A STUDY OF DRUG ABUSE EDUCATION PROGRAMS OF SELECTED PUBLIC HIGH SCHOOLS IN MICHIGAN

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ABSTRACT

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The drug use and abuse problem, especially among teenagers, is considered by some to be one of the most serious ever faced by our society. Some state that a whole generation of young people will be lost unless measures are taken to solve the problem. This alarm has caused citizens to respond by placing the responsibility for solutions on certain individuals, agencies, and organizations. The school is one of the public agencies which has been asked to react.

In view of the outcry by the public for the schools to do something, this study was made to gather pertinent information on current drug abuse education programs in an attempt to discover what the response of some of the schools has been to this point. The population of this study consists of selected large public high schools in the State of Michigan. A large high school is defined by the author as one which has a student

enrollment of 2,000 or more and which is administratively organized on a ten through twelve grade level.

The survey focused on several aspects of the drug abuse education program including the description of the type of program, the determination of need, school policy related to student drug users, in-service training programs for teachers, school-community cooperative programs, and evaluation techniques.

Because of the size of the population of the study, it was possible for the investigator to personally interview each principal, or his designate, whose school met the criteria mentioned above. An interview questionnaire guide was used so each interviewee was asked the same question and in the same manner by the interviewer.

The findings of the status of drug abuse education in the large public high schools of this study are as follows:

1. One-third of the large public high schools in this study reported not having a drug abuse education program as part of their curriculum.
2. Drug abuse education programs of the large public high schools of this study have the following characteristics:
    a. most programs are required of all students some time during their matriculation through high school

b. the programs are most commonly placed at the tenth grade level

c. most high school programs are not articulated with their respective junior high school programs

d. most high school programs are not coordinated in such a way that the programs avoid repetition

e. most programs are conducted in the social studies departments, or the health and physical education departments

f. most teachers who teach in the drug abuse education programs are not required to have special training in the field before teaching the subject

g. the most common length of the drug education programs is two to three weeks

h. teachers and administrators (local and/or district) are the personnel most commonly involved in the planning of the drug education programs

3. Most principals interviewed, for a variety of reasons, would not venture to make a guess as to the percentage of students in their school who have experimented with drugs.

4. Principals interviewed will not make a survey of students to discover how widespread drug use is in their schools because most think that the data gathered is not reliable or the information may cause community reaction.
5. Slightly over half of the principals interviewed thought that drug abuse was a major student behavior problem.
6. Most schools do not have a district board of education policy pertaining to student drug users.
7. When a student drug user is discovered, most school officials would notify parents and/or police.
8. The most common in-service training program on drug abuse consists of one faculty meeting devoted to the subject.
9. Most schools do not have a cooperative school-community drug abuse program though many make referrals to agencies in the communities.
10. Very few of the schools attempt to evaluate their drug abuse education programs to discover their effectiveness.

The findings of this study have many implications for changes and improvements needed in current drug abuse education programs. The areas of weakness seem to be

in-service training for school personnel, evaluation of current educational programs, cooperative programs between school and community, involvement of representatives from the total school community in program planning, and a well defined school drug policy which does not focus only on the punitive aspect.

The author recommends that similar studies be undertaken so that comparisons might be made in schools of different size and grade levels. This study should also be replicated in another state to compare the status of drug abuse education between states. A sound evaluation of current practices in drug abuse education is needed.

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CHAPTER I

INTRODUCTION

A General Overview

The problem of drug abuse can be traced back to our earliest civilizations. From the herbs and other botanicals of early times to the present day barbiturates and amphetamines, man has discovered substances which would help to ease his tensions. But as the world became more complex and change took place at a more rapid rate, the tensions and anxieties increased. With this increase, came the increase in self-medication to relieve one temporarily of the responsibilities and harsh realities with which one was faced.

Such mind relieving drugs were widely used by people who lived in the slums of our large cities for many years. Heroin was a way of forgetting the daily poverty and the hopelessness, but not many people became too excited about drug use and abuse until it became common among the youngsters of the white middle class. Today neither small rural towns nor large suburban communities are immune to the drug problem.

A pamphlet published by Kiwanis International describes the situation as follows:

> The problem of drug abuse is not new, but in our nation it is becoming more and more widespread. It occurs in the large city, in the small town, and even in rural areas. It is not limited to people of any particular area, age group, environment, or level of income.[1]

Though drug abuse is not a new phenomenon, the substantial number of young people currently involved is without precedent. The full dimension of the teenage drug problem is difficult to assess because of the illegal aspect. Statistics published on the number of drug users and abusers can only be estimates.

Newsweek magazine, on February 16, 1970, reported: "The use of drugs, particularly marihuana, is now an accepted fact of life for anywhere from 30 to 50 percent of all U.S. secondary school students."[2]

Ochberg states, "estimates of marihuana usage in the United States run as high as 20 million--on the other hand estimates of heroin use in the U.S. are between

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[1]Kiwanis International, Deciding About Drugs, Chicago, Illinois, 1969, p. 1.

[2]Staff Reporter, "The Drug Scene: High Schools are Higher Now," Newsweek, Vol. LXXV No. 7, February 16, 1970, p. 67.

40 and 100 thousand, with a large concentration in New York City slums and other low income areas."[3]

People compiling drug use and abuse data tend to lump all drug users, from the first time experimenter to the person who is dependent, into one category. This tends to make the information less useful to those attempting to study the degree of seriousness of the problem. Though the data may not define the drug problem well, one only needs to select teenagers at random in most any community today and talk with them about drugs to get some notion of the extent of drug use and abuse.

The problem, however, is not one which is characteristic of certain local communities or states, but one of national scope. In March, 1970, President Nixon, concerned over reports of growing drug use among the nation's youth, announced a $12.4 million drive to educate students and teachers about the dangers of drug abuse.

As with many of our social problems, people turn to the schools for a partial solution. Barrins states,

> The facts speak for themselves and for an obligation on the part of schools to arm youngsters early in life with knowledge of drugs. Although the federal government is considering a new bill to control drugs, only education will save the

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[3]Frank M. Ochberg, "Drug Problems and the High School Principal," The Bulletin of the National Association of Secondary School Principals, Vol. 54 No. 346, May 1970, p. 55.

> life or the healthy brain of a child tempted to experiment. If properly educated in drug dangers most youngsters will react with reason when the temptation arises.[4]

Most writers in the field agree with Barrins that schools have an obligation to offer drug education. The federal, state, and local governments are allocating money for such programs in the schools. Administrators are suddenly challenged to design an effective drug education program.

What has happened all over the country is the generation of crash and piece-meal programs. To paraphrase Halleck, many programs consist of assembling all the students in the school auditorium to show them a film which was designed to scare students and which many times gives them inaccurate information. Others consist of having police officers come into the classrooms to tell the students what would happen to them if they were caught using drugs illegally.[5]

In a highly departmentalized secondary school, there is a struggle to determine where drug education should be taught. Since most teachers know little about

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[4]Phyllis C. Barrins, "Drug Abuse: New Problem for Boards," The American School Board Journal, Vol. 157 No. 4, October 1969, p. 15.

[5]Seymour Halleck, "The Great Drug Education Hoax," The Progressive, The Progressive, Inc., Madison, Wisconsin, Vol. 34 No. 7, 1970, p. 30.

the subject, departments are reluctant to accept it as part of its curriculum though most would agree that it should be taught. Some schools may include a unit on drugs in the homemaking department, others may place it in science, and still others may find it best suited for physical education. If none of these departments are appropriate, it might be placed in a course where all subjects which do not easily fit into any one department could be lumped, e.g. first aid, driver education, drug use and abuse. Therefore, the problem of the placement of drug abuse education in the curriculum must be considered.

The shortage of qualified teachers to teach drug abuse education is another problem. School districts mandated to teach drug education and given money to do so are floundering because drug education calls for some expertise of which there is a limited supply. Usually one of the first things educators think about when a new course or subject is proposed is a curriculum guide. But such a guide presupposes some knowledge of the subject matter. There have been many drug education classes where the students sit back and snicker at the teacher because they know more about the subject from first hand experience than the teacher. This calls for more and better in-service training programs for teachers concerning drugs, their use and abuse.

The tasks that face school administrators today are to (1) become more knowledgeable about drugs themselves, (2) assess the drug use and abuse problem in their schools, (3) provide in-service training for teachers so they will become more informed and more aware, and (4) initiate a drug education program based on identified needs.

Statement of Purpose

The purpose of this study is to gather current information and data concerning drug education programs, in-service training programs on drug abuse for school personnel, and school-community cooperative programs on drug use and abuse so that results of this investigation will: (1) enlighten readers on the current status of drug abuse education in the large high schools of this study, (2) give educators information which might be of value in bringing about changes in current practices of drug education, and (3) help others who may wish to institute drug abuse programs in their schools and communities.

Definition of Terms

In order for the reader to better understand this study, it is necessary for him to know the way in which

the author will use certain terms. The definition of these terms are as follows:

comprehensive high school--a school which provides (1) a general education for all the future citizens, (2) elective programs for those who wish to use their acquired skills immediately after graduation and (3) programs for those whose vocations will depend on their subsequent education in a college or university.[6]

drug--any substance which by its chemical nature affects the structure or function of the living organism.[7]

drug abuse--use of a non-medically approved drug or of a medically approved drug for non-medically approved purposes.[8]

drug abuse education--an educational program which gives students reasonably accurate information on abused or illegal drugs and which is offered in the curriculum as a separate course or as part of other existing courses during the regularly scheduled school day.

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[6]James B. Conant, The American High School Today (McGraw-Hill Book Company, Inc., New York, 1959), p. 17.

[7]Helen H. Nowlis, "Student Drug Use," Paper presented at the American Psychological Association Convention, Washington, D.C., September 7, 1969.

[8]Ibid.

drug dependence--a state arising from repeated administration of a drug on a periodic or continuous basis.[9]

large high school--a public high school with an enrollment of 2,000 or more students, which is administratively organized on a ten through twelve grade basis.[10]

narcotic--a drug which produces lethargy or stupor, and relief of pain. This family of drugs includes opium derivatives and synthetic opiates.[11]

physical dependence--a reliance on a substance to a point that progressively larger doses are required for the desired effect and, if the substance is withheld, a painful withdrawal illness will occur.[12]

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[9]James B. Landis and Donald K. Fletcher, Drug Abuse, A Manual for Law Enforcement Officers, Smith, Kline and French Laboratories, 1966, p. 15.

[10]Jack K. Mawdsley, "A Study of the Delegation of Administrative Tasks by Principals of the Large High Schools in Michigan as Related to Selected Variables" (unpublished Doctor's dissertation, College of Education, Michigan State University, 1968), p. 11.

[11]Angela Kitzinger and Patricia J. Hill, Drug Abuse (California State Department of Education, Sacramento, California, 1967), p. 4.

[12]Norman W. Houser, Drugs (Scott, Foresman and Company, Glenview, Illinois, 1969), p. 46.

psychological dependence--a psychic reliance on a substance which is so persistent it may be considered compulsion.[13]

tolerance--the ability of the body, over a period of time, to adapt itself to the drug so it takes a larger and larger amount to obtain the effects originally produced by its use.[14]

Limitation of The Study

This study is a survey of drug use and abuse education programs currently in operation in the large high schools of the State of Michigan. No attempt will be made to evaluate the effectiveness of the programs. A description of the types of programs, drug abuse policies of the schools, in-service training programs for staff members, and cooperative school-community drug programs will be reported.

Though there may be many drug use and abuse education programs on the junior high school or middle school levels as well as other size high schools, this study reports only on large high schools because most drug education programs to date have been offered at this level in this state. This also served to limit the study to a manageable portion of the educational system.

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[13] Ibid.

[14] Houser, op. cit., p. 47.

The reader is cautioned not to make generalizations about drug education programs in other states based on the conclusions reached in this study; for it is limited to the State of Michigan.

Methodology

The population of this study will be defined by the parameters of a large high school as described by the author in the definition of terms. Schools will be selected which meet the criteria established.

Each school principal will be contacted for a personal interview and a standard survey verbal questionnaire technique will be used. The information will then be summarized and the findings will be reported as a descriptive study.

A more detailed description of the methodology will be given in Chapter III.

Organization of Subsequent Chapters

The content of Chapter I has included a general introduction to the study, a statement of the problem, the purpose for the study, definition of terms, and the limitations of the study.

In Chapter II the author presents a review of the literature related to the study. It includes a historical perspective of drug abuse, factual information about drugs,

a view of the drug abuser and treatment modalities, a report on the reasons for drug abuse in our society, a review of the laws as they relate to drug abuse, and an account of current drug education programs.

In Chapter III the author describes the methodology used in making this study including the approach, population selection, method of investigation, and data gathering instrument.

In Chapter IV, the author presents the findings from the study and in Chapter V, he gives his analysis of the findings in the form of conclusions, assumptions, and recommendations.

CHAPTER II

RELATED LITERATURE

Foreward

To better understand the context of the study, it would help both the reader and the author to review some of the related literature which is relevant. This review will serve to introduce the reader to a background body of knowledge which will make the study more meaningful. The literature reported here will deal with the history of drug abuse, factual information about groups of drugs which are more commonly abused, a picture of the abuser, treatment modalities, laws related to drug abuse, the causes of drug abuse, and drug abuse education programs.

Historically, drugs have been part of every culture.

History

Drug use dates back to our earliest civilization.[15] The knowledge of marijuana dates back to before 2737 B.C.

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[15] D. Solomon, The Marihuana Papers (Bobbs-Merrill, New York, 1966), p. 7.

when it was mentioned in a chinese herbal.[16] Records also indicate that the substance played an important part in religious ceremonies of the Hindus, Scythians, Chinese, Iranians, and American Indians.[17]

There is also evidence of fanaticism and evil misuse of hashish, the concentrated resin from Cannabis, which took place in the 11th century as told in a story about a group known as "Hashishin."[18] As Leonard explains:

> At the time of the crusades a Mohammedan sect was organized to terrorize the invading Christian armies. The young men of this sect were trained to commit murder while under the influence of hashish and were therefore called, "Hashishin" from which the term "assassin" was ultimately derived.[19]

Another drug extracted from a plant, the oriental poppy, is opium which has historically been used to ease man's pains or as a form of self indulgence as a confection, or for smoking. As early as 1500 B.C., opium was used by Egyptians. Smoking of opium for pleasure was introduced to this country by immigrants from China, who

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[16]Thomas N. Burbridge, "Marijuana: An Overview," Journal of Secondary Education, Vol. 43 No. 5, May 1968, p. 197.

[17]Ara H. Der Marderosian, "Marijuana Madness," Journal of Secondary Education, Vol. 43 No. 5, May 1968, p. 200.

[18]Ibid.

[19]B. E. Leonard, "Cannabis: A Short Review of its Effects and the Possible Dangers of its Use," British Journal Addict, Vol. 84, 1969, p. 121.

were brought here to work at low wages to build railroads in the West. "For many years it was medically considered a panacea for most ills," states Lasagna.[20]

Morphine, a natural alkaloid of opium, was discovered in 1805 and with the subsequent invention of the hypodermic syringe in the middle of the 19th century it was used extensively to relieve pain. During the Civil War, morphine addiction became so common it was called the "Army" disease. Heroin was discovered in 1898 and was thought to be non-addicting; therefore, a good replacement for morphine.

Man has recorded other plants such as cacti and mushrooms which have a historical record in the area of hallucinogens. Peyote was used by the Indian tribes of Central America and Mexico when the white man came to this continent. Psilocybin, which is extracted from mushrooms, has been used in Indian religious rites for centuries.[21]

For many years, drug agents remained limited to botanicals and their derivatives.[22] But in the 1850's,

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[20]Louis Lasagna, "The Many Faces of Drug Abuse," Modern Medicine, April 6, 1970, p. 144.

[21]Michigan Department of Education, A Teacher Resource Guide for Drug Use and Abuse for Michigan's Schools, Lansing, Michigan, 1970, p. 21.

[22]Committee on Alcoholism and Addiction, AMA, "Dependence on Barbiturates and Other Sedative Drugs," Journal of the American Medical Association, Vol. 193 No. 8, August 23, 1965, p. 107.

modern chemistry introduced a whole array of new substances. For example, from the bromides as sedatives came the innumerable barbiturates which have been synthesized.[23] The amphetamines, however, came much later being first introduced in 1936 as a treatment for narcolepsy (uncontrolled sleeping spells).[24]

In 1938, Dr. Albert Hofmann, research chemist for a Swiss pharmaceutical firm, first synthesized lysergic acid diethylamide (LSD). He later discovered its effects when he accidently swallowed some. He recorded the results of this experience as follows:

> I noted with dismay that my environment was undergoing progressive change. Everything seemed strange and I had the greatest difficulty in expressing myself. My visual fields wavered and everything appeared deformed as in a faulty mirror. I was overcome by a feeling that I was going crazy, the worst part of it being that I was clearly aware of my condition.[25]

Between the botanicals and the synthetic chemicals, the list of substances of abuse seems to go on endlessly. The historical perspective indicates the search and discovery of new substances will continue. But to quote an

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[23]Michigan Department of Education, op. cit., p. 31.

[24]S. B. Penich, "Amphetamines in Obesity," Seminars in Psychiatry, Vol. 1 No. 2, May 1969, p. 145.

[25]Houser, op. cit., p. 15.

intuitive 18th century remark, "the mischief is not really in the drug, but in the people."[26]

About Drugs

In order to present drugs and volatile chemicals in some organized way, these substances will be categorized into six groups. This classification is based on the similarities of the chemical composition of the substance and the symptomology it causes in the user. The six groups are as follows: marijuana, hallucinogens, narcotics, barbiturates, amphetamines, and volatile chemicals.

Marijuana

Though marijuana can be classified as a hallucinogen, it will be dealt with separately because it is the most commonly abused drug and because there is so much literature on the subject.

The marijuana plant, Cannabis sativa, L., was introduced into the United States from Mexico about sixty years ago. It grows wild in Oklahoma, Texas, Kansas, Iowa, and Michigan.[27] The ideal climate for the plant is

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[26]George B. Griffenhagen, "A Brief History of Drug Abuse," Teaching About Drugs, American School Health Association, 1970, p. 135.

[27]Michigan Department of Education, op. cit., p. 24.

warm and dry, and it will grow in any waste or fertile area. The plant is considered an annual and can reach a size of fifteen feet or more.[28] Factors related to cultivation seem to have an effect on its psychic potency. The highest concentration of the active ingredients comes from the resinous exudate of the tops of the female plant.[29]

Marijuana is used around the world and it has been estimated by the World Health Organization that the drug is used in some form or another by at least 200 million people. This is probably a conservative figure.[30] Burbridge reports, "In the Middle East, North Africa, and the Far East, such names as hashish, charas, blang, ganja, bagga, are used as well as marijuana."[31]

Some countries that are less medically advanced still use marijuana as medicine. It is used to treat many maladies such as tetanus, asthma, delirium tremens, convulsions, hydrophobia, and others. Marijuana is no longer used in modern medicine and, in this country, it was

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[28]Der Marderosian, op. cit., p. 202.

[29]J. Robertson Unwin, "Non-Medical Use of Drugs," The Canadian Medical Association Journal, Vol. 101, December 27, 1969, p. 812.

[30]Burbridge, op. cit., p. 197.

[31]Ibid.

deleted from the United States Pharmacopoeia over thirty years ago.[32]

Marijuana may be taken into the body in several ways--by chewing the leaves, by sniffing it in powder form, by using it in cooking as seasoning, by mixing it with honey for drinking, or by making it into candy or cookies for eating. However, the most common use is by smoking. A special technique of slow, deep inhalation is used in order to achieve maximum vaporization and absorption of the resin in the smoke.[33]

Leonard reports that the inhaled smoke from a marijuana cigarette produces the initial effect within a few minutes and the maximum effect is produced in 30-60 minutes and persists for three to five hours. The setting in which it is taken has much to do with its effects.[34] Der Marderosian states that the effects of cannabis intoxication is dependent upon the quality and quantity of the preparation and even how far to the end the cigarettes are smoked.[35]

Though many and varying effects have been experienced by marijuana users, the most commonly described

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[32]Der Marderosian, op. cit., p. 201.

[33]Kitzinger and Hill, op. cit., p. 25.

[34]Leonard, op. cit., p. 123.

[35]Der Marderosian, op. cit., p. 203.

ones are increased appetite, headache, dizziness, vertigo, fainting, and perspiration. Contrary to popular belief, hangover effects have been described.[36]

There is much disagreement between authorities concerning the effects of marijuana. Burbridge states, " . . . marijuana appears to be relatively harmless in most users and creates fewer serious problems than alcohol."[37] Eddy reports, "For the individual, harm resulting from abuse of cannabis may include inertia; lethargy; self-neglect; feeling of increased capability, with corresponding failure; and precipitation of psychotic episodes."[38]

Unwin describes this lack of agreement on the effects of marijuana this way:

> Despite many studies and reports, reliable facts are scant and elusive, and there have been surprisingly few adequately conducted experiments in man, particularly in North America. Experts with impeccable credentials and long experience give diametrically opposed and mutually contradictory interpretations of available information. Reviewers of the same reports and literature markedly disagree in their conclusions.[39]

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[36]Conrad J. Schwarz, "Toward a Medical Understanding of Marijuana," Canadian Psychiatric Association Journal, Vol. 14 No. 6, 1969, p. 593.

[37]Burbridge, op. cit., p. 198.

[38]N. B. Eddy, et al., "Drug Dependence: Its Significance and Characteristics," World Health Organization, Vol. 32, 1965, p. 721.

[39]Unwin, op. cit., p. 812.

One of the most comprehensive reviews of the English language medical literature over the past 35 years on marijuana was done by Conrad J. Schwarz. He reports the following points relative to the current level of medical understanding of marijuana:

1. Marijuana is a poorly defined intoxicant derived from the Indian Hemp plant (Cannabis sativa). It is qualitatively similar to, but quantitatively weaker than hashish, the other commonly used natural intoxicant derived from the plant.

2. The Indian Hemp plant varies widely in its botanical properties.

3. Marijuana, hashish and chemical extracts of cannabis vary widely in potency and deteriorate with time.

4. The chemical composition of these substances is largely unknown at this time.

5. There are wide variations in human response to these substances, and variations may also occur in the same individual using the same substance at different times.

6. The acute intoxicated state is of variable duration, and the individual is not necessarily aware that he is intoxicated.

7. The acute intoxicated state characteristically involves a feeling of euphoria, distortions of the sense of time and space, heightened sensory perceptions and impairment of complex psychomotor activity. However, fluctuations in mood and behavior may occur and a state of toxic psychosis may result, which is not necessarily related to high dosage.

8. In order to achieve the state of intoxication, the individual may have to accept some degree of unpleasant physical and psychological experiences.

9. Depending on the complex interaction of a number of variables of which the drug is only one, hashish, and to a lesser extent, marijuana, can be associated with acute psychological distress requiring medical attention, intoxicated behaviors dangerous to the individual or to others, drug dependency, personality deterioration, and chronic physical ill-health.

10. The incidence of acute side effects is unknown, but it is generally considered that chronic side effects are more likely to occur with hashish when used regularly over a period of time.

11. To date, studies of regular users of both marijuana and hashish tend to show basic defects in personality.[40]

Hallucinogens

Hallucinogen is any substance which generates or produces hallucinations when ingested. Another name given these substances is psychedelic drugs because it is believed that the drug improves the psychic power of the mind.[41] Actually hallucinogen is a poor name for this group since true hallucinations are infrequent. Since almost invariably, distortions of perception from sensory cues are noted, "illusinogen" is probably a more appropriate name.[42]

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[40]Schwarz, op. cit., p. 812.

[41]Michigan Department of Education, op. cit., p. 20.

[42]Sidney Cohen and Keith S. Ditman, "Prolonged Adverse Reactions to Lysergic Acid Diethylamide," Archives of General Psychiatry, Vol. 8, May 1963, p. 71.

Hallucinogens include lysergic acid diethylamide (LSD), marijuana, mescaline (also called peyote), psilocybe mushroom, STP, and dimethyltryptamine (DMT).[43]

Lysergic acid diethylamide is a colorless and odorless substance which is a derivative of the ergot fungus of rye, a black substance that grows on the grain. LSD is taken orally as a tablet or capsule. It can be saturated on a sugar cube, on chewing gum, hard candy, crackers, vitamin pills, aspirin, even on blotting paper and postage stamps. An extremely small amount is needed for an effect. As little as 100 micrograms can produce hallucinations which may last for hours.[44] Masters and Houston report:

> Theoretically, one ounce of the substance could "turn on" a city of 30,000 inhabitants, though fears that someone might contaminate the water supply of cities are groundless, because the chemical purifiers in the reservoirs would inactivate the LSD.[45]

All the LSD obtained today is through the black market since the single legitimate manufacturer of the drug, Sandoz Laboratories, discontinued production early

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[43]Michigan Department of Education, op. cit., p. 20.

[44]Staff Reporter, "A Schoolman's Guide to Illicit Drugs," School Management, February 1968, p. 57.

[45]R. E. Masters and J. Houston, The Varieties of Psychedelic Experience (Rinehart and Winston Inc., New York, 1966).

in 1966.[46] One dose of LSD costs about two cents to make and sells for from $3.00 to $8.00 on the illegal market.[47]

LSD seems to effect each individual in a different way and predictions cannot be made by personality types. Ungerleider states:

> It is known that there are both acute and chronic side effects, and that their occurrence cannot be predicted. Psychiatric interviews and psychological testing do not screen out adverse reactors. Some of the worst reactions have been in persons, often physicians and other professionals, who appeared stable by every indicator.[48]

Four major types of acute symptoms of LSD ingestion identified by Kitzinger and Hill are:

1. illusion and hallucinations
2. anxiety, often to the point of panic
3. severe depression with suicidal thoughts and attempts
4. confusion, often to the point of not knowing where one's self is

The occurrence of these symptoms is totally unpredictable.[49]

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[46]J. Thomas Ungerleider and Duke D. Fisher, "LSD Today," Medical Digest, July 1967, p. 33.

[47]Michigan Department of Education, op. cit., p. 21.

[48]J. Thomas Ungerleider, "A Medical Look at the Facts and Fantasies," The San Francisco Examiner, April 23, 1967.

[49]Kitzinger and Hill, op. cit., p. 38.

To paraphrase Houser, LSD affects the central nervous system and results in physical symptoms such as these: dilated pupils, lowered temperature, chills with "goose bumps," increased blood sugar, rapid heartbeat, increased pulse rate, nausea, loss of appetite.[50]

An unusual characteristic of LSD is that a user can experience a recurrence of symptoms, as intense as the original intoxication, many months after taking it, without having taken another dose during that period of time.[51]

Some LSD users report sensory perceptions such as tasting color and seeing and feeling sound. They say they feel more sensitive, aware and creative; however, tests of performance while under the influence of the drug show poorer rather than better performance.[52] Dr. Sidney Cohen states:

> Artistic inspiration can only be executed by one who has already mastered the technique of the medium. The drive to achieve is another requisite for creative accomplishment. LSD will reduce motivation as often as it will intensify it.[53]

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[50]Houser, op. cit., p. 16.

[51]Kitzinger and Hill, op. cit., p. 37.

[52]Michigan Department of Education, op. cit., p. 22.

[53]J. Thomas Ungerleider and Duke D. Fisher, "LSD: Fact and Fantasy," Arts and Architecture, Vol. 83 No. 11, December 1966, p. 20.

Many users state that LSD enables them to be more loving individuals and aids them in developing warm interpersonal relationships. Ungerleider, however, refutes these claims. He states:

> The ability to love, to have psychic intimacy with other persons, seems also to be decreased by LSD. In contradiction to the claims that the drug helps one to get closer to other people, we have noticed that users become more introspective and invested in themselves.[54]

LSD does not produce a physical dependence; therefore, cannot be considered an addictive drug, but continued use requires a larger and larger dose to obtain the same sensation.[55]

Mescaline is the active hallucinatory substance which is found in the peyote cactus. It is a small dome shaped cactus that grows in northern Mexico and the southwestern part of the United States. Indians in North and Central America have used peyote for hundreds of years for ceremonial purposes. When the chopped cactus buttons are digested, hallucinations characterized by the presence of brilliant colors occur.[56]

Dr. Albert Hofmann, the discoverer of LSD, first isolated psilocybin and psilocin, the two active

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[54]Ungerleider (San Francisco Examiner), op. cit.

[55]Michigan Department of Education, op. cit., p. 22.

[56]Ibid., p. 27.

hallucinogens in the psilocybe mushroom. These drugs have also long been used by Indians in religious rites. They have been said to produce brilliant visual hallucinations which are generally followed by a period of emotional disturbance.[57]

DMT, dimethyltryptamine, is also a product of a mushroom. The effects are relatively short in duration lasting about 45 minutes to an hour. Some drug users are substituting DMT for LSD.[58]

Users state that STP stands for serenity, tranquility, and peace; but it was more likely named after the oil additive. STP was first discovered by Dow Chemical Company in their research for drugs to treat mental illness. The company called it DOM (4-methyl-2, 5-dimethoxy-α-methylphenethylamine). Its full effects have not yet been determined.[59]

Other substances which produce hallucinogenic or psychodelic effects are nutmeg and morning glory seeds. Nutmeg has long been popular with sailors and prisoners. It is sniffed or mixed in juice and swallowed. The active substance, myristicin, produces a visual phenomena similar

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[57]Houser, op. cit., p. 19.

[58]Michigan Department of Education, op. cit., p. 28.

[59]Houser, op. cit., p. 19.

to LSD, although less marked, and is accompanied by malaise.[60] Morning glory seeds are crushed, prepared into a potion, and swallowed to produce these effects. The active ingredients are alkaloids of lysergic acid.[61]

Narcotics

Pain-killing drugs which are made from opium or opium derivatives are called narcotics. They are also called "hard drugs" and produce a state of euphoria, tranquility, drowsiness, unconsciousness, or sleep. Narcotics are particularly useful in medicine to relieve or modify almost any type of pain and have aided patients suffering from acute short-term pain, e.g. accident victims, as well as long-term pain, e.g. cancer patients. Though narcotics are effective pain-killers they have the potential of causing both psychological and physical dependence.[62]

The raw material of opium is the juice extracted from the immature flower pod of the opium poppy, Papaver somniferum. This brown poppy-gum collected from the fruit is then refined into opium and its derivatives, morphine,

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[60]Unwin, op. cit., p. 811.

[61]J. S. Pollard, L. Uhr and E. Stern, Drugs and Phantasy: Effects of LSD, Psilocybin and Sernyl on College Students (Little, Brown and Company Inc., Boston, 1965).

[62]Michigan Department of Education, op. cit., p. 17.

heroin and codeine. Most of the world supply, both licit and illicit, comes from India, Turkey, and Iran.[63]

Of the narcotics, heroin is the most potent and the most abused. It has been estimated that of all addicts of hard drugs, 92% are on heroin and most of them call within the twenty one to twenty seven year old age group.[64]

Heroin, or diacetylmorphine, is a white crystalline powder which is odorless and has a bitter taste. It is usually sniffed or injected in the vein with a hypodermic syringe. The injection method is especially hazardous, because if the needle is not sterilized, it may spread hepatitis and tetanus and may cause blood poisoning. Also, repeated injections may cause the walls of the veins to deteriorate. Another danger is the fact that the strength of the dose purchased illegally is not known; therefore, the user may have a severe reaction or may even die from an overdose.[65]

Heroin produces the same general effect as the other narcotics. The immediate effects are a dulling of the sense, a depressing of the central nervous system, grogginess, a sense of well-being, lack of coordination,

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[63]Kitzinger and Hill, op. cit., p. 47.

[64]Houser, op. cit., p. 27.

[65]Kitzinger and Hill, op. cit., p. 49.

impaired thinking, a drop in blood pressure, slowing of respiration and circulation, stupor, or coma. Continued use of heroin will cause loss of appetite, malnutrition, serious loss of weight, and constipation.[66]

Because narcotics can cause physical dependence if the user becomes addicted, he will suffer withdrawal illness unless he continues to use the drug. This withdrawal symptom usually appears about eighteen hours after the discontinuance of the drug. Dr. Paul Zimmering states that the intensity of withdrawal symptoms depends on these four factors: the daily amounts of heroin taken, the length of time of addiction, the possible constitutional factors, and the degree of psychological dependency.[67] Kitzinger and Hill describe the symptoms of withdrawal as follows:

> Several hours after the last dose, the addict feels his habit coming on and begins to yawn, to sweat, and to suffer running of the eyes and nose as though he had an acute head cold. These symptoms increase in severity and are followed, after about 24 hours, by violent muscle spasms and waves of gooseflesh; dilation of the pupils, vomiting, and diarrhea; functions which have been depressed are now hyperactive. The respiration rate is elevated, blood pressure and temperature are heightened, and basal metabolism is accelerated. The flow of body fluids is overabundant. These symptoms may last

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[66] Houser, op. cit., p. 28.

[67] Committee on Public Health Relations of the New York Academy of Medicine, Drug Addiction Among Adolescents (The Blakiston Company, New York, 1953), p. 13.

> for two or three days and then diminish gradually over a period of a week or more. The addict may suffer a general feeling of discomfort for several months.[68]

A synthetic narcotic, methadone, is currently being used to treat heroin addicts. Dr. Marie E. Nyswander, Program Director of the Methadone Maintenance Research Project, Beth Israel Medical Center in New York, has pioneered a program in which she has successfully rehabilitated, in a three year period, more than three hundred heroin addicts and transformed them into socially useful human beings. Dr. Nyswander states, "Under proper medical supervision, a single daily dose of methadone achieves a blockade of the narcotic effects of heroin without producing euphoria in the addict and without escalation of dosage."[69]

Morphine is medically the most valuable of the narcotics in relieving severe pain. When a patient becomes dependent upon morphine through medical treatment, it is usually more curable since psychological dependence is not ordinarily experienced. Morphine is a powerful drug and must be used in small controlled dosages because an overdose may result in unconsciousness and even death.

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[68]Kitzinger and Hill, op. cit., pp. 51-52.

[69]Marie E. Nyswander, "The Methadone Treatment of Heroin Addiction," Hospital Practice, April 1967, pp. 27-33.

Morphine was named after the Greek god of dreams, Morpheus, since it makes the user sleepy.[70]

Codeine is one of the oldest drugs to be abused since it is found in most cough syrups and can be purchased over the counter without prescription. It is similar to morphine in its analgesic and addictive properties but is much milder in its effects. Because it does not produce euphoria as effectively as morphine or heroin, it is not as popular among drug abusers.[71]

Pharmaceutical companies in their search for a narcotic which is not addicting have discovered several synthetic products such as meperidine, methadone, oxycodone, and pethidine which are known by commercial names such as Demeral, Dolophine, Percodan, and Methadon. However, none of the synthetic substances are addiction free.[72]

Barbiturates

Barbiturates affect the central nervous system as depressants and are used medically for the relief of nervousness, tension and anxiety, or to produce sleep. They are often referred to as sedatives or hypnotics.

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[70]Houser, op. cit., p. 27.

[71]Kitzinger and Hill, op. cit., p. 52.

[72]Michigan Department of Education, op. cit., p. 16.

Because of their sedative but non-analgesic effects, barbiturates are used in treating both physical and mental illnesses. Barbiturates usually have names that end in the letters al; pentobarbital, phenobarbital, amobarbital, secobarbital, and are commonly called "sleeping pills," "barbs," "goofballs," "downs," "reds."[73] Though there are some fifty commercial brands of barbiturates on the market, the American Medical Association states that five or six types are sufficient for most clinical purposes.[74]

Continued use of barbiturates result in the following symptoms: slurred speech, loss of coordination, staggering walk, sluggishness, emotional instability, quarrelsomeness, depression, and coma.[75]

Unlike stimulants, depressants may produce both physical and psychological dependence. Harold S. Feldman warns physicians that, though barbiturates are useful drugs in the practice of medicine, they must be aware of the potential addicting dangers of barbiturates and must regulate their therapeutic use. He states:

> Every medical practioner must be able to recognize the four types of barbiturate-drug abusers, namely: persons seeking sedative or hypnotic effects, individuals that develop excitation from

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[73]Houser, op. cit., p. 13.

[74]Richard R. Lingeman, Drugs from A to Z: A Dictionary (McGraw-Hill Book Company, New York, 1969), p. 15.

[75]Houser, op. cit., p. 13.

> barbiturates to counteract amphetamines, and lastly, persons who use combinations of barbiturates with alcohol and opiates.[76]

Unwin states that physicians and pharmacists must exercise caution when repeating or refilling prescriptions because barbiturates are common vehicles for suicide.[77] The Committee on Alcoholism and Addiction of the American Medical Society reports:

> Barbiturates are high on the list of suicidal poisons. These suicides may be either intentional or unintentional. Most depressed patients, particularly those with psychoneurotic depressions, know that barbiturates are an effective suicidal means. Patients often accumulate large amounts of drugs by hoarding.[78]

Amphetamines

Amphetamines stimulate the nervous system and produce a feeling of general well-being, energy, alertness, and endurance. Since amphetamines keep the user alert, awake, and active, they are often called "pep pills." Conam Kornetsky states, "In man an effective dose produces wakefulness, decreased feelings of fatigue, alertness, and an increase in mood often accompanied by

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[76]Harold S. Feldman, "The Pill Head Menace," Psychosomatics, Vol. 11 No. 2, March-April 1970, p. 100.

[77]Unwin, op. cit., p. 808.

[78]Committee on Alcoholism and Addiction, AMA, op. cit., p. 109.

loquaciousness and euphoria."[79] Amphetamines are commonly used by students who are cramming for examinations and by truck drivers who have long distances to travel and want to make sure they stay awake.[80]

The American Medical Association reports that over 100,000 pounds of amphetamines and methamphetamines are produced in the United States each year. This is enough to provide every man, woman, and child with from 25 to 50 doses.[81]

The slang names for amphetamines are "speed," "dexies," "ups," "bennies," and "drivers" and are sold under the trade names, Benzedrine, Dexedrine, Methedrine, Desoxephedrine, Dexamyl, and Desyphed.[82, 83]

The symptoms from amphetamine abuse are as follows: dryness of mouth, loss of appetite, heavy perspiration, enlarged pupils, talkativeness, nervousness, restlessness,

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[79]Conam Kornetsky, "The Pharmacology of the Amphetamines," Seminars in Psychiatry, Vol. 1 No. 2, May 1969, p. 229.

[80]Houser, op. cit., p. 11.

[81]Committee on Alcoholism and Addiction, AMA, "Dependence on Amphetamines and Other Stimulants," Journal of the American Medical Association, September 19, 1966, p. 1024.

[82]Staff Reporter (School Management), op. cit., p. 58.

[83]Michigan Department of Education, op. cit., p. 28.

excitability, aggressive behavior, tension and anxiety, and inability to sleep.[84]

Physicians prescribe amphetamines to obese patients for weight-reduction programs. However, the use of amphetamines as an appetite-depressant affects only food intake and not basal metabolism, digestive processes, or water balance.[85] S. B. Penich states:

> It is clear that over a short period of time, amphetamine administration is associated with decreased food intake and weight loss. It is equally clear that this effect diminishes rapidly in 4 to 8 weeks in individuals who regularly ingest amphetamines. It is quite clear that amphetamines do not provide the "answer" to the clinical problem of chronic obesity.[86]

Thomas A. Ban makes this statement concerning the use of amphetamines, "Even in obesity and depression, it is the reviewer's opinion that better therapeutic methods exist and that the use of amphetamines is not generally justifiable in either condition."[87]

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[84]Houser, op. cit., p. 11.

[85]M. H. Nathanson, "The Central Action of Beta-Aminopropylbenzine (Benzedrine): Clinical Observations," Journal of the American Medical Association, Vol. 108, 1939, p. 528.

[86]Penick, op. cit., pp. 158-159.

[87]Thomas A. Ban, "The Use of the Amphetamines in Adult Psychiatry," Seminars in Psychiatry, Vol. 1 No. 2, May 1969, p. 129.

Volatile Chemicals

Glue, containing toluol, is the volatile chemical which is most commonly abused. This glue is the plastic cement which is often used to build models and comes in tubes. The fumes from the glue are inhaled by placing the substance in a plastic or paper bag and placing the bag over the face.[88]

The sensation from glue sniffing resembles a state similar to that of an alcoholic intoxication. The physical and mental effects are as follows: (a) a tingling sensation, (b) intoxication with slurred speech, dizziness and unsteady gait, (c) irritability, (d) irresponsible, foolish, and sometimes homicidal actions, (e) possible loss of consciousness and coma, (f) inflamed eyes and swollen nose, throat, and lung tissue, and (g) nausea, vomiting, appetite and weight loss.[89]

Continued sniffing of glue may result in damage to the brain, liver, and kidney and may interfere with the blood-forming function of the bone marrow. Glaser and Massengale report that, "In some instances glue sniffing

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[88]Michigan Department of Education, op. cit., p. 34.

[89]Houser, op. cit., p. 33.

has led to mental deterioration, acute liver damage, and death."[90]

Lingeman reports that a form of psychological dependence can develop from continued glue sniffing. Some users also need increasingly larger amounts to intensify their experience. He also states that, in most instances, the user eventually discontinues the practice since glue sniffing is regarded as "kid stuff" by many older adolescents.[91]

Other volatile chemicals which are inhaled are: gasoline, alcohol, lighter fluid, paint thinner, carbon tetrachloride, and chloroform.[92]

The Drug Abuser

There have been some recent studies to determine whether drug abusers are of a certain personality type; therefore, become dependent upon drugs or whether drug abuse is a sociocultural problem which has no relationship to personality types. Research can be found to support both positions.

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[90]Helen H. Glaser and Oliver N. Massengale, "Glue Sniffing in Children: Deliberate Inhalation of Vaporized Plastic Cement," Journal of the American Medical Association, Vol. CLXXXI, July 1962, pp. 300-303.

[91]Lingeman, op. cit., p. 85.

[92]Leland M. Corliss, "A Review of the Evidence on Glue Sniffing: A Persistent Problem," Journal of School Health, October 1967, pp. 442-449.

It has been stated that drug addiction is related to age group, ethnic background, socioeconomic level, education, and vocational skills. Brotman and Freedman point out:

> These characteristics of some of the addicted population are certainly important to the consideration of the problem as a whole, but they are not characteristic of the whole population, and drug use does not seem to be one of cause and effect.[93]

Kenneth Keniston, who has studied drug use among college students, found that though the population of users is very heterogeneous, a common quality which it seems to possess is the lack of personal values. He states it as follows:

> I doubt that it is possible to present an exact portrait of the type of student who is likely to use and abuse drugs. My own experience with student drug-users convinces me that there are many different motives for drug use and abuse, and there are many different factors--psychological, sociological, cultural, and situational--that determine whether one student will use drugs while another will not. But despite the diversity of student types who may become involved in drug use, there is, I believe, one type that is particularly prone to drug abuse. Students of this type have, I think, particularly few values that militate against drug use and particularly strong motivations that incline them toward drugs, especially the hallucinogens.[94]

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[93]Richard Brotman and Alfred Freedman, A Community Mental Health Approach to Drug Addiction, U.S. Department of Health, Education and Welfare, 1968, p. 8.

[94]Kenneth Keniston, "Drug Use and Student Values," Paper presented at National Association of Student Personnel Administrators Drug Education Conference, Washington, D.C., November 7-8, 1966.

John W. Rawlin identified twelve personality characteristics found among people who take drugs. These characteristics are: passive dependence, withdrawn, rigid compulsive, anxious-insecure, depressed, distrustful, aggressive, emotionally unstable, antisocial, hypochondriacal, attention seeking, and symptoms of psychosomatic illness.[95]

Gendreau and Gendreau in a recent study examined the evidence supporting the "addiction prone" personality theory. They conducted a study involving an addict group and a non-addict control sample and incorporated several of the parameters which were found to be lacking in the previous studies. The results of their study showed that, contrary to the "addiction prone" theory, the addict and non-addict groups were not reliably different.[96]

These findings indicate that the relationship between drug abusers and a particular personality type are inconclusive. Further research and study is needed.

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[95]John W. Rawlin, "A Review of Sociologically Relevant Literature on Drug Abuse," Southern Illinois University, Edwardsville, Illinois, 1967, p. 15.

[96]Paul Gendreau and L. P. Gendreau, "The 'Addiction Prone' Personality: A Study of Canadian Heroin Addicts," Canadian Journal of Behavioral Science, Vol. 2 No. 1, 1970, p. 18.

Drugs and Treatment

As one studies the person who abuses drugs, one finds the necessity to study the basic socio-cultural issues, which may give some explanation for the large number of young people involved. As Unwin states:

> Just as individual drug misuse if heavy and sustained, reflects an underlying personality disturbance, so widespread misuse of intoxicants by a significant segment of our youth reflects deep-seated problems within the whole society.[97]

This has implications for communities in the ways they might approach the drug problem. There is no one single community drug program model to be followed. A program which is found to be effective in one setting may not be in another. But before a community plans a program, it must make some type of assessment of the problem. Rothman states that "Every community is different and its peculiarities have to be weighed in designing an appropriate action program."[98] One community may have to focus its attention on the hard core heroin addict, while another may discover that marijuana is its most serious problem.

Once the problem has been identified, a multi-phased and inter-agency approach needs to be considered. That is, there must be a coordination of schools,

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[97]Unwin, op. cit., p. 817.

[98]Jack Rothman, "How to Organize a Community Action Plan," The Next Step, Governor's Office of Drug Abuse, Lansing, Michigan, p. 14.

hospitals, universities, courts, and other such agencies and the resources they represent. These agencies must not focus their attention on a single plan but must develop multi-phased programs so as to open more avenues of assistance to which the drug abuser may turn.

The Laguna Beach Experiment which was a community approach to family counselling for drug abuse problems in youth is an example of inter-agency cooperation. In this experiment, the school district, community hospital, assistance league, and department of psychiatry of a local university, jointly sponsored a drug abuse center for young people. The center was an evening clinic where students could go, with or without their parents, and where parents could go, with or without their sons or daughters. Louis A. Gottschalk and his associates describe the center as follows:

> The center has served as a problem-clarification and communication-facilitating occasion between children and parents and has not functioned primarily for the purpose of individual problem solving. We are attempting to encourage both the young people and their parents to view and discuss their similar and different views about the usual problems of adolescence and parenthood. We also aim to provide informal scientific information about drugs, their pharmacology, their uses, and adverse side-effects, and dangers.[99]

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[99]Louis A. Gottschalk, Gilbert C. Morrison, Robert B. Drury and Allen C. Barnes, "The Laguna Beach Experiment as a Community Approach to Family Counselling for Drug Abuse Problems in Youth," Comprehensive Psychiatry, Vol. 11 No. 3, May 1970, p. 232.

Jerome Jaffe believes that the establishment of communities which are run entirely by addicts is one of the best approaches to producing a drug free, productive person who does not need continued psychological treatment or medical care. By communities, he speaks of organizations such as Synanon, Daytop Village, Phoenix House, Odyssey House, and Gateway House to name a few. These organizations are complex social systems to which the addict voluntarily resides with the agreement that he will conform to all the rules established by the members of the community. If he does not follow the community rules, he is asked to leave. Jaffe states:

> Many former compulsive drug users are able to remain drug-free and function productively while they are in such communities but how they do after leaving is not certain. Some critics feel that this approach falls short of returning ex-users to their homes sound in mind and body. But even if this is so, providing a voluntary, specialized community in which addicts can live a useful life is still a worthy enterprise.[100]

B. M. Garvey states that many times courts decide on a prison sentence, fines, or probation as punishment for a drug abuser, without obtaining medical reports, or without making psychiatric treatment a part of his rehabilitation program. He advocates a clinic which is jointly operated by the law enforcement agency and the

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[100]Jerome Jaffe, "Whatever Turns You Off," Psychology Today, Comm/Research/Machine/Inc., Vol. 3 No. 12, May 1970, p. 42.

medical services. Garvey administered such a clinic called the Kilburn Square Drug Abuse Centre in England. He says this about the clinic:

> A clinic run cooperatively between the probation department and the psychiatric services can offer, for very modest expenditure: (a) a diagnostic service for the courts (b) a treatment/supportive/ referral service for non-narcotic addicts (c) an advisory centre for other probation officers, youth club leaders and parents of addicted children (d) a useful listening post in which to learn the "trends in fashion" of the ever changing drug "scene."[101]

Recent methadone treatment programs for heroin addicts have gained much attention. The criticism of this treatment model is the fact that a synthetic narcotic drug is used as a substitution for the one upon which the addict is dependent. Despite this criticism, the medical research done in this area reports very favorable results. Hugh R. Williams reports:

> Through chemotherapy, we are able to move the patient far enough away from the use of illicit drugs so that our treatment staff of counselors and nurses are able to work on the social and personal problems that face the addict. We feel that this approach is only realistic and feasible in a natural setting where the addict must face up to and resolve the difficulties that arise each day in a normal setting. Incarceration for the treatment of chronic drug dependent person appears to offer little solution. This is apparent since most addicts have spent on an average of seven to

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[101]B. M. Garvey, "The Kilburn Square Drug Abuse Centre," British Journal Addict, Vol. 64, 1970, p. 393.

eight months of every addiction year in jail prior to these various treatment programs.[102]

Jerome H. Jaffe et al. reported in a recent study of sixty patient addicts who were selected at random and who had volunteered for methadone treatment. Patients were not rejected because of previous history. Patients were given daily doses of methadone dissolved in fruit juice. Seven months after initiating the study seventy five percent who started were still in treatment making satisfactory progress.[103]

One of the longest range studies on addict recidivism rates was carried on at Lexington Hospital in Lexington, Kentucky. The study covered a 32 year period and studies the readmission rates for all addicts discharged from Public Health Service Hospital since 1935. From this study John C. Ball et al. concluded, "a positive association exists between relapse to drug abuse and both the youthfulness of addicts and the inadequacy of brief periods of voluntary hospital treatment."[104]

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[102]Hugh R. Williams, "Using Methadone to Treat the Heroin Addict," Canada's Mental Health, Vol. XVIII, March-April 1970.

[103]Jerome H. Jaffe, Misha S. Zaks, and Edward N. Washington, "Experience with the Use of Methadone in Multi-Modality Program for the Treatment of Narcotic Users," The International Journal of Addiction, Vol. 4 No. 3, September 1969, p. 490.

[104]John C. Ball, William O. Thompson and David M. Allen, "Readmission Rates at Lexington Hospital for 43,215 Narcotic Drug Addicts," Public Health Report, Vol. 85 No. 7, July 1970, p. 616.

Drugs and The Law

In the past half-century, several laws were enacted by the federal government in an effort to place legislative controls on narcotics and dangerous drugs. Below is a chronicle of these laws:

1914 — Harrison Narcotic Act
a tax measure designed to control the importation, manufacture, production, preparation, purchase, sale, distribution, or gift of opium and its derivatives

1922 — Narcotic Drugs Import and Export Act
limits the importation of crude opium and coca leaves to amounts deemed necessary for medical and scientific needs and specifically prohibits the importation of opium for smoking or for the manufacture of heroin

1937 — Marijuana Tax Act
suppresses the use of marijuana in this country

1942 — Opium Poppy Control Act
prohibits the growing and production of the opium poppy in this country

1951 — Boggs Act
provides severe penalties for the illegal possession or sale of narcotic drugs

1956 — Narcotic Control Act
provides penalties for the unlawful sale of narcotics or marijuana between adults and between adults and minors

1965 — Drug Abuse Control Amendments
adopts controls over depressants, stimulants, LSD and similar substances with provisions to add new substances as the need arises.[105]

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[105]Kitzinger and Hill, op. cit., pp. 57-59.

1966 Narcotic Addict Rehabilitation Act established new policy for treatment of narcotic addict as emotionally ill

1968 Bureau of Narcotics and Dangerous Drugs bureau which is under the jurisdiction of the U.S. Department of Justice was developed to eliminate duplication, reduce confusion and improve law enforcement.[106]

Laws relating to illegal drug activities are in a period of flux at both the state and federal levels. The reason for this is that current laws are so harsh most judges are not imposing the penalty prescribed by law. There is a trend to make these laws more lenient for individual users, and those involved in illegal sales for no profit, so they can be realistically enforced.

Under the federal law the penalties for illegal sale, transfer, delivery, or possession are as follows:

Offenses	Federal Penalties
Illegal possession of depressants, stimulants and hallucinogens (e.g. barbiturates, amphetamines, LSD) for purpose of sale or delivery	A felony, first conviction maximum 5 years imprisonment and/or $10,000 fine
Illegal possession of depressants, stimulants, and hallucinogens other than for purposes of sale or delivery	A misdemeanor, first and second offense maximum 1 year imprisonment and/or $1,000 fine; subsequent offenses maximum penalty 3 years imprisonment and/or $10,000 fine

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[106]Michigan Department of Education, op. cit., p. 45.

Illegal possession of narcotics (e.g. heroin, opium, morphine, cocaine)	first offense 5 to 20 years imprisonment and fine up to $20,000; subsequent offenses 10 to 40 years imprisonment and fine up to $20,000
Illegal transfer (sale, gift, barter, or exchange) of narcotics	same as for possession except where transfer is made between different age groups i.e. a person over age 18 makes transfer to one under 18, 10 to 40 years and fine up to $20,000; heroin transfer made by a person over age 18 to one under age 18, fine up to $20,000 and 10 years to life imprisonment, death penalty may be imposed
Illegal transfer of marijuana or hashish	first offense, 5 to 20 years in prison, fine up to $20,000; subsequent offenses 10 to 40 years, fine up to $20,000[107]

State laws on illegal drug activities differ greatly from federal laws and many times are more stringent. For example, under federal law marijuana is not considered a narcotic drug but it is under state laws. Each state has its own regulations; therefore, drug related laws differ from state to state.

The primary enforcement statute in Michigan is the 1952 amended form of the Uniform Narcotic Act of 1932. Under Michigan law, a narcotic drug is defined as opium

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[107] Pharmaceutical Manufacturers Association, Legal Division, "Narcotic and Dangerous Drug Laws: Penalties for Illegal Possession and Sales of Depressant and Stimulant Drugs, Narcotics and Marijuana," Teaching About Drugs, American School Health Association, Kent, Ohio, 1970, pp. 174-175.

and its derivative, cocaine; marijuana; and any synthetic drug designated by the U.S. Justice Department as narcotic. In 1961, a dangerous drug law was passed to control amphetamines, barbiturates, and their derivatives. The Michigan statutes are as follows:

Offenses	State Penalties
Sale and/or possession of dangerous drugs (barbiturates, amphetamines, and derivatives)	high misdemeanor, 1 year imprisonment
Sale and/or possession of hallucinogenic drugs (LSD, mescaline, psilocybin, DMT, etc.)	felony, 4 years imprisonment
Sale of narcotic drugs	felony, mandatory 20 years to life imprisonment
Possession of narcotic drugs	felony, (first offense) maximum 10 years imprisonment and fine up to $5,000; (second offense) maximum 20 years imprisonment and fine up to $5,000; (subsequent offenses) 20-40 years imprisonment and fine up to $5,000[108]

In 1969 the Michigan Department of Public Health conducted an extensive study entitled, Drugs and Michigan High School Students. One of the questions on the survey attempted to measure student attitudes toward current state and federal drug-control laws relating to marijuana. Despite the fact that Michigan laws are as severe as the federal constitution allows, the survey showed:

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[108]Michigan Department of Education, op. cit., p. 45.

> While about one-third of the students supported current laws or suggested that the laws be made more lenient, another third indicated unfamiliarity with relevant laws while a final third checked what we feel is a somewhat unrealistic statement, "The laws are too lenient and need to be stronger for better control."[109]

Even though we now have strict laws relating to drugs it is obvious that they have not been effective in controlling illegal drug traffic. The number of marijuana arrests are increasing each year at an unbelievable rate. Though there are very harsh laws concerning narcotics such as heroin, its use in the white middle class suburbs is alarming. Seventy five percent of all heroin addicts under twenty one years of age are white.[110]

A great error we seem to be making in our attempt to control illegal drug use is to concentrate our efforts on harsh penalties and vigorous police surveillance. More money and effort should be placed on the causal factors. We need to look at the reasons young people turn to drugs. As Halleck states:

> Many of our laws are based on unrealistic fears and misinformation. If we approached the drug problem by recognizing man's need to seek relief and release from a world he never made; by being realistic as to the physical and psychological dangers of drugs;

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[109]Michigan House of Representative, Special House Committee on Narcotics, Drug Dependence in Michigan, Lansing, Michigan, April 1969, p. 20.

[110]Edward R. Cass, "Marihuana--Look Before You Leap," Catholic Psychological Record, Vol. 6, Fall 1968 p. 140.

> and by considering the extent to which society has the right to control the use of agents that interfere with social progress, we could at least develop a rational basis for recommending legal reform.[111]

Why Drugs?

Thoreau once said, "There are a thousand people hacking away at the branches of evil for every one striking at the roots." This quotation aptly describes the drug abuse scene today. Most of the drug abuse programs are designed to cope with the problem as it exists rather than to focus on the causes or the reasons young people turn to drugs.

One of the reasons drug abuse is so difficult to define is the fact that we are a drug taking society. We have a pill of a prescribed color, size, and shape for every malady, mental or physical, that man may face and taking it is an acceptable mode of treatment. "We take vitamin pills, reducing pills, sleeping pills, pills to stay awake, headache pills, cold pills, pain pills, tranquilizer pills, and birth control pills. You name it. We are a pill-conscious society.", states Peter J. Pitchess, Sheriff of Los Angeles County.[112]

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[111] Halleck, op. cit., p. 4.

[112] Peter J. Pitchess, "Dangerous Drugs and Your Child," California Parent-Teacher, August 1967, p. 16.

Recently the Stanford Research Institute studied 86 households in California and found a total of 2,539 medications, an average of approximately 30 medications per household. Approximately one-fifth of these medications were prescription drugs given under medical aegis. Louria points out, this data indicates the general public, not the medical profession, is to blame for most of the indiscriminate drug use.[113]

There probably is no single, definitive reason for drug abuse among teenagers due to the complexity of adolescents and the social milieu in which they live. However, some of the contributing factors seem to be as follows:

1. The isolation, alienation, and segregation of youth from adults. Adolescents are left to develop their own philosophies and behavior patterns within their own peer culture. They have no meaningful long term relationship with adults. They grow up with a series of hired supervisors, e.g. babysitters, teachers, and agency leaders.[114]

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[113]Donald B. Louria, The Drug Scene (McGraw-Hill Book Company, New York, 1968), p. 2.

[114]San Francisco Unified School District, Drugs and Hazardous Substances--Grades K-12, San Francisco, California, October 1969, p. 3.

Cohen states:

> From childhood through adolescence we are failing (1) to provide goals appropriate to our times (2) to train the emotions and the senses, and (3) to set limits. Therefore, goallessness, and inability to enjoy, and an attenuated sense of social responsibility predispose to chemical escape, chemical hedonism, and the search for chemical enlightenment.[115]

Another factor which contributes to this feeling of alienation is the length of time it takes an adolescent to become a part of the decision-making process today, even though they are more mature and knowledgeable. Unwin puts it this way:

> The increasingly earlier onset of puberty (by four to six months per decade) and a longer period of training and education before employment in a technological society have increased the length of adolescence--("becoming adult"). Youth is thus asked to contain its biological urges, idealism, frustrations, and desire to take part in the decision-making modalities of society, for longer than any previous generation.[116]

2. Youth's perception of adult hypocrisy. Adults who use and abuse alcohol and tobacco, which are socially and legally sanctioned, are alarmed at the drug abuse among teenagers.[117]

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[115]Sidney Cohen, "The Drug Dilemma: A Partial Solution," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, p. 15.

[116]Unwin, op. cit., p. 818.

[117]San Francisco Unified School District, op. cit.

Harrison states:

> One reason students resent the preaching of their frightened elders is because they resent their elders' hypocrisy. The kids shouldn't smoke grass, but it's okay for Mother and Dad to consume several packs of mentolated filter tips every day; . . . the kids are supposed to steer clear of the up-and-down pills, although Mother takes something to control her weight, something else for a nervous stomach and a pill to put her to sleep at night.[118]

The Urban Studies Center at the University of Louisville, Kentucky conducted a rather extensive study of the so-called generation gap. The findings revealed a rejection of adult life patterns by the young as being shallow, hypocritical, and irrelevant to truly basic values.[119]

3. Pressures to use drugs: advertising, peer fads, and patterns of seeking immediate relief from normal tensions and stresses.[120]

There is no doubt that drug commercials have painted a very tempting picture. As Unwin describes it:

> Television advertising daily reminds all our people, continuously and unremittingly, of the rich variety of "chemical comfort" freely available without medical prescription--a pill for every problem, a scent for every smell, a liquid for every liability.[121]

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[118]Charles H. Harrison, "The Drug Epidemic--What's a Teacher to Do?" Scholastic Teacher, May 4, 1970, p. 4.

[119]Joseph F. Maloney, "Communication With Youth," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, p. 11.

[120]San Francisco Unified School District, op. cit.

[121]Unwin, op. cit., p. 818.

Drugs also provide a temporary relief from our daily problems and enable us to avoid the painful realities of our lives. When major world crises seem unresolvable or when minor personal problems seem too great, drugs permit us to forget, at least for a while. Halleck states:

> In our frustration, our anxiety, our fear, our boredom and our purposelessness, we all use too many drugs. Our affluence and leisure do not bring us happiness. Our failure to deal with urgent problems such as the rapid rate of technological change, over-population, pollution, or the war in Vietnam leaves us feeling frustrated and impotent. The younger generation seems especially desperate. They fear the future, distrust the past as a guide to the future, and are relentlessly trying to live in the moment.[122]

When young people are asked why they use unprescribed drugs the most common reasons given are as follows: escape, curiosity, desire for pleasure, rebellion against authority, and conformity.[123]

Nowlis states that the reasons young people use drugs are the same as the reasons adults give: for fun, to facilitate social interaction, to feel better, and to relieve boredom.[124]

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[122]Halleck, op. cit., p. 4.

[123]Kiwanis International, op. cit., pp. 1-4.

[124]Nowlis, op. cit.

Drug Abuse Education

Current literature is full of discussions concerning the role of the schools in the present drug abuse problem. As with any of our social ills, education is seen as the answer by some. Some communities object to the inclusion of drug abuse education in the curriculum because it is thought that such programs would only make youth curious about drugs. However, resistance seems to be waning in most communities.[125]

Barrins states that a drug education program in the schools is an obligation. She believes that youngsters need to be armed early in life with knowledge of drugs so they will be in a better position to make a decision if they are tempted to experiment.[126]

The role of the school in drug abuse education can be found in the following beliefs: (a) the traditional pledge of schools to meet the needs of youth, (b) the school is the agency created by society for education of all of the young, and (c) education should play a preventative role by disseminating accurate information.[127]

Before we commence to design a drug program, we must weigh some considerations. Nowlis states that it

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[125]Unwin, op. cit., p. 817.

[126]Barrins, op. cit., pp. 15-18.

[127]Michigan Department of Education, op. cit., p. 1.

is most important for the communicator of drug education to either present the best and most objective information as frankly as he can and then trust the student to make his own decision, or make his position known at the onset, if he feels that the risks in letting the student make his own decision are too great.[128]

In addition to making one's biases known, the communicator must have a firm command of his subject matter. As Halleck explains:

> Once a speaker's biases and ignorance have been exposed, the younger people in the audience seem to give up. They may continue to confront the speaker but as the meeting goes on it is evident that some are snickering, that others are giving one another knowing glances, and that most are responding to the meeting with an attitude of supercilious resignation.[129]

Levy believes:

> The best deterrent to drug abuse is the individual's value system and his assessment of the consequences associated with drug involvement. Decision making can be aided when sensitive teacher-pupil relationships based upon mutual understanding, integrity, and honesty are established. Exaggeration, distortion, and sensationalism are propaganda, not education, and have no place in the schools. . . .[130]

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[128]Helen H. Nowlis, "Communicating About Drugs," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, p. 9.

[129]Halleck, op. cit., p. 32.

[130]Marvin R. Levy, "Background Considerations for Drug Programs," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, p. 3.

In dealing with the drug problem in the schools Ochberg states there are three things that are needed: (a) Administrative Policy: a written administrative policy regarding school administration responses to the detection of student usage of harmful or illicit drugs, (b) Accurate Drug Information: the principal, the student body, parents, teachers, and other interested community members need facts about drugs and drug use, (c) Perspective and Context: the symptom of a rapidly changing society should be the context in which drug abuse is studied.[131]

Lewis gives ten practical guidelines in building a curriculum in drug abuse education. These guidelines are as follows: assess the level of your students' sophistication about drugs, involve students in planning, include alcohol and tobacco in your discussion of drug abuse, compare drug use and abuse, do not sensationalize, make drug education part of an ongoing classroom experience, include experimental data in the drug curriculum, emphasize the motivational factors that effect a student's decision to use drugs, don't forget to discuss factors that inhibit the use of drugs, include the comments of drug experienced young people in the educational process.[132]

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[131]Ochberg, op. cit., pp. 52-57.

[132]David C. Lewis, "How the Schools Can Prevent Drug Abuse," Bulletin of the National Association of Secondary School Principals, Vol. 54 No. 346, May 1970, pp. 45-46.

Too often the assembly type approach to drug education is used. In this approach, students are assembled in the school auditorium and a program designed to "scare the hell out of them" is presented. These programs are prevalent and least effective.[133]

Weinswig et al. suggest several excellent approaches. One is to have well qualified college students lead small group discussions in the high schools. Another suggestion is to have an ongoing in-service program designed to educate the educators as well as precipitate attitudinal and behavioral changes with respect to the mis-use of drugs. Another approach is to invite local experts (e.g. physicians, pharmacists, etc.), who have credibility, and who can make an interesting presentation, to speak to classes.[134]

Professionals are very cooperative when asked to participate in school drug programs because most are aware of the problem which faces our society. Dr. Feldman writing to his fellow physicians states:

> To descrease and prevent the pill-head menace, all practitioners of medicine must be careful in the prescribing of sedatives and minor tranquilizers. They must also participate in educational programs that will stress prevention techniques amongst the

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[133] Halleck, op. cit., p. 31.

[134] M. H. Weinswig, D. W. Doerr and S. E. Weinswig, "Drug Abuse Education," Phi Delta Kappan, Vol. L No. 4, December 1968, p. 222.

> community that will inform young people and their parents of the horrendous dangers which may befall individuals who may experience and abuse potent drugs.[135]

It should be stressed that drug education instruction should include the beneficial aspects, as well as the harmful, and the curriculum should have a logical integration of related topics. For example, the physiology and psychology of pain should be included in the study of the opiates, and sleep and insomnia should be discussed in the lesson on barbiturates.[136] A good drug education program should also examine the societal conditions that promote drug use and abuse. As Levy states, "Drugs per se are not the issue; rather, the issue is why people use them."[137]

The drug education curriculum should also include the study of human reactions to situations which cause emotional stress. Halleck, in addressing himself to drug use, states:

> The problem here is that a certain degree of stimulation or tranquility obviously benefits many people, but too much alteration of consciousness does not bring out the best in man. People need a certain amount of anxiety and frustration to be creative, to make decisions and even to confront oppressive

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[135]Feldman, op. cit., p. 103.

[136]North Central High School, "Narcotics," course syllabus (mimeographed) Indianapolis, Indiana.

[137]Levy, op. cit., p. 3.

> institutions within our society. If they become too euphoric or too tranquil, they do nothing.[138]

The teacher in drug abuse education program is probably the most important factor in its success. As Cohen points out, "When parents are lacking or have failed to accept their role, the teacher may be the first to learn of, or notice, aberrant behavior due to drugs."[139]

Peterson has four suggestions for educators: (1) they shouldn't panic when students bring drug problems to their attention, (2) they should keep lines of communication open with students so that students will turn to them for information and guidance, (3) they should use facts, and not fear, to convince students that drugs are a bad scene, (4) they should avoid jumping to wrong conclusions such as "kids with long hair take drugs" and "all drugs are alike."[140]

Many educators ask what they can do in the drug abuse problem. Demos makes eight excellent recommendations: (1) become more familiar with the subject matter, (2) provide avenues for drug users and potential users to level with you with impunity, (3) strive to be a better

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[138]Halleck, op. cit., p. 3.

[139]Cohen, op. cit., p. 15.

[140]Robert C. Peterson, "Suggestions for Educators," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, p. 4.

model, (4) listen to the young, (5) provide constructive outlets, (6) expand counseling for young people, (7) offer youth accurate information, and (8) bring together a variety of disciplines e.g. psychology, law, medicine.[141]

Though an examplary drug abuse education program is developed, schools alone cannot combat the problem. "At best, drug education can be a band-aid measure which may prevent the spread of drug abuse. It may be an antidote for the chemical cop-out of a whole generation," states Todd.[142]

The drug problem must be approached from all fronts. Through more effective law enforcement and massive public education there may be a change. An example of such an effort which was strikingly successful was reported in Japan in its methamphetamine epidemic. From 1945 to 1955 Japan experienced a wave of methamphetamine abuse which was estimated to involve some 2,000,000 people at its peak. Through a massive public education campaign and improvement in law enforcement a rapid decline was reported. In 1958 only 271 methamphetamine abuse arrests were made.[143]

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[141] George D. Demos, "Drug Abuse and the New Generation," Phi Delta Kappan, Vol. L No. 4, December 1968, pp. 215-217.

[142] San Francisco Unified School District, op. cit., p. 4.

[143] Henry Brill and Tetsuya Hirose, "The Rise and Fall of a Methamphetamine Epidemic: Japan 1945-55," Seminar in Psychiatry, Vol. 1 No. 2, May 1969, pp. 179-181.

CHAPTER III

PLANNING AND CONDUCTING STUDY

Introduction

The research technique used for this study was the normative survey. An interview questionnaire was designed in order that certain information about drug education programs could be gathered through personal interviews with the schools' principals. Six main areas of concern in drug abuse education have been selected for this study. They are as follows: program and program planning, determination of needs, school policies related to drug use and abuse, in-service training program for staff members, school-community cooperative drug abuse programs, and the schools' evaluation of current drug abuse programs. At the end of the interview, two open ended questions were asked. The questions were: "What is your reaction to the teenage drug abuse problem?" and "In your opinion what is the best approach to solving the drug problem?". These open ended questions were added to the interview because it was thought that some interesting

information might be collected from responses to such broad, unstructured questions.

The selection of the population for this study was originally described by Mawdsley in his dissertation.[144] Mawdsley's study involved large high schools and his rationale for selecting this population was the evidence that conclusively points to larger, more complex high schools in the years ahead. In his methodology he was able to select a population which was of a manageable size.

The population for this study was the selected large public high schools in the State of Michigan which are considered comprehensive, which have a student enrollment of 2,000 or more, and which include grades ten, eleven and twelve only. These criteria were used, not only to limit the population, but also to select high schools where drug abuse program information might be most available. That is, many of the drug abuse education programs have been initiated at the high school level and large high schools have greater flexibility in personnel assignments; therefore, more opportunity to institute programs. Large high schools are also located in the larger cities where drug use and abuse tends to be more prevalent.

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[144]Mawdsley, op. cit., p. 71.

The Michigan Education Directory and Buyer's Guide was used to identify the public schools which met the criteria mentioned above.[145] From this reference twenty five schools were identified. Of these schools one has since been changed to a nine through twelve grade level high school and one did not respond to repeated requests for permission to conduct the study; therefore, was not included. Twenty three schools responded and they are identified below in alphabetical order. Additional items of information included in the table are the student enrollments, the cities where the schools are located, and the names of the principals.

The subject of drug use and abuse in some communities is a very sensitive topic; therefore, some school superintendents had a great deal of reservation in permitting such a study to take place in their districts. Only after assurance was given that the individual schools would not be identified with the information collected was permission granted to conduct the study in some schools.

Procedure

Once the population was identified, letters were sent to the superintendents of each public school district,

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[145]Michigan Education Directory, Michigan Education Directory and Buyer's Guide, 1969-70, Lansing, Michigan.

TABLE 3-1. High Schools Selected for Study, Their Enrollments, Cities in Which the School is Located and Names of Principals

Names of High Schools	Enrollment	Cities	Principals
Arthur Hill	2545	Saginaw	Harold Giesecke
Benton Harbor	2723	Benton Harbor	David Hartenback
Berkley	2071	Berkley	Loren Disbrow
Central	2200	Kalamazoo	L. Henry Goodwyn
Central	2000	Pontiac	Donald McMillan
Cody	3516	Detroit	George Donaldson
Cooley	3000	Detroit	Leonard Minkwic
East Detroit	3275	East Detroit	John Sanders
Everett	2200	Lansing	Calvin Anderson
Ford	3100	Detroit	Samuel Milan
Fordson	2250	Dearborn	Harvey Failor
Groves	2103	Birmingham	Ronald Rolph
Lincoln	2930	Lincoln Park	Thomas Cuozzo
Murray	2087	Detroit	Robert Boyce
Northern	2100	Pontiac	Philip Wargelin
Northwestern	2510	Flint	Kenneth Fish
Redford	2400	Detroit	William Kleming
Saginaw	2254	Saginaw	Duane Maas
Seaholm	2213	Birmingham	Ross Wagner
Sexton	2151	Lansing	Dale Metts
Southfield	2545	Southfield	Robert Hall
Southwestern	2264	Flint	Garret Ebmeyer
Thurston	2126	Detroit	Jack Harms

selected for the study, describing the nature of the study, indicating the time it would take to conduct the investigation, and requesting permission to interview the principals of the high schools identified. A self-addressed postcard was included in each letter for the superintendent's convenience.

After permission was granted, a telephone call was made to the principal of the high school and an appointment was made for a personal interview. The interview technique of gathering information was used for the following reasons:

1. The number and locations of the high schools selected for this study made it possible to visit each one.
2. This technique produces greater results in gathering information than survey questionnaires by mail.
3. The investigator is able to explain the study and discuss it with the participants.
4. Terms or questions which are not clear to the participants could be explained in greater detail to clarify semantic difficulties.
5. This method forces the interviewee to concentrate on the question at hand and the questions can be asked at a pace appropriate to each situation.[146]

Though the interview technique of gathering information has many advantages it is not without fault. During the course of the interview it is very easy for

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[146]Mawdsley, op. cit., pp. 76-77.

the investigator to project his own thoughts or to become side tracked by the remarks of the interviewee and become involved in a discussion. To avoid these pitfalls an interview guide was followed and the responses recorded on a form.

This particular interview questionnaire was designed to: (1) gather specific information about school drug policies, school-community programs and drug abuse education programs, e.g. type, determination of need, in-service training, evaluation; (2) give direction and form to the interview process; (3) structure the possible responses for categorization yet allow for responses not anticipated; and (4) focus on special areas of concern in drug abuse education.

The limitations of the interview guide form are as follows: (1) the interviewee may tend to give information as it comes to mind; therefore, making it difficult to record the data on a form, and (2) the recording of the information during the interview may tend to distract from the discussion.

The format of this guide is as follows:

DRUG ABUSE EDUCATION PROGRAM

Interview Guide

High School:_____ Enrollment:_____

Principal:_____ Date:_____

School District:_____

.....

I. Program

A. Does your school have a drug education program? yes___ no___

1. if "yes" what type?

a. required___ elective___

(1) if elective what is the percentage of students who are enrolled?_____

b. grade level: ten___ eleven___ twelve___

c. articulated with "feeder" schools? yes___ no___

(1) if "yes" in what way?

joint planning___ teacher exchange__

others_____

d. is the program sequential (coordinated with other subjects and grade levels of the high school)? yes___ no___

(1) if "yes" in what way?

joint planning___

coordinated teaching___

others_____

e. is the program an assembly type of approach? yes___ no___

(1) is "yes" do the students get an opportunity for small group discussion? yes___ no___

(2) if "yes" was an outside speaker invited? yes___ no___

(a) if "yes" what type of speaker?

former addict___ policeman___

physician___ pharmacist___

others___

f. in what department is drug education taught?

_____

g. by whom (school personnel) is the course taught?

_____

(1) what special training have these teachers had to teach this course?

_____

h. how long have you had such a program?

_____

B. Who was involved in the planning of this drug education program?

parents___ students___ teachers___ counselors___

administrators___ community resource people___

II. Determination of Need:

A. do you have any idea what percentage of your students have experimented with drugs? yes___ no___

1. if "yes" what percent?___

2. how did you arrive at this figure?

   random sample___ all students surveyed___

   informal___ guess___ others___

3. if "no" have you made an attempt to discover how widespread drug use is in your school? yes___ no___

4. do you consider drug use and abuse a major problem* in your school? yes___ no___
   (*defined as one of the top five student behavior problems in the school)

B. Have you taken a survey of the parents to discover what their opinions and attitudes are on drug education? yes___ no___

1. if "yes" how was this survey taken?

   random sample___ questionnaire to all

   parents___ informal___ parent organiza-

   tions___

2. if "yes" what were the results?

   _____

III. Drug Policies

A. Does the school have a policy for drug users, possessers or peddlers? yes___ no___

1. if "yes" what is it? (attach copy if available)

IV. In-Service Training

A. Does the school have an in-service training program for staff members? yes___ no___

1. if "yes" what type?

   one session___ institute___ long term___

2. was attendance mandatory? yes___ no___

V. School-Community Programs

A. Do you have a cooperative drug program with the community? yes___ no___

1. if "yes" what type of arrangement?

drug education center___ crisis intervention center___ drug abuse symposium___ others___

VI. Evaluation

A. Have you attempted in any way to evaluate your present drug education program? yes___ no___

1. if "yes" how?

questionnaire___ interview___ teacher reaction___

2. what were the results? (attach copy if available)

VII. Open Ended Questions

A. What is your reaction to the teenage drug abuse problem?

B. In your opinion what is the best approach to solving the drug problem?

Method of Reporting Findings

The information recorded on each interview guide form was reviewed and the responses for each question were then summarized so the findings could be reported in a clear and understandable fashion. The summary will be in the form of a simple arithmetic treatment reporting numbers and percentages of similar responses.

CHAPTER IV

FINDINGS OF STUDY

Introduction

The findings from the study will be reported in seven parts. They will be as follows:

Part I. The first part will consist of a report of the types of drug abuse education programs currently being offered in the selected large public high schools of Michigan of this study. Descriptions of the programs will include grade level placement, length of unit, requirement or elective course, articulation of subject, course sequence, departmental placement, training of instructional personnel, number of years unit has been offered, and personnel involved in the planning stages.

Part II. This portion will include a report on the method by which the need for a drug abuse education program in that particular school

was determined. It focuses on the survey of students and parents.

Part III. In this part, the policy of the school as it relates to student drug users will be reported.

Part IV. Data concerning the number of schools that provide in-service training on drug use and abuse for faculty members will be reported here.

Part V. Findings of cooperative school-community programs on drug abuse will be presented in this part.

Part VI. This portion will give information concerning the schools' evaluation of current drug abuse education programs.

Part VII. The answers to the two open ended questions will be summarized in this section of the report.

PART I

Drug Abuse Education Programs

This portion of the study reports the findings about the drug abuse education programs which are offered in the selected large public high schools of Michigan. The findings are as follows:

1. To the question, "Does your school have a drug education program?", fifteen (15) or 65.2% of the principals or their designates responded "yes" and eight (8) or 34.8% responded "no."
2. Of the fifteen (15) schools with a program twelve (12) or 80.0% made it a requirement some time during the student's matriculation through school and three (3) or 20.0% made it an elective subject. (See Table 4-2.)
3. Of the fifteen (15) schools with a program (required and elective) thirteen (13) or 86.7% offered the program at the tenth grade level. Several schools reported the grade level placement at other levels. This information is summarized below in Table 4-1.

TABLE 4-1. Grade Level Placement of Drug Abuse Education

Program Required		Program Elective	
Grade Level Placement	No. of Schools	Grade Level Placement	No. of Schools
10	7	10, 11	1
11	1	10, 11, 12	1
10, 11	2	11, 12	1
10, 11, 12	2		

TABLE 4-2. Some Characteristics of the Fifteen (15) Existing Drug Abuse Education Programs

Characteristic	No. of Schools	Percent	No. of Schools	Percent
1	Program Required		Program Elective	
	12	80%	3	20%
2	Program Articulated		Program Not Articulated	
	3	20%	12	80%
3	Program Sequential		Program Non-Sequential	
	3	20%	12	80%
4	Training for Program Teachers Required		Training for Program Teachers Not Required	
	2	13.3%	13	86.7%
5	Drug Unit: 1 to 2 Weeks		Drug Unit: 3 Weeks	
	10	66.7%	5	33%

4. Of the fifteen (15) schools with a program three (3) or 20.0% reported that the program was articulated with the "feeder" schools (junior high schools which send their students to that particular high school) and twelve (12) or 80.0% of the schools reported that the program was not articulated with the "feeder" schools. Of the three (3) schools with an articulated program all three reported joint planning as the method of articulation employed. (See Table 4-2.)
5. Of the fifteen (15) schools with a program three (3) or 20.0% reported that the program was sequential. (Sequential was defined as a program coordination with other grade levels of the high school to avoid redundancy.) Twelve (12) or 80.0% of the schools indicated that the program was not sequential. Of the three (3) schools with a sequential program all three reported teacher meetings to determine subject matter coverage as the means of making the program sequential. (See Table 4-2.)
6. Of the fifteen (15) schools with a program the major emphasis was placed in subject area departments as follows in Table 4-3.

TABLE 4-3. Placement of Drug Abuse Education in the Curriculum

Department	No. of Schools	Percent
Social Studies	7	46.7
Health and Physical Education	4	26.7
Science	2	13.3
Guidance	2	13.3

7. Of the fifteen (15) schools with a program two (2) or 13.3% of the schools required the teachers teaching in the drug abuse education programs to take some training before beginning to teach the unit. One of these schools conducted a local in-service training session for the teachers involved in the program at the high school and the other school held a district wide workshop for teachers teaching the drug abuse unit. Thirteen or 86.7% of the schools did not require the teachers to obtain special training though it was reported that many teachers did receive training on a voluntary basis. (See Table 4-2.)
8. Of the fifteen (15) schools with a program, four (4) or 26.7% spend one week on drug abuse, six (6) or 40.0% spend two weeks, and five (5)

or 33.3% spend three weeks. These time periods are approximations made by the person interviewed and does not necessarily represent a block of time since some teachers integrate drug education with other topics. (See Table 4-2.)

9. The fifteen (15) schools with a program reported that they have had the programs in their schools for the number of years reported below in Table 4-4.

TABLE 4-4. Number of Years Drug Abuse Education Has Been Offered

No. of Years Drug Education	No. of Schools	Percent
2	3	20.0
3	4	26.7
4	2	13.3
5	2	13.3
more	2	13.3
not known	2	13.3

10. Of the fifteen (15) schools with a program, the various segments of the school community involved in the planning of the drug abuse program were reported as follows in Table 4-5.

TABLE 4-5. School Community Members Involved in Planning the Drug Abuse Education Programs

High School	Student	Parent	Teacher	Dept. Head	Counselor	Administrator (local/district)
A				X		X
B	X		X			X
C			X			X
D	X		X		X	X
E	X	X	X		X	X
F			X			
G			X			X
H	X		X			X
I			X			X
J			X	X		
K					X	X
L			X		X	X
M			X	X		
N			X			
O			X	X		X
No. of Schools	4	1	13	4	4	11
Percent	26.7	6.8	86.7	26.7	26.7	73.3

PART II

Determination of Need

This portion of the study reports the manner in which the schools determined their need for a drug abuse education program. Techniques such as questionnaires and surveys will be the major focus. The findings are as follows:

1. One of the questions asked in this part of the interview was, "Do you have any idea what percentage of your students have experimented with drugs?". Of the twenty three (23) school principals or their designates interviewed, fourteen (14) or 60.9% did not know and did not venture to give an approximation. The remaining nine (9) or 39.1% also said they did not know but did make the following estimates as shown in Table 4.6.
2. When asked if any attempt had been or will be made to discover how widespread drug use was in their schools, of the twenty three (23) schools represented, six (6) of 26.1% indicated that an anonymous student survey was taken. The remaining seventeen (17) or 73.9% of the principals stated that no student survey had been or will be taken in their schools. Reasons given were as described in Table 4-7.

TABLE 4-6. Estimates by Principals of Student Drug Use

Percentage of Students Experimented with Drugs	No. of Schools
20 - 29	2
30 - 39	3
40 - 49	
50 - 59	
60 - 69	3
70 - 79	
80 - 89	

TABLE 4-7. Reasons Given by Principals for Not Conducting a Student Survey on Drug Use

Reasons	No. of Schools	Percent
data unreliable	7	41.2
community reaction	4	23.5
suggestive (may suggest experimentation)	2	11.7
not useful	2	11.7
waiting for direction	1	5.9
no reason	1	5.9

3. To the question, "Have you taken a survey of the parents of your students to discover what their opinions and attitudes are on drug education?", all twenty three (23) principals or their designates replied that no formal survey had been made, though parent organizations, e.g. parent teacher association, parent-faculty clubs, were approached for their reaction.
4. Each principal or his designate was asked if he considered drug use and abuse a major problem in his school. Major was defined as one of the top five student behavior problems. Of the twenty three (23) schools represented in the study, thirteen (13) or 56.5% of the principals responded "yes" and ten (10) or 43.5% said "no."

PART III

Drug Policies

This portion of the study reports findings dealing with school policies related to student drug users. The findings are as follows:

1. Of the twenty three (23) schools in the study, six (6) or 26.1% had a district board of education policy pertaining to student drug users and seventeen (17) or 73.9% did not. Though the

school district did not have a board policy, each principal gave an account of what would happen to a student drug user in his school.

2. Of the twenty three (23) schools in the study, twelve (12) or 52.2% of the principals stated that both the parent and police would be notified in the case of a student drug user. Nine (9) or 39.1% said the parent would be notified and would be counseled as to what steps might be taken. Two (2) or 8.7% stated that the student is referred to the counselor who, along with the student, makes the determination if parents should be notified.

PART IV

In-Service Training Programs

Part IV reports findings of the drug abuse education in-service training program for teachers which currently exist.

Of the twenty three (23) schools in the study, fourteen (14) or 60.9% indicated that they had an in-service training program and nine (9) or 39.1% reported that they did not.

Of the fourteen schools reporting that they had an in-service training program, they were of the types and frequencies reported in Table 4-8.

TABLE 4-8. Type and Frequency of In-Service Training Programs on Drug Abuse

Type of In-Service Drug Abuse Program	No. of Schools	Percent
one faculty meeting	6	42.8
two or three faculty meetings	2	14.3
workshop (long term, voluntary)	2	14.3
workshop (short term, mandatory)	4	28.6

PART V

School-Community Programs

The findings reported in this part of the study will be related to cooperative school-community drug abuse programs.

In this part of the interview the principal or his designate was asked if a cooperative drug program existed between the school and community. Of the twenty three (23) schools in the study, seven (7) or 30.4% reported that they did have a cooperative drug program and sixteen (16) or 69.9% indicated that they did not.

Those schools with a cooperative program reported the following arrangements: (a) school counselors participating in crisis intervention centers on a released

time basis, (b) a social worker hired jointly by the school district and community e.g. city council or civic groups, to work with students and parents who need help with drug problems, (c) a school-community task force designed to attack the drug abuse problem at all levels and in all phases of the total community (the task force consists of people representing a cross section of the community), and (d) a drop-in center manned partially by school personnel.

Most of the principals stated that there were referral agencies e.g. clinics, drug centers, guidance services, in the communities that were used frequently but no cooperative arrangement was made with them other than on a referral basis.

PART VI

Evaluation

In this portion of the study, the interviewee was asked if any attempt had been made to evaluate the present drug education program.

Of the twenty three (23) schools in the study, twenty one (21) or 91.3% of the principals or designates said "no." Two or 8.7% said an evaluation had been made. One of the two stated that evaluation data was not yet available. The other school reported an anonymous survey

evaluating the drug education program was conducted by the students. From this survey, this school discovered that 39% of the students did not think the program was worthwhile and that 83% of the students recommended the program for the lower grades.

PART VII

Open Ended Questions

In this portion of the interview, two open ended questions were asked. They were very broad, unstructured questions designed to discover what the immediate response to such a question might be.

The first open ended question was, "What is your reaction to the teenage drug abuse problem?". The responses to this question were quite varied and the answers were very dissimilar. The manner in which the interviewee answered, however, had something in common. That is, the answer would usually consist of an affect, e.g. "frightening," "frustrating," "concerned," or "scares me" which was then followed by a short discourse on the interviewee's impression of the cause of drug abuse, e.g. "generation gap," "affluent society," "drug taking society," "escape device," "breakdown in family unit," or "value conflict."

The second open ended question was, "In your opinion what is the best approach to solving the drug problem?". The answers given to this question had some similarities. Most responded that education was one of the best approaches. The responses seemed to cluster as shown in Table 4-9.

TABLE 4-9. Principals' Opinions on Best Approaches to Solving Drug Problem

Approach to Solving Drug Problem	No. of Responses	Percent
education	14	60.9
work on social ills	3	13.0
total community effort	2	8.7
mass media	2	8.7
change laws	1	4.4
by not presenting so much drug information	1	4.4

CHAPTER V

CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS AND SUMMARY

Conclusions

The findings from this study enables the author to conclude the following about the status of drug abuse education programs in the selected large public high schools of Michigan:

1. Despite the drug use and abuse crisis which exists today in our society among the adolescent population, one-third of the large public high schools in this study reported not having a drug abuse education program as part of their curriculum.
2. The drug abuse education programs of the large public high schools of this study have the following characteristics:
   a. most programs are required of all students some time during their matriculation through high school
   b. the programs are most commonly placed at the tenth grade level

c. most high school programs are not articulated with their respective junior high school programs

d. most high school programs are not coordinated in such a way that the programs avoid repetition

e. most programs are conducted in the social studies departments, or the health and physical education departments

f. most teachers who teach in the drug abuse education programs are not required to have special training in the field before teaching the subject

g. the most common length of the drug education programs is two to three weeks

h. most of the programs have been offered for the last two to five years

i. teachers and administrators (local and/or district) are the personnel most commonly involved in the planning of the drug education programs

3. Most principals interviewed, for a variety of reasons, would not venture to make a guess as to the percentage of students in their schools who have experimented with drugs.

4. Principals interviewed will not make a survey of students to discover how widespread drug use is in their schools because most think that the data gathered is not reliable or the information may cause community reaction.
5. The large public high schools have made no formal survey of parents to discover their attitudes and opinions concerning drug abuse education.
6. Slightly over half of the principals interviewed thought that drug abuse was a major student behavior problem.
7. Most schools do not have a district board of education policy pertaining to student drug users.
8. When a student drug user is discovered, most school officials would notify parents and/or police.
9. The most common in-service training program on drug abuse consists of one faculty meeting devoted to the subject.
10. Most schools do not have a cooperative school-community drug abuse program though many make referrals to agencies in the communities.
11. Very few of the schools attempt to evaluate their drug abuse education programs to discover their effectiveness.

12. Most principals interviewed are very concerned about drug abuse among teenagers and think that education has a role to play in attacking the problem.

Implications

From the conclusions, the author believes certain implications can be made concerning drug abuse education programs in the large public high schools of this study. These implications are as follows:

1. Though drug abuse is a major social problem, not all of the large public high schools have a drug abuse education program. This makes one question the flexibility of school personnel in bringing about curriculum changes to meet current needs.
2. The fact that four-fifths of the drug abuse education programs are not articulated with "feeder" schools, and are not in sequence with other courses and grade levels of the same high school, has tremendous implications for the need for more coordination in education to avoid redundancy. As one principal stated in his description of the drug abuse program in his school, "Some teachers are doing some things." His comment summarizes well the status of many programs.
3. A problem that arises due to our highly departmentalized high schools is one related to an interdisciplinary approach to any subject. For example, drug abuse is touched upon in social studies,

science, homemaking, health, physical education, and other subjects. The coordination of "who will teach what?" is a difficult task because of existing domains.

4. Many of the principals indicated that a student survey has not and would not be made to discover just how widespread drug use was, or is, in their schools. This may have some ramification for the sensitivity of administrators to potentially controversial issues.
5. The findings of the participation of persons in the planning stages of the drug abuse programs certainly has a great deal of implication for education. Most school people complain that students know more about drugs than they do. Yet few schools involve students in the planning of a drug abuse program.
6. The fact that only slightly over half of the principals interviewed stated that drug abuse was a major student behavior problem in their schools may imply that student behavior problems are seen as overt acts rather than passive withdrawn ones, symptoms most common to drug users. As one principal stated, "It does not interfere with my running of this school."

7. School policies related to student drug users are seen as punitive by students when parents and/or police are notified. Since drug use is usually a symptom of a greater problem which motivates the student to use drugs, a counseling approach is needed. Students must feel free to go to school personnel for help with personal problems without fear of punishment.
8. The whole notion of in-service training for staff members must be studied very closely. What is happening in the way of drug use and abuse in-service training in the schools gives evidence for this. In-service is probably the most viable approach to improving instruction yet most in-service programs are too short, with too many people, and do not usually lead to behavioral changes.
9. The fact that there are few cooperative school-community drug abuse programs demonstrates the fragmented approach taken in attacking a social problem in our communities. Each agency "does their own thing" with little or no coordination or cooperation. Since education is mandatory for most teenagers and since that is the segment of the population where drug abuse is most prevalent,

one would think that schools should play a key role in developing agencies which deal with drug problems.

10. One of the most inadequate phases of educational programs is evaluation and this holds true with drug abuse education programs. Schools that offer drug programs are not sure of their effectiveness. When a program is designed, little thought is given to the measurement aspect of its success or failure.

11. Most principals showed concern over the drug abuse problem, but the number and type of drug abuse education programs which exists makes one wonder where drug use and abuse among students happens to be on administrators' lists of priorities.

Recommendations

In view of the conclusions and implications made from the findings of this study, the author makes the following recommendations. The recommendations will be in six parts. These six parts are as follows: Part I--School-Community Programs, Part II--School Drug Policies, Part III--Drug Abuse Education Program, Part IV--In-Service Training Program, Part V--Personnel, and Part VI--Further Study.

Part I--School-Community Programs

Too often, social issues are attacked by several agencies in the community resulting in a fragmented and duplicated effort. Each agency develops its own program unaware that the same or similar services are offered elsewhere in the community. The drug abuse problem is a gigantic one and calls for total community effort and cooperation. Agencies designed to serve the needs of the community must be held accountable for their share in solving the problem. Since so many of our young people are involved in drug use and abuse, the public school is one of the community agencies which should be called upon heavily to participate. Public schools should be represented in all programs in the community designed to combat the drug problem. Too often, however, school officials

see the drug problem as a temporary one. As one veteran principal interviewed by the author on drug abuse stated, "We have faced many so-called critical issues in education and I imagine this too will pass." The fact is that it will not pass. All indications point to drug abuse getting worse, especially among the young. But schools alone cannot solve the problem. It calls for a well planned and well organized community effort. Just as there is no one personality type among drug abusers, there is no one approach or model that should be employed to resolve the drug problem. All must be considered. A multifaceted plan which calls upon community leaders, agencies, and organizations to work cooperatively and with commitment is needed.

Community action plans have been implemented in some communities. The plan currently in progress in Dearborn, Michigan appears to be especially promising. Since this community action plan was instituted on October 20, 1970, it is too early to evaluate the program. However a research and evaluation procedure has been designed as part of the plan to measure the effectiveness of the total program. This plan calls for a community task force composed of all segments of the community to insure that a cross section of the population is represented. It also involves representatives from organized

groups and agencies, e.g. police, health, service clubs, city council, courts, schools, pharmacists and physicians, clergy, youth groups. The task force is divided into several working committees with young people well represented on each committee.[147]

The author recommends a task force type of community action plan with the following committees, their functions, and suggested activities as mentioned in the Dearborn Plan:

Committee on Community Information

Functions. Disseminate drug information through the use of mass media. Prepare printed factual information on drugs for distribution to various community agencies. Provide a speakers bureau for various community groups. Offer seminars and study sessions for those who might be interested.

Suggested Activities. Distribute literature door to door, business locations, and public offices. Prepare releases for newspapers, radio stations, and television stations. Prepare newspaper series on drug abuse for local newspapers.

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[147]Dearborn Community, "Community Task Force to Combat Drug Abuse in Dearborn," Dearborn, Michigan, October 20, 1970.

Committee on Curriculum Development

Functions. Review drug abuse education programs of the other school districts. Study the components of an effective drug education curriculum. Determine the appropriateness of subject matter, learning activities, and grade placement. Consider an articulated and sequential kindergarten through twelfth grade curriculum.

Suggested Activities. Arrange for supplementary activities and programs on drug abuse for students, e.g. assemblies, student seminars, field trips, and guest speakers. Observe current practices in drug education by visiting classrooms in and out of the school district. Plan summer workshop programs for teachers, parents and students.

Committee on Research and Evaluation

Functions. Study the extent of drug use and abuse in the community. Research factors in the community which may contribute to drug use and abuse. Attempt to determine what the sources of drugs are and how they are distributed in the community. Design an evaluation of the total community drug use and abuse education program.

Suggested Activities. Collect data on effectiveness of action plan as the program evolves. Search out

latest research on drugs in medical, psychiatric and sociological journals. Study "personality types" related to drug abusers in the community.

Committee on School Professional Staff Development

Functions. Determine the professional staff needs of a model school drug education program. Plan and implement in-service training sessions for school staff members. Recommend procedures for teachers to follow when confronted with a student drug user.

Suggested Activities. Prepare training films and other audio and/or visual aids for staff. Arrange for staff members to visit community agencies involved in drug abuse.

Committee on Parent Relationship

Functions. Design and implement programs to educate parents on the various aspects of drugs and their use. Establish family counseling services on drug abuse problems.

Suggested Activities. Arrange study sessions on drug use and abuse in parents' homes. Establish telephone "dial access" system for drug information. Conduct small discussion groups with parents and students.

Committee on Multi-Media Materials

Functions. Preview and evaluate multi-media materials on drug use and abuse. Collect materials that would be useful as audio-visual aids in drug education programs. Prepare an annotated bibliography of drug information materials.

Suggested Activities. Establish a drug library. Have students in the school construct visual aids on drug abuse. Provide other committees with multi-media materials which are related to their functions.

Committee on Community Service Centers

Functions. Investigate the possibility of establishing drug clinics, crisis intervention centers, drug education centers and half-way houses in the community. Determine the role of these centers in the total community drug abuse program. Prepare an analysis of the needs of these centers. Recommend possible funding for such centers.

Suggested Activities. Visit existing drug clinics in the community. Sponsor fund raising functions to support clinics. Speak to groups about clinical needs in the community.

Committee on Police and Court Relationships

Functions. Evaluate current legal and enforcement situations of drug abuse. Form a liaison with all agencies so they are aware of the legal ramification of drug use and abuse. Inform the public so they will be aware of and understand the role of law enforcement in drug use.

Suggested Activities. Recruit police and court officials to participate in action plan. Gather data on drug abuse investigations, arrests, and convictions in the community. Institute a work experience program for students interested in penology.

Committee on Legislation

Functions. Study the current legislation in the area of drug abuse. Recommend change where change is needed in legislation related to drugs. Make others aware of the channels to bring about needed change. Support legislation pertaining to a better understanding of drug use and abuse. Screen local and state politicians in an attempt to discover where they stand on drug issues.

Suggested Activities. Gather supportive data for suggestions for legislative changes on drugs. Send a delegation from the community to visit legislators in their offices to discuss laws related to drugs.

Part II--School Drug Policy

The findings from this study show that there must be greater enlightenment on the part of most of the administrators who were interviewed in establishing administrative policies related to the student drug user. A different perspective is needed. Those responsible for policy formation need to view the student drug user from a helping or therapeutic position rather than a punitive one. Though the welfare of all students must be considered, school officials must learn to use the resources available in attempting to assist students who may be in need of help. With this perspective in mind, the author recommends the following:

1. Each school should have an administrative policy related to the student drug user which clearly defines the position of the school, the procedure which will be followed, and the role of each person in fulfilling this procedure. This policy should be reviewed and adopted by the board of education so all people involved, e.g. parent, student, teacher, counselor, and administrator, are well aware of the steps to be taken. Such a policy is important so that a student in need of medical attention is able to get it quickly without confusion as to what steps should be followed.

Also, a clearly defined policy enables the student to determine if he can go to a school official for help with a drug problem without being reported to the policy. Haphazard, well-intentioned procedures kept in the heads of administrators may do more harm than good, though administrators may think this approach is more flexible. Such policies create a great deal of anxiety among those involved.[148]

2. The drug policy should be stated in such a manner that the administrator or counselor has some latitude in making a decision about notifying parents and police about the matter. For example, part of the policy could be stated as follows: "A student drug user who comes to the attention of the administration will be referred to his counselor for an assessment of his particular situation. Each case will be dealt with individually. The school administration shall be responsible for using its judgement, taking into consideration the individual involved and the setting, in deciding what steps should be taken." If a drug user knows his parents or the police will be notified if he talks to his counselor or

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[148]Ochberg, op. cit., p. 54.

an administrator about his drug problem, he will not turn to these individuals for help. Since public school officials can be criticized by parents for not notifying them when the problem arose, the policy must clearly define the fact that the administration will use its discretion. The reasons for not notifying parents immediately in certain cases must be explained.

3. The school district should employ a social worker or psychologist who can work with student drug users either on an individual basis or in groups or both. These persons can handle information about drugs from a student as privileged communication.
4. School drug policies should include referral agencies in the community which are available to students and parents who are in need of help with drug problems.
5. Counselors should play a key role in the establishment of school policies related to student drug use. Counselors should also have special in-service training in dealing with student drug problems. If the school counselor has frequent personal contact with students, he should be prepared to discuss drug use and abuse with some

degree of competency. In a survey of high school students of Michigan on drug use, conducted by the Department of Public Health, students were asked in a questionnaire to rank in order of preference nine sources of advice on drug use and abuse to whom they would turn. The high school counselor was ranked the lowest of the nine sources of advice. This data should cause some concern for administrators as to the effectiveness of student counseling services.[149]

6. School policies related to student drug use should be so stated that it promotes trust between students and school personnel. A student should be able to approach a teacher as a friend to discuss his drug problem without fear of being suspended, and without causing guilt feelings in the teacher because he did not notify school authorities. The teacher should be able to listen to the student's problem without disclosing this information to others and should be able to listen to the student's problem without disclosing this information to others and should be able to make a

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[149]Michigan House of Representatives, Special House Committee on Narcotics, op. cit., p. 33.

referral if he thinks the student needs specialized attention which he is not able to give.[150]

Part III--Drug Abuse Education Program

In describing the components of a model drug abuse education program, the author will restrict the scope of his recommendations to the high school level, though many of the points discussed are applicable to other grade levels. The components will be as follows: the philosophy, determination of need, instructional approach, curriculum, and evaluation.

1. Philosophy: The philosophy of a drug abuse education program should be a broad statement which encompasses the notion that each student is a unique person with certain abilities and potentials. The individual's talents are to be developed in a humanizing educational milieu through warm and meaningful interpersonal interactions with students and adults. Such a notion indicates to the student that he has self-worth and that he can discuss issues and feelings openly and his comments will be received with respect. When drug education is viewed in this context,

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[150]Cohen, op. cit., p. 16.

rather than as a factual presentation on drugs, the program is more likely to get at human needs. An orientation such as this will come closer to approaching the causal factors of drug use and abuse than will the symptomatic.

2. Determination of Need: An attempt must be made to assess the level of sophistication of the students so the drug education program can be tailored to the specific needs of the population. As Feinglass states, "Young people, in relation to drugs, can be categorized as (1) those who will not abuse drugs or can easily be prevented from doing so, (2) experimenters, and (3) abusers. Just where the emphasis in education about drugs should be, depends on the age of the students and the situation in a particular school."[151]

One of the difficulties in making such an assessment of needs is the fact that many school officials are fearful of what the assessment would reveal and who might have access to this information. Some administrators think that if the board of trustees, the newspaper, or the community

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[151]Sanford J. Feinglass, "How To Plan A Drug Abuse Education Workshop," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, p. 100.

were to discover the results of the assessment, the findings would be a reflection upon their reputation as competent administrators.[152]

The author recommends a more open approach in determining the need for a drug education program. The findings should be discussed openly and rationally with the members of the school community so all are aware of the magnitude of the drug use and abuse situation. In this way, each segment of the school community will see the need and become involved in assisting the development of an effective drug education program.

3. Instructional Approach: Just as there is no single therapeutic modality for the treatment of drug abusers, there is no single instructional approach which educators should depend upon. Most authorities state that approaches which should not be used are the scare techniques, and the sensationalism of drug use and abuse, conveyed in the typical school assembly drug programs. Such methods are ineffective and detrimental in conveying accurate and factual information and can

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[152]Richard H. Blum, "Nature and Extent of the Problem," Drug Abuse Information--Teacher Resource Material, Santa Clara County Office of Education, San Jose, California, p. 178.

create a morbid curiosity which may lead to drug experimentation.[153] There are several very promising instructional approaches that have been instituted in some schools. The author recommends the following:

a. A student research approach which requires a student to find the needed information himself and draw his own conclusions. This approach, designed to provide drug education, takes into consideration the differences which exist among human beings and emphasizes the fact that answers to the problems are individually unique. This method calls for a close, working-relationship between the student and the teacher in conducting the research.

b. A behavioral approach to drug education is based on the fact that the act of drug abuse is a behavior. This approach places emphasis upon the actions of the individual; therefore, the focal point is the understanding and appreciation of the self. The premise is that, if an adolescent can answer the questions, "Who am I?", "What am I?", "Where am I

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[153]Louria, op. cit., p. 175.

going?" and "Do I like myself?", he will not turn to drugs.[154]

c. A student-faculty dialog approach which abandons the traditional relationship between the "all-knowing" adult teacher and the ignorant young student is needed. Students who are well informed about drugs contribute their expertise to the group. Each member is on an equal basis and shares in the leadership of the group. Learning is maximized through inquiry, discussion, and confrontation.[155]

4. Curriculum: One of the reasons some school officials give for not initiating a drug education program in their schools is that this will tend to sensationalize drugs. This can be true if the drug education curriculum is not sequential from kindergarten through the twelfth grade. Drug education topics which are integrated into the existing school subject structure avoid the sensationalism which may arise when a program on drugs is introduced at a certain grade level and as a separate unit.

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[154]Stamford Public Schools, The Behavioral Approach to Drug Education, Stamford, Connecticut, p. 1.

[155]Michigan House of Representatives, Special House Committee on Narcotics, op. cit., p. 35.

The author recommends that drug education at the high school level be integrated in the appropriate courses of the various subject area departments. For example, government classes could discuss drug laws and the ways and channels through which they might be revised. Biology classes could learn about the physiological effects of drugs. Chemistry classes could study the substances in botanicals which are used as narcotics and hallucinogens. Sociology classes could investigate the reasons we are a drug taking society and why drug abuse has become so widespread among youths. All classes could discuss how we might relate to one another as human beings.

Current alcohol and tobacco units taught in schools should be integrated into the drug education curriculum so as to avoid the hypocritical notion that these are acceptable because they are used and abused by adults.

All segments of the school community, students, parents, teachers, counselors, and administrators should be represented in the planning of a drug education program. They should be involved in all phases of the program from selecting teaching materials to designing

appropriate evaluation procedures to measure program effectiveness. It is essential that students be well represented on all committees and encouraged to become active participants. Their contributions are extremely valuable.

The drug education curriculum should have four main parts which are: concepts, objectives, activities, and materials. It is important that all of these parts are appropriate to the particular grade level. Too often, curriculum guides sit on teachers' shelves and collect dust because the ideas set forth in them are not functional. The author makes the following recommendations related to the four curriculum segments mentioned above:[156, 157, 158, 159]

a. There are certain concepts which can be appropriately discussed at the high school level. Some of these are as follows:

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[156]San Francisco Unified School District, op. cit., pp. 1-12.

[157]Pharmaceutical Manufacturers Association, op. cit., pp. 78-97.

[158]Tacoma Public Schools, Curriculum Guide for Drug Education--Grades 6-12, Tacoma, Washington, 1968, pp. 1-7.

[159]Rhode Island Department of Education, An Educational Program Dealing With Drug Abuse--Grades K-12, Providence, Rhode Island, September 1969, pp. 17-42.

(1) Drugs have been used by man for thousands of years.

(2) We live in a society where drug and chemical use is socially acceptable.

(3) Drugs are of value to mankind when properly used.

(4) People take drugs for a variety of reasons.

(5) Use of drugs to avoid problems is only a temporary escape.

(6) Drug abuse causes problems for the individual, the family, and society.

(7) Factual and accurate information about drugs is essential to wise decision making.

(8) Some mild discomfort and unhappiness should be endured without relief from drugs.

(9) Critical attitudes are needed to evaluate advertising practices which are intended to increase the sale of alcohol, tobacco, and drugs.

(10) Personal values directly influence behavior.

(11) Socio-psychological conditions play a role in drug abuse.

(12) Relief of daily stress and tension through acceptable activities is important.

(13) Treatment of individuals for drug abuse is difficult and often ineffective.

(14) Control of drug abuse is difficult.

(15) Drug problems require the cooperation of many agencies and individuals.

b. Objectives should be written in behavioral terms and should describe the level of competency the student should reach upon completion of the program. Each concept should have a set of objectives which are congruent with each concept. These are examples of terminal behavioral objectives described above:

(1) Differentiate between known and suspected, short and long range, effects of alcohol, drugs, and tobacco.

(2) List five community resources and agencies where a person with a drug problem could go for help.

(3) Cite seven of the most common reasons given by teenagers for taking drugs.

(4) Given a list of factual information and myths about drugs, the student should be able to discriminate at a 90% level of

accuracy which statements are fact and which are fiction.

c. It is very important that learning activities which are appropriate for adolescents be selected for each objective. The activities should be real, informative, and relevant to the student. The following are examples of such learning activities:

(1) Visit a court of law during the trial of a person accused of drug abuse. Evaluate the sentence in terms of fairness to the accused.

(2) Have the class evaluate audio-visual materials on drugs and have the class discuss the strengths and weaknesses of each.

(3) Analyze the resistance of a community against the establishment of a rehabilitation center.

(4) Compare the American and British methods of rehabilitation from drug abuse.

(5) Conduct individual surveys among family and friends to find the drugs most commonly used and the reasons for their use.

(6) Monitor mass media drug ads. Critique the message and quality and keep track of frequency and quantity.

d. There have been many teaching materials on the market in recent years. Many have inaccuracies. Some are designed to scare students with emotionalism and dramatics. The author recommends the use of students, especially those knowledgeable about the drug scene, to help evaluate drug education materials.

5. Evaluation: One of the greatest weaknesses of most educational programs is the evaluation which usually comes at the end of the program. An effective evaluation procedure is designed during the planning stages when the goals and objectives for the program are being formulated. Evaluation criteria should report the degree of success or failure in meeting the objectives. If the objectives for the program are written in terminal behavioral terms, the evaluative measures are built into the objective statement. Evaluation measurements may take place throughout the program and/or several years after the completion of the program. For example, the effectiveness of a drug abuse education program to deter drug use may

have to be made a year or two after the student has matriculated through the program. Such a follow-up study could result in valuable "feed back" information which would be useful in program revisions.

Part IV--In-Service Training Program

Up to this point, educators have relied heavily on outside consultants on drugs to teach both students and teachers. Experts such as pharmacists, psychiatrists, and narcotics law enforcement officers have been asked to share their background and knowledge. Many times their input has become the major segment of the total drug education program. Though educators must continue to use their particular expertise, they cannot be as exclusively dependent upon them. Educators must give serious consideration to the training of teachers so they will be comfortable and confident in teaching the subject of drug use and abuse. Since the teacher is the key person in an effective drug abuse education program, and has the greatest influence on students, educators must focus their effort on giving classroom teachers the background and tools to accomplish the task.

The magnitude of drug abuse crisis in our society today and the number of teachers who are in need of

training to prepare themselves to teach in a drug education program would appear overwhelming to anyone assigned the responsibility of implementing an in-service training program for staff members. But the task must begin. Educators must approach this task systematically and realistically. Below are some recommendations for the various aspects of a model in-service training program on drug use and abuse for teachers. The author will make recommendations on the following aspects: approach, concepts, objectives, evaluation, planning, program content, participants, and knowledge base.

1. Approach: Since there are so many teachers who need to be trained in drug use and abuse in all school districts, to assure maximum spread of an effective in-service training program, the author recommends a process in which teams composed of teachers and students from the same school are trained who will then return to their respective schools and, in turn, train other groups.[160]
2. Concepts: When planning an in-service training program on drug use and abuse, certain concepts should be considered. The following are suggested for consideration:

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[160]Wayne County, Intermediate School District, "Reducing Delinquency and Drug Abuse--A School Program," Action Grant Application, Detroit, Michigan, June 1970.

a. We live in a drug-using society where the mass media have sold adults and young people alike the notion that an acceptable escape from physical and psychological discomfort is through drugs.

b. The motivations for drug abuse are varied. A few of the most common causes seem to be: rebellion against adults or authority figures, peer pressure or influence, boredom, curiosity, frustration with current problems, escape from psychological inferiority, and "feels good."

c. Schools may contribute to the drug abuse problem by not offering an educational program which is designed to meet the needs of students.

d. Drug information should be presented factually without exaggerating, sensationalizing, or moralizing.

e. The difference between drug use and abuse is the behavior of the user. If drug use results in a behavior not acceptable to the norms of the community, it is then considered abuse.

f. Young people are disenchanted with the values and goals of our society and feel impotent to bring about change.

g. Inconsistencies and hypocrisies which exist in the adult world must be discussed openly.

h. Many young people are not aware of the dangers involved in the use of drugs and need factual information to make a decision to use or not to use drugs when the temptation arises.

i. Opportunities for involvement and participation in school or community activities for students are basic deterrents to drug use.

3. Objectives: Any program should have well defined objectives. Representatives of the training program participants should be involved in the establishing of objectives and planning stages. In setting objectives for an in-service training program the planners should consider the following points:

a. The objectives established for the program should be stated in measureable terms so the effectiveness of the program can be determined.

b. Most objectives for an in-service training program fall into two categories. One is the content objectives, which are those dealing with the subject matter or knowledge base. The other is the process objectives, which are related to certain learned skills.

(1) The content objectives will generally include the following topics: pharmacology, physiological reaction, legal aspects, psychosocial aspects, youth subculture, and history of drugs.

(2) The process objectives will include skills which will facilitate the student-teacher relationship, such as, communicative skills (verbal and nonverbal), empathy skills, decision making process, and listening skills.

4. Evaluation: If the objectives for the in-service training program are stated in terminal behavioral terms, i.e. "by the end of the in-service training sessions the participant should be able to . . . ," the evaluation of its effectiveness is an easier task. Pre-post tests to measure progress in content information and attitudinal change about drugs and drug users are recommended. Evaluation of process objectives can be accomplished by a qualified observer studying the performance of the learned skill by the workshop participant. Evaluation is generally the weakest and most difficult phase of an in-service plan.

5. Planning: As emphasized earlier, representatives of the participants should be involved in the planning of the program. Factors such as the schedule, time, length, speakers, and facilities need to be considered. The author recommends the following:

   a. The program should be a continuous workshop rather than one which is offered on a certain day of the week for several weeks. In a continuous workshop situation the participants get to know each other better, time is more flexible, and the sessions are used more efficiently since less time is taken up re-constructing what happened at the last session.

   b. In order for an attitudinal change to take place, a continuous program lasting from two to seven days is recommended. Participants are more likely to express their own feelings and beliefs in this situation.

   c. Facilities away from the daily work routine environment should be used.

   d. Speakers should be selected after a thorough investigation. Speakers who are knowledgeable and interesting and who are able to move the group toward its ultimate goal should be asked

to participate. A few well chosen guest speakers can contribute greatly to the success of a workshop.

6. Program: Large group in-service training programs where all teachers in a particular school or school district are mandated to attend a meeting on drug abuse are totally ineffective. Program planners must carefully consider group size, workshop participants, and the content.
   a. Groups should be kept small enough for group process activities to take place such as role playing, awareness experiences, exercises of skill in observations, decision making, empathy training, and communication skills.
   b. Participants should represent the disciplines involved in drug education. Those teachers who are best qualified, and who show concern for young people, should be invited to attend. Students should be involved in selecting these teachers. Students should also be invited to participate on an equal basis with teachers.
   c. The content portion of the program will be dependent upon the length of the workshop. The following are some of the subjects which should be part of the knowledge base of the

participants: history of drug and drug use, pharmacology of drugs including alcohol and tobacco, psychosocial and legal aspects of drugs, latest medical and scientific research on drugs, and the role of education in drug abuse.[161]

Part V--Personnel

As stated before, the success of an effective drug abuse education program is dependent to a large extent upon the teacher and his ability to create an atmosphere in the classroom which promotes open discussion and expression of thoughts and ideas. In this way, a student will feel free to talk about his inner conflicts and problems.[162] This means that teachers who have the ability to create this type of atmosphere must be selected to participate in the drug education program. Students are very skillful and perceptive in identifying these teachers.

As Feinglass states,

> The element of over-riding importance in drug education is the teacher. His role is not merely that of a conduit of knowledge. He must, in addition, personify an active force in molding student actions and beliefs. Honesty and integrity that will gain student respect, ability to recognize and respond to student problems, and needs, and to

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[161]Feinglass, op. cit., pp. 102-110.

[162]Stamford Public Schools, op. cit., p. 1.

> show care and concern--these are the prerequisites for a successful mentor in the drug abuse education field.[163]

Teachers who lack these qualities should undergo intensive in-service training to learn these skills.

Since warm, empathic, and caring kinds of teachers are needed in all educational programs, not just drug abuse education, teacher training institutions should focus their attention on developing these essential skills as a part of the professional preparation. School administrators in charge of personnel must also make a greater effort to recruit and to employ more candidates who have these qualities.

Part VI--Further Study

The review of related literature, the scope of the investigation and the findings of this study on drug abuse education in the large public high schools of Michigan leads to the possibility of some interesting further study. Some of these are as follows:

1. A similar study might be conducted to assess the status of drug abuse education in other size high schools or other school grade levels.
2. The same study might be replicated in another state of like size for comparison purposes.

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[163]Feinglass, op. cit., p. 99.

3. It has been frequently reported that high school students know more about drugs than teachers. A comparative study, taking a sample from each, might be conducted.
4. A statistically sound evaluation needs to be conducted of current drug abuse education programs.
5. A study might be conducted to discover how many young teachers who have recently entered the teaching profession have experimented with drugs.
6. A comparative study of effectiveness might be conducted between drug abuse education programs which are offered as a separate course and programs which are integrated into existing courses at the high school level.

Summary

Drug use and abuse has attracted a great deal of attention in recent years. The problem is considered by some to be one of the most serious ever faced by our society. Some state that a whole generation of young people will be lost unless measures are taken to solve the problem. This alarm has caused citizens to respond by placing the responsibility for solutions on certain individuals, agencies, and organizations. The school is one of the public agencies which has been asked to react.

In view of the outcry by the public for schools to do something, this study was made to gather pertinent information on current drug abuse education programs in an attempt to discover what the response of some of the schools has been to this point. The population of this study consists of selected large public high schools in the State of Michigan. A large high school is defined by the author as one which has a student enrollment of 2,000 or more and which is administratively organized on a ten through twelve grade level.

The survey focused on several aspects of the drug abuse education program including the description of the type of program, the determination of need, school policy related to student drug users, in-service training

programs for teachers, school-community cooperative programs, and evaluation techniques.

Because of the size of the population of the study, it was possible for the investigator to personally interview each principal, or his designate, whose school met the criteria mentioned above. An interview questionnaire guide was used so each interviewee was asked the same question and in the same manner by the interviewer.

The findings are reported in Chapter IV of this thesis. The author cautions the reader not to make generalizations about the status of drug abuse education programs in public high schools based on these findings. The results of the survey describe the drug education practices of those schools in the population study as reported by the principals.

It is the hope of the author that this study will contribute to the program development in drug abuse education which is so sorely needed. It is also hoped that the findings and recommendations will assist in the enlightenment and improvement of current drug abuse education practices at the high school level.

BIBLIOGRAPHY

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Books

Committee on Public Health Relations of the New York Academy of Medicine. Drug Addiction Among Adolescents. The Blakiston Company, New York, 1953.

Conant, James B. The American High Schools Today. McGraw-Hill Book Company, Inc., New York, 1959.

Houser, Norman W. Drugs. Scott, Foresman and Company, Glenview, Illinois, 1969.

Kitzinger, Angela and Patricia J. Hill. Drug Abuse. California State Department of Education, Sacramento, California, 1967.

Lingeman, Richard R. Drugs from A to Z: A Dictionary. McGraw-Hill Book Company, New York, 1969.

Louria, Donald B. The Drug Scene. McGraw-Hill Book Company, New York, 1968.

Masters, R. E. and J. Houston. The Varieties of Psychedelic Experience. Rinehart and Winston Inc., New York, 1966.

Pollard, J. S., L. Uhr and E. Stern. Drugs and Phantasy: Effects of LSD, Psilocybin and Sernyl on College Students. Little, Brown and Company, Inc., Boston, 1965.

Solomon, D. The Marihuana Papers. Bobbs-Merrill, New York, 1966.

Periodicals

Ball, John C., William O. Thompson and David M. Allen. "Readmission Rates at Lexington Hospital for 43,215 Narcotic Drug Addicts," Public Health Report, Vol. 85 No. 7, July 1970, pp. 610-616.

Ban, Thomas A. "The Use of the Amphetamines in Adult Psychiatry," Seminars in Psychiatry, Vol. 1 No. 2, May 1969, pp. 129-143.

Barrins, Phyllis C. "Drug Abuse: New Problem for Boards," The American School Board Journal, Vol. 157 No. 4, October 1969, pp. 14-18.

Brill, Henry and Tetsuya Hirose. "The Rise and Fall of a Methamphetamine Epidemic: Japan 1945-55," Seminar in Psychiatry, Vol. 1 No. 2, May 1969, pp. 179-181.

Burbridge, Thomas N. "Marijuana: An Overview," Journal of Secondary Education, Vol. 43 No. 5, May 1968, pp. 197-99.

Cass, Edward R. "Marihuana--Look Before You Leap," Catholic Psychological Record, Vol. 6, Fall 1968.

Cohen, Sidney and Keith S. Ditman. "Prolonged Adverse Reactions to Lysergic Acid Diethylamide," Archives of General Psychiatry, Vol. 8 No. 5, May 1963, pp. 475-480.

Committee on Alcoholism and Addiction, AMA. "Dependence on Barbiturates and Other Stimulants," Journal of the American Medical Association, Vol. 193 No. 8, August 23, 1965, pp. 107-111.

Committee on Alcoholism and Addiction, AMA. "Dependence on Amphetamines and Other Stimulants," Journal of the American Medical Association, Vol. 197 No. 12, September 19, 1966, pp. 1023-1027.

Corliss, Leland M. "A Review of the Evidence on Glue Sniffing: A Persistent Problem," Journal of School Health, October 1967, pp. 442-449.

Demos, George D. "Drug Abuse and the New Generation," Phi Delta Kappan, Vol. L No. 4, December 1968, pp. 214-217.

Der Marderosian, Ara H. "Marijuana Madness," Journal of Secondary Education, Vol. 43 No. 5, May 1968, pp. 200-205.

Eddy, N. B., et al. "Drug Dependence: Its Significance and Characteristics," World Health Organization Bulletin, Vol. 32, 1965, pp. 721-733.

Feldman, Harold S. "The Pill Head Menace," Psychosomatics, Vol. II No. 2, March-April 1970, pp. 99-104.

Garvey, B. M. "The Kilburn Square Drug Abuse Centre," British Journal Addict, Vol. 64, 1970, pp. 383-394.

Gendreau, Paul and L. P. Gendreau. "The 'Addiction Prone' Personality: A Study of Canadian Heroin Addicts," Canadian Journal of Behavioral Science, Vol. 2 No. 1, 1970, pp. 18-25.

Glaser, Helen H. and Oliver N. Massengale. "Glue Sniffing in Children: Deliberate Inhalation of Vaporized Plastic Cement," Journal of the American Medical Association, Vol. CLXXXI, July 1962, pp. 300-303.

Gottschalk, Louis A., Gilbert C. Morrison, Robert B. Drury, and Allen C. Barnes. "The Laguna Beach Experiment as a Community Approach to Family Counselling for Drug Abuse Problems in Youth," Comprehensive Psychiatry, Vol. 11 No. 3, May 1970, pp. 226-234.

Halleck, Seymour. "The Great Drug Education Hoax," The Progressive, The Progressive, Inc., Madison, Wisconsin, Vol. 34 No. 7, 1970, pp. 30-33.

Harrison, Charles H. "The Drug Epidemic--What's a Teacher to Do?", Scholastic Teacher, May 4, 1970, pp. 4-22.

Jaffe, Jerome. "Whatever Turns You Off," Psychology Today, Comm/Research/Machine/Inc., Vol. 3 No. 12, May 1970, pp. 42-44.

Jaffe, Jerome, Misha S. Zaks, and Edward N. Washington. "Experience with the Use of Methadone in Multi-Modality Program for the Treatment of Narcotic Users," The International Journal of Addiction, Vol. 4 No. 3, September 1969, pp. 481-490.

Kornetsky, Conam. "The Pharmacology of the Amphetamines," Seminars in Psychiatry, Vol. 1 No. 2, May 1969, pp. 227-235.

Lasagna, Louis. "The Many Faces of Drug Abuse," Modern Medicine, April 6, 1970, pp. 144-175.

Leonard, B. E. "Cannibis: A Short Review of its Effects and the Possible Dangers of its Use," British Journal Addict, Vol. 84, 1969, pp. 121-130.

Lewis, David C. "How the Schools Can Prevent Drug Abuse," Bulletin of the National Association of Secondary School Principals, Vol. 54 No. 345, May 1970, pp. 45-46.

Nathanson, M. H. "The Central Action of Beta-Aminopropylbenzine (Benzedrine): Clinical Observation," Journal of the American Medical Association, Vol. 108 No. 7, February 13, 1937, pp. 528-531.

Nyswander, Marie E. "The Methadone Treatment of Heroin Addiction," Hospital Practice, April 1967, pp. 27-33.

Ochberg, Frank M. "Drug Problems and the High School Principal," The Bulletin of the National Association of Secondary School Principals, Vol. 54 No. 346, May 1970, pp. 52-59.

Penich, S. B. "Amphetamines in Obesity," Seminars in Psychiatry, Vol. 1 No. 2, May 1969, pp. 144-162.

Pitchess, Peter J. "Dangerous Drugs and Your Child," California Parent-Teacher, August 1967, pp. 16-18.

Schwarz, Conrad J. "Toward a Medical Understanding of Marijuana," Canadian Psychiatric Association Journal, Vol. 14 No. 6, 1969, pp. 591-600.

Staff Reporter. "A Schoolman's Guide to Illicit Drugs," School Management, February 1968, pp. 57-59.

Staff Reporter. "The Drug Scene: High Schools are Higher Now," Newsweek, Vol. LXXV No. 7, February 16, 1970, p. 67.

Ungerleider, J. Thomas and Duke D. Fisher. "LSD: Fact and Fantasy," Arts and Architecture, Vol. 83 No. 11, December 1966, pp. 18-20.

Ungerleider, J. Thomas and Duke D. Fisher. "LSD Today," Medical Digest, July 1967, pp. 33-37.

Unwin, J. Robertson. "Non-Medical Use of Drugs," The Canadian Medical Association Journal, Vol. 101, December 27, 1969, pp. 804-820.

Weinswig, M. H., D. W. Doerr, and S. E. Weinswig. "Drug Abuse Education," Phi Delta Kappan, Vol. L No. 4, December 1968, p. 222.

Williams, Hugh R. "Using Methadone to Treat the Heroin Addict," Canada's Mental Health, Vol. XVIII, March-April 1970, pp. 1-7.

Other Publications

Blum, Richard H. "Nature and Extent of the Problem," Drug Abuse Information--Teacher Resource Material, Santa Clara County Office of Education, San Jose, California.

Brotman, Richard and Alfred Freedman. A Community Mental Health Approach to Drug Addiction, U.S. Department of Health, Education and Welfare, 1968.

Cohen, Sidney. "The Drug Dilemma: A Partial Solution," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, pp. 14-17.

Dearborn Community. "Community Task Force to Combat Drug Abuse in Dearborn," (mimeograph) Dearborn, Michigan, October 20, 1970.

Feinglass, Sanford J. "How to Plan a Drug Abuse Education Workshop," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, pp. 99-117.

Griffenhagen, George B. "A Brief History of Drug Abuse," Teaching About Drugs, American School Health Association, Kent, Ohio, 1970, pp. 117-135.

Keniston, Kenneth. "Drug Use and Student Values," Paper presented at National Association of Student Personnel Administrators' Drug Education Conference, Washington, D.C., November 7-8, 1966.

Kiwanis International. Deciding About Drugs, Chicago, Illinois, 1969.

Landis, James B. and Donald K. Fletcher. Drug Abuse, A Manual for Law Enforcement Officers, Smith, Kline and French Laboratories, 1966.

Levy, Marvin R. "Background Considerations for Drug Programs," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, p. 3.

Maloney, Joseph F. "Communication With Youth," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, pp. 11-13.

Mawdsley, Jack K. "A Study of the Delegation of Administrative Tasks by Principals of the Large High Schools in Michigan as Related to Selected Variables." Unpublished Doctor's dissertation, College of Education, Michigan State University, 1968.

Michigan Department of Education. A Teacher Resource Guide for Drug Use and Abuse for Michigan's Schools, Lansing, Michigan, 1970.

Michigan Education Directory. Michigan Education Directory and Buyer's Guide, 1969-1970, Lansing, Michigan.

Michigan House of Representatives, Special House Committee on Narcotics. Drug Dependence in Michigan, April 1969.

North Central High School. "Narcotics," Course syllabus (mimeograph) Indianapolis, Indiana.

Nowlis, Helen H. "Communicating About Drugs," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, pp. 8-10.

Nowlis, Helen H. "Student Drug Use," Paper presented at the American Psychological Association Convention, Washington, D.C., September 7, 1969.

Peterson, Robert C. "Suggestions for Educators," Resource Book for Drug Abuse Education, U.S. Department of Health, Education and Welfare, October 1969, pp. 4-7.

Pharmaceutical Manufacturers Association, Legal Division. "Narcotic and Dangerous Drug Laws: Penalties for Illegal Possession and Sales of Depressant and Stimulant Drugs, Narcotics and Marijuana," Teaching About Drugs, American School Health Association, Kent, Ohio, 1970, pp. 174-176.

Rawlin, John W. "A Review of Sociologically Relevant Literature on Drug Abuse," Southern Illinois University, Edwardsville, Illinois, 1967 (mimeograph).

Rhode Island Department of Education. An Educational Program Dealing with Drug Abuse--Grades K-12, Providence, Rhode Island, September 1969.

Rothman, Jack. "How to Organize a Community Action Plan," The Next Step, Governor's Office of Drug Abuse, Lansing, Michigan, pp. 1-16.

San Francisco Unified School District. Drugs and Hazardous Substances--Grades K-12, San Francisco, California, October 1969.

Stamford Public Schools. The Behavioral Approach to Drug Education, Stamford, Connecticut.

Tacoma Public Schools. Curriculum Guide for Drug Education Grades 6-12, Tacoma, Washington, 1968.

Ungerleider, J. Thomas. "A Medical Look at the Facts and Fantasies," The San Francisco Examiner, April 23, 1967.

Wayne County, Intermediate School District. "Reducing Delinquency and Drug Abuse--A School Program," Action Grant Application, June 1970, Detroit, Michigan.