical Profession Toward Drug Abuse

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Introduction

There are many indications that drug use problems are related in complicated ways to social attitudes. Drug use behaviors interact with pre-existing cultural attitude sets in schools, professional groups, and the news media.[1] These attitude sets can either help or hamper solutions. Formalized attitudes expressed as government policies have a similar but more powerful effect. For example, in Britain, where a different attitude set towards heroin abuse prevails, its medical management and social consequences differ from those in the United States. Heroin addiction-related crime is a major problem here, but does not appear to be so in Britain.[2-5] Certainly, before our society can take meaningful steps to solve its growing drug abuse problem its own underlying attitudes must be known.

In many ways physicians are in a unique position to evaluate the effects of drugs in society, and could be important in determing legislation policy concerning drug abuse. They are exposed commonly to the controlled use of drugs, and the many problems created by drug use. Many of the doctors in this sample became acquainted first-hand with drug abuse problems through their patients. Although much of society's past response to drug problems has been through law enforcement agencies, there is a growing feeling that drug abuse problems are best handled medically as the symptoms of underlying psychological disorder.[6-8] It is fair to say that before our society can arrive at constructive policies concerning drug problems, the attitudes of our physicians must be known and taken into consideration.

Study Methods

This study was designed by medical and law students to obtain the attitudes of physicians. Whereas all physicians may be concerned with the problems of drug abuse, the opinions of some will weigh more heavily in the shaping of policy. A random sample of forty-five doctors was selected from the list of the sixty-two Officers of the County Medical Societies in Massachusetts. We selected officers of the county medical societies as our population since they are most likely to participate in formulating medical society policy.

Letters of introduction were sent by faculty advisors to each physician in the sample requesting a personal interview. The letter mentioned the approval given to the study by the Chairman of the Massachusetts Medical Society Committee on Mental Health, and the sponsorship by the Department of Preventive and Social Medicine of the Harvard Medical School. Nine medical and law students were each assigned to perform five interviews and were trained in the use of a standardized interview schedule. These interviews were designed to evaluate attitudes toward drug abuse and toward many commonly used illegal and legal drugs (heroin, marijuana, psychedelics, amphetamines, alcohol, aspirin, caffeine).

Among the forty-five randomly chosen officials, thirty-five interviews were completed (78% response rate), and these form the basis of the results presented below. Half of the ten non-responses resulted from medical student work loads and scheduling difficulties; there were two refusals, and three doctors could not schedule interviews. Table 1 lists characteristics of our sample's respondents and non-respondents by age, location, medical specialty, and medical school attended.

Physician respondents were designated as either "experienced" or "less experienced" on the basis of having seen at least one patient or the parents of one patient with drug-related problems once per week over the last year; having responsibilities for such patients in local hospitals; or being involved with drug problems through professional activities with community groups. The sixteen physicians, or forty-six per cent of the sample (all percentages are expressed as the nearest whole number), designated as "experienced" were well-distributed among surgeons, internists, and other specialists. All but one doctor below the age of forty qualified in this group, whereas more than half over age forty were designated as less experienced.

Table 1—Characteristics of Physician Sample

Age	S.S.*	N.I.*	Massachusetts Location	S.S.*	N.I.*
30-39	6	0	North East	5	1
40-49	11	5	East	11	5
50-59	9	5	South-East	8	0
60-69	9	0	Central	5	1
70-	0	0	West	6	3
Specialty			**Medical School**		
Surgery	14	5	Tufts	14	5
Internal			Harvard	6	3
Medicine	5	1	Other Boston	4	0
General					
Practice	4	3	Other U. S.	9	2
Radiology	3	0	Foreign	2	0
Ophthalmology	3	0			
Other	6	1			

S.S.-Sample Study; N.I.-Not Interviewed

Results

The "Drug Problem"–Drug Abusers[3]

All members of the sample thought that drug abuse was an important problem at the time of interview in early 1971 when compared with other social problems. Eighty-six per cent (30 physicians) thought that it was either a serious or a very serious problem. There were no important differences of opinion related to experience, age, specialty, or physician location. Eighty-eight per cent agreed that drug use has been increasing in Massachusetts in recent years.

When asked why drug use was increasing, thirty-two per cent thought the increase was due to general social unrest, either related directly to the Vietnam War or to a general disillusionment with this country. Another twenty-nine per cent cited changing family structure and values as contributing to the increase in drug abuse. For some, this changing family structure meant increased permissiveness, and for others it meant the loss of spiritual guidance within the family. Twenty-two per cent mentioned social factors such as fashions, television, media publicity, and other social pressures contributing to the increase in drug abuse. Another fourteen per cent explained that inactivity, boredom, availability of drugs and money, desire for experimentation, desire for new thrills, all contributed to the increase. Three per cent did not reply.

When asked which drugs cause the greatest problems at this time, seventy-one per cent (twenty-five physicians) cited heroin. Both experienced and less experienced physicians cited heroin as the major problem-producing drug. Smaller percentages of the sample cited psychedelic drugs, amphetamines ("speed"), barbiturates, and alcohol.

Subjects were asked to characterize the abusers of various drugs by socioeconomic status, ethnic and racial grouping, geographic location, sex, and age. The doctors agreed to a great extent in their opinions as to the groups in which drug abuse is most prevalent. These opinions are summarized in Table 2 for heroin, alcohol, marijuana, psychedelics, and pharmaceuticals. Psychedelics refer to LSD, mescaline, and STP; pharmaceuticals refer to the indiscriminate abuse of tranquilizers, barbiturates, and amphetamines. Table 2 lists in all cases the groups indicated by the greatest percentage of the sample. The figures given with the ethnic/racial groups are the percentage of the sample indicating these groups as containing the predominant users.

In these characterizations the experienced group of physicians named abusers of heroin as Negroid twice as frequently as the less experienced group of physicians. Experienced physicians also named housewives more frequently and students less frequently as the abusers of pharmaceuticals.

Relative Damage from Drug Use

The physicians were asked to list a variety of commonly used drugs in order of potential damage both to the user and to society as a whole. A ranking of one was given to the most damaging substance and a ranking of seven to the least damaging substance. These were tabulated, and the mean rankings appear in Table 3.

Obviously, alcohol and opiates were, in the opinion of these physicians, the most damaging drugs in all respects. The only exception was the high ranking of psychedelics as a cause of psychological damage. Caffeine and aspirin were consistently ranked as the least damaging drugs.

In view of the controversy about marijuana, it is pertintent to examine the physicians' opinions on this point. Marijuana was ranked significantly lower than alcohol in all categories: that is, it was considered less damaging by all measures. The widest difference between marijuana and alcohol was in the number of hospital beds utilized as a consequence of the use of these drugs. In physiological rankings, younger doctors placed a wider difference between alcohol and marijuana than the sample as a whole. In the listings of physiological damage, number of hospital beds, and the danger of causing dependency, tobacco was rated significantly more dangerous than marijuana. In rankings of psychological damage, marijuana was ranked higher than tobacco.

Marijuana

The physicians were asked further questions about marijuana. Four doctors in this sample from different areas of the state had treated patients for adverse reactions to marijuana. Two of the four doctors treated personality changes in chronic users, one doctor treated two cases of tracheobronchitis from chronic smoking of marijuana cigarettes, and another doctor treated one case of gastric upset lasting twelve hours during marijuana usage. Sixty-six per cent (twenty-three physicians) had not treated a patient for adverse effect caused by marijuana, and twenty per cent did not reply. When asked if marijuana seems to lead to psychosis, seventy-one per cent (twenty-five physicians) of the sample answered "no," fourteen per cent answered "occasionally," six per cent answered "rarely," and nine per cent did not reply. When asked if occasional use of marijuana by an adult is acceptable behavior, forty-six per cent said "yes," forty per cent said "no," and fourteen per cent did not reply.

Table 2—Physician Opinions About Drug Abusers' Primary Characteristics

Drug	Sex	Age	Socio-economic	Location	Ethnic, Racial
Heroin	Males	19-25	Students	Boston	Negroid (40)*
			Unemployed		
Alcohol	Males	19-45	Business Men	Suburbs	Irish (63)
				Metropolitan	Yankees (14)
Marijuana	Males	14-25	Students	Boston	Yankees (20)
	Females			Suburbs	Negroid (17)
Pharmaceuticals	Females	14-65	Housewives	Suburbs	Yankees (31)
			Students	Metropolitan	Jews (14)
Psychedelics	Males	19-25	Students	Metropolitan	Yankees (30)
	Females			Suburbs	

**Figures in parenthese refer to the percentage of the physicians naming this group.*

Table 3—Physician Attitudes About Relative Damage From Drug Abuse

Physiological Damage		Psychological Damage		Damage to Whole Society		Number of Hospital Beds		Dependency Danger	
Opiates	1.86	Opiates	1.74	Alcohol	1.89	Alcohol	1.40	Opiates	1.26
Alcohol	2.60	Psychedelics	1.89	Opiates	2.31	Opiates	2.86	Alcohol	2.26
Psychedelics	2.94	Alcohol	2.94	Psychedelics	2.97	Tobacco	3.00	Tobacco	3.53
Tobacco	3.31	Marijuana	4.11	Marijuana	4.00	Psychedelics	3.47	Psychedelics	3.82
Marijuana	4.91	Tobacco	5.33	Tobacco	4.11	Marijuana	5.00	Marijuana	4.82
Caffeine	5.80	Caffeine	5.61	Aspirin	6.07	Caffeine	5.63	Caffeine	5.10
Aspirin	6.12	Aspirin	6.21	Caffeine	6.08	Aspirin	6.11	Aspirin	6.53

– Rankings by physiological and psychological damage are for the habitual users of these products.
– The rankings of hospital beds is for the relative number of general and psychiatric hospital beds directly occupied at the present time because of the use of these substances.
– A ranking of one indicates most damaging substance; a ranking of seven indicates the least damaging substance.

A report by a group of clergymen in Massachusetts advanced the argument that marijuana use might lower alcohol abuse.[9] When asked about this, twenty-three per cent of the sample agreed, fifty-one per cent disagreed with this hypothesis, and twenty-six per cent did not reply. When asked if marijuana use frequently leads to the use of opiates, fifty-one per cent (18 physicians) said "yes," forty per cent (14 physicians) said "no," and nine per cent (3 physicians) did not reply. This question demonstrates an age association with the older physicians' feeling that marijuana use can lead to the use of opiates, and the majority of the younger physicians' feeling that it does not. Of the sample members younger than age fifty, six per cent (eleven physicians) said that marijuana does not lead to the use of opiates, and thrity-five per cent (six physicians) said that it does. All eight physicians above the age of sixty said that it does, except one who did not reply. In the middle ages 50-59, four physicians said "yes," three said "no," and two did not reply. The experienced physicians replied "no" more frequently than the less experienced physicians.

When asked about the reasons for the disagreement among doctors concerning the effects of marijuana, sixty-five per cent said that there is no good available information. In this group many said that there are no controlled studies, that behavioral research is very variable, and that many questions have not been studied at all. Twelve per cent expressed the opinion that there is too much emotion attached to this question for rational discussion, and nine per cent said that there are many preconceptions and many prejudices at the basis of the disagreement.

The attitudes of this sample concerning what the legal status of marijuana should be is shown in Table 4. Sixty-nine per cent (twenty-four physicians) felt that there should be some form of legalized marijuana use. Forty-eight per cent

said that it should be regulated as alcohol, nine per cent said that it should be regulated as tobacco, and twelve per cent (four physicians) wanted to see licenses issued to marijuana users. The last category was only chosen by less experienced physicians.

Opinions About Needed Social Action

Ninety-four per cent of the sample stated that they are in favor of educational efforts concerning drug use, whereas eighty-nine per cent thought that this would help alleviate the problems of abuse. One-third of the sample suggested that this education start in primary schools or junior high schools.

Eighty-two per cent thought that the medical profession should take an active part in formulating and promoting new legislation relevant to drug problems. Seventy-one per cent were in favor of setting up medical committees to deal with casefinding, treatment, and rehabilitation of drug abuse patients. Ninety-four per cent were in favor of encouraging expenditures for the study of medical aspects of drug use.

Most of the physicians said that their local societies have already discussed the problem; forty per cent said that some decisions were made, and thirty per cent said that some type of action has already begun. Twenty-two per cent of the physicians said that their local societies have decided to work with local agencies such as half-way houses, drug centers, and methadone clinics; nine per cent have decided to institute new drug education programs.

Discussion

There was obviously a high level of experience with drug problems in this random sample of the County Medical Society Officers consisting mostly of surgeons and internists. Unfortunately we did not ask about their earlier experiences in this field, since it would have been very interesting to know what their level of experience was three to five years previously. The literature contains remarkably little reliable quantitative information on the size of the drug problem, but from the opinions and experiences of these physicians it appears that it is quite widespread in Massachusetts.

From the current studies available, one cannot confidently make judgments about drug use, and certainly not about the chronic effects of drug use. Personality changes have been tentatively described as adverse effects for some chronic marijuana users.[10] Recently the complication of tracheobronchitis was described as a sequella to chronic smoking of marijuana cigarettes.[11] It is interesting that of the four doctors who treated patients for adverse effects of marijuana, one treated two such cases of tracheobronchitis. From the experience with tobacco, it appears that valid determination of chronic effects of the social use of a substance can take as long as three decades. So it may be too early to assess the consequences of marijuana use.[12]

This group of physicians viewed alcohol and opiates as the most serious problems for individual users and society as a whole. It is interesting that the physicians considered marijuana to be less dangerous. These opinions seem to represent a different view from those of society in so far as society's views can be deduced from legal provisions and government policies regarding the use of marijuana.

On the whole, it appeared that respondents had given much thought to the problem. The authors hope that in the future physicians will take every opportunity to express their experience-based opinions concerning the social and medical consequences of the use of the various agents discussed here. In this way the observations and opinions of our physicians can have some impact upon government policies which in turn have a great impact upon society.

The physicians in our sample felt that solutions should be sought by the medical community. They suggested the establishment of medical committees for research and treatment of drug use cases. Most thought that more expenditures should be made by society to deal with this problem. The authors agree strongly that physicians should seek to involve themselves in the study of this problem and the search for solutions.

Table 4—Physician Attitudes Concerning the Legal Status of Marijuana

Legal category	Total	Experienced	Less experienced
Regulate as tobacco	3	1	2
Regulate as alcohol	17	9	8
License users	4	0	4
Present legal approach	4	3	1
Stronger efforts to eliminate use	7	3	4

Summary

The purpose of this study was to ascertain the attitudes about drug abuse of a group of physicians in leadership positions. A sample of the County District Office of the Massachusetts Medical Society was asked for opinions about drug abuse and the various drugs of abuse.

Seventy-five per cent ranked heroin as the major problem-producing drug at the present time. An attitude index of the relative damage of various commonly used drugs, including heroin, psychedelics, marijuana, alcohol, and tobacco, indicated that heroin caused the greatest physiological damage, psychological damage, and the greatest potential for dependency. Alcohol was ranked the most damaging to society as a whole and the drug responsible for the greatest number of hospitalized patients.

All members of the sample thought that drug abuse is an important social problem, and eighty-eight per cent of the sample thought that such usage was increasing. Most of the physicians thought that the medical profession should take action to alleviate the problems created by this abuse, and thirty per cent said their local societies were already involved in such action.

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