

A SURVEY OF DRUG USAGE BY STUDENT NURSES
IN ONE SELECTED SCHOOL OF NURSING

by

Zelotta M. Mendelson B.S.

A THESIS

Presented to
the University of Oregon School of Nursing
and the Graduate Council
of the University of Oregon Medical School
in partial fulfillment
of the requirements for the degree of
Master of Science

June 9, 1972

APPROVED:

[REDACTED]

Lucile Gregerson, M.Ed., Associate Professor, Thesis
Adviser

[REDACTED]

May Rawlinson, Ph.D., Assistant Professor, First
Reader

[REDACTED]

Everlyn Schindler, M.A., Associate Professor, Second
Reader

[REDACTED]

John M. Brockhart, Ph.D., Chairman, Graduate Council

ACKNOWLEDGMENTS

The author wishes to express her appreciation to Miss Lucile Gregerson, Associate Professor, under whose guidance this study was planned and executed.

The author also wishes to extend gratitude to the instructors and students at the School of Nursing who graciously gave of their time.

l.m.

This study was undertaken with the financial assistance of
a United States Public Health Traineeship, Grant Number
NT-35-C11

TABLE OF CONTENTS

CHAPTER	Page
I. INTRODUCTION	1
Introduction to the Problem	1
Statement of the Problem	2
Purpose of the Study	2
Limitations	3
Definitions	3
Importance of the Problem	3
Sources of Data	4
Procedure of the Study	4
Overview of the Study	5
II. REVIEW OF RELATED LITERATURE	6
Introduction	6
History	8
Marijuana	10
Tobacco	17
Alcohol	20
Barbiturates	23
Amphetamines	25
LSD	27
Sociological Aspects	28
Psychological Factors	30

CHAPTER	Page
Related Studies	33
Summary of Literature and Related Studies	43
III. REPORT OF THE STUDY	44
Introduction	44
Procedure	44
Findings and Discussion of Data	45
IV. SUMMARY, CONCLUSION, AND RECOMMENDATIONS FOR FURTHER STUDY	83
Summary	83
Conclusions	88
Recommendations for Further Study	88
BIBLIOGRAPHY	90
APPENDICES	
A. Drug Usage Survey Form	97
B. Raw Data	99
ABSTRACT	

LIST OF TABLES

Table		Page
1	Distribution of Eighty-Seven Student Nurse Participants by Age.	46
2	Extent of Drug Usage by Twenty-Five First Year Student Nurses.	47
3	Extent of Drug Usage by Thirty-Five Second Year Student Nurses.	48
4	Extent of Drug Usage by Twenty-Seven Third Year Student Nurses.	49
5	Extent of Drug Usage by Eighty-Seven Student Nurses.	50
6	Responses of Eighty-Five Student Nurses Regarding Drug Usage by Others.	52
7	Responses to Possible Future Experimentation with Drugs.	55
8	Responses Concerning Plans to Stop or Continue Drug Usage.	55
9	Responses of Eighty-Seven Participants Regarding Desire for More Information on Drug Usage and Drug Abuse.	56
10	Cumulative Responses of Twenty-One Students Who Did Not Desire More Information Regarding Drug Usage.	64
11	Cumulative Responses of Fifty-Five Students Who Desired More Information Regarding Drug Usage.	74

CHAPTER I

INTRODUCTION

Introduction to the Problem

During the past several years educators, civil authorities, the health professions and the news media have become increasingly alarmed about drug usage among youth. The prevalence is cause for alarm. The literature reveals a growing number of studies and research projects carried out in colleges, secondary and elementary schools. In 1964, Blum and Associates stated that most usage appeared to be in the graduate student group. (6) Recent San Mateo studies point to users in the seventh grade. (14, 41)

In 1967, surveys by the National Institute of Mental Health indicated twenty percent of the students on American campuses made a habit of using marijuana and stated that untold others have tried it. (11) The Blum studies (1969) showed twenty-five percent of urban college students had tried marijuana. From 1967 to 1969 there was found to be a rapid increase in the number of students experimenting with the drug. It was found that more persons were using drugs but that proportionally hallucinogens became less popular even though their use increased. The use of opium is expanding steadily. Conclusions indicate that most users began

their experimentation in college; that most usage was learned from peers and that successful and active students could be involved in illicit use just as much as the deviant or fringe element. Other findings point out that fifteen to twenty percent of undergraduates have taken LSD or want to take it in spite of its bad outcomes. Marijuana has increased in regular usage as opposed to just experimentation. According to Blum, the overall student drug usage is frequent enough that it must be considered within the normal range of behavior at least on some campuses. (6) The literature, news media, and educators agree that drug usage is an increasing social problem. It is concluded that information regarding extent of usage must be sought from the source, namely the youth in schools and colleges. The information may be used to facilitate a more effective educational program.

Statement of the Problem

Some knowledge of drug usage among college students has been elicited. The extent of drug usage among nursing students has yet to be determined.

Purpose of the Study

This descriptive study has been undertaken a) to determine the extent of drug usage by student nurses in a selected school of nursing and b) to determine if students desire more information regarding drug usage and drug abuse.

Limitations

This study includes only the information obtained from a questionnaire distributed to eighty-seven student nurses in a selected school of nursing. No attempt was made to validate the statements made by the respondents.

Definitions

Drug use refers to that situation when the effects of the drug utilized can be realized with minimal hazard whether or not used therapeutically, legally or prescribed by a physician.

Drug abuse refers to that situation when drugs are taken or administered under circumstances and at dosages that significantly increase their hazard potential, whether or not used therapeutically, legally or prescribed by a physician. (22)

Drug abuse may also be defined as the use of a chemical agent to the point where it seriously interferes with the individual's economic, social or health functioning. (45)

Importance of the Problem

In order to increase knowledge about students, it is important to seek information from them. This information may alter curriculum content. From this study, inferences can be made regarding drug usage and knowledge and regarding the students' desire for more drug knowledge.

Sources of Data

The primary sources of data were the responses of eighty-seven student nurses to the questionnaire. The data collection tool was an adaptation of one used for a study on drug usage in the junior and senior high schools of San Mateo County, California. The secondary sources of data were obtained from a review of the literature and related studies.

Procedure of the Study

A general survey of the literature concerning youth and drug usage was carried out. It was anticipated from this literature that a frame of reference would be established. The problem was defined. The purpose and scope of the study was formulated. The limitations were identified. A data collection tool in the form of a questionnaire was constructed by using a modified form of the San Mateo County Health Department Drug Usage Survey. Telephone communication to the student program director of the selected school of nursing resulted in a plan for student participation in the study. The questionnaire was given to three groups of students, sophomores through seniors on three separate occasions. The participants folded their questionnaires, placed them in an envelope and deposited them into a manila folder to insure anonymity. The data were tabulated and interpreted. The findings were summarized, conclusions

drawn and recommendations were made for further study.

Overview of the Study

Chapter I contains the introduction to the problem, the statement of the problem, the purpose of the study, the limitations, the importance of the problem, definitions and sources of data.

Chapter II includes a review of related literature and studies of drug usage among youth.

Chapter III describes the methodology, statistical analysis of the data and the interpretation of the findings of the study.

Chapter IV includes the summary, the conclusions of the study, and recommendations for further study.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

Society faces an increasingly serious problem arising from indiscriminate drug usage, especially among young people. Communities are beginning to mobilize their resources in an attempt to cope with this problem.

On November 14, 1969, Governor Tom McCall of Oregon called an Operation Drug Alert. He appointed a committee to organize a program of information to be distributed throughout the state. The committee generally was to define proper attitudes towards drugs; to identify techniques which would result in effective action before symptoms became acute; to continue to develop an adequate treatment and rehabilitation program with self-help programs, psychological, social and medical programs, and maintenance programs.

In August, 1971, Governor McCall told the opening session of the fourth annual Western Institute of Drug Problems that there was no single drug abuse problem and no single cure for it. Avenues of approach include a nationwide public education program, use of federal grants to develop a treatment program for young drug dependent persons, also for demonstration of alcohol and safety programs; expansion and

improvement of services to alcoholics and the new after-care service for narcotic addicts. (48)

Nursing is called upon to face this drug problem not only in the hospital emergency rooms but in the street, at youth rallies and in school situations. A recent article in the American Journal of Nursing has defined nursing responsibilities in drug crisis intervention. Zerwekh and Foreman stated that the increasing number of drug abuse emergencies in the United States demand certain knowledge and care aspects from all medical personnel. The nurse must be able to assess the patient's condition to facilitate determination of symptomatic intervention and to help collect information for establishment of a differential diagnosis. Appropriate intervention varies with each drug. The assessment has three facets: contextual, behavioral and physical. Inquiry should focus on determination of the drug the patient thinks he has taken and events which followed. The patient's friends can be the best source of information and the nurse's accepting manner greatly influences her effectiveness in this stage of assessment. The authors concluded that concerned knowledgeable help during drug crisis can return the patient to previous level of function and may lead to a growth producing experience. A trust established during crisis has led to effective referral for long term therapy. The establishment of rapport with an alienated

youth community was the most significant change arising from help in a drug crisis. (61)

History

Throughout history there has been use of the "Indian Hemp", "Cannabis Indica" or "Marijuana" plant. People have used it for easement of pain, for worship of their gods and for visions or dreams. Ancient Egyptians and Assyrians made reference to Indian Hemp or Soma. The drug was used by their holy men. Earliest Chinese medical books list Hemp as a narcotic or pain relieving drug. There is a reference from the Song of Solomon where Calamus is spoken of as one of the chief spices in an exotic garden. Solomon asked his beloved to come into his garden and partake of his pleasant fruits. It is thought that Calamus really refers to hemp or marijuana. (3)

Hemp has a variety of names most commonly known as marijuana (from the Spanish 'Maria Juana') and the Arabic hashish. Marijuana is the dried flowers of the female plants. Hashish is the resin which coats the flowers and shakes off as a golden powder. It is then heated and pressed into blocks. The heating darkens the color. It is interesting to note that the classic Arabic and American slang for hemp is the same, "grass".

Another historical reference of note to the hemp plant is the famous or infamous hashish assassins of Arabia. With

their mountain fortress temple and promises and visions of paradise, they were known and feared. It is said that they were promised paradise whether caught and killed or whether successful in their assassinations; they obviously preferred the hashish unreality to the reality of their world.

Many times in American Indian lore reference is made to the peace pipe. The community pipe was also used for smoking at prayer and festival time. It is thought that the Indians may have mixed some marijuana with other herbs and bark. (34)

Lewis Carroll described a hoopah-smoking caterpillar in the classical Alice in Wonderland. The hoopah is a water pipe used for smoking opium or hemp. The caterpillar answered a thought question of Alice's. Perhaps Mr. Carroll was not serious in his portrayal of the pot smoking caterpillar and its mind reading abilities, but mind expansion is often alluded to by drug promoters. (34)

In 1845, Thomas de Quincey, author of Confessions of an English Opium Eater, predicted psychological effects of industrial urban society and related them to the use of drugs. He said that "the fierce condition of external hurry" would subdue the "grandeur which is latent in all men." He stated further that "without sufficient opportunity for solitude and contemplation, human beings lose their capacity to dream splendidly." (34) He added that without these

opportunities, men lose meaning in their lives and cannot enrich their experiences with imagination. De Quincey spent most of his life struggling against his addiction of opium and believed that his drug-induced fantasy was perhaps a poor substitute for real spontaneity of feeling. (34)

Marijuana

Marijuana is a very popular (a Life Magazine article stated that 12,000,000 use the drug) (21) drug with relatively easy accessibility. It is much maligned due to stringent laws. It has been proven that the drug brings about the following physiological changes: "increased pulse rate, slight rise in blood pressure and in blood sugar, increased frequency of urination, dilation of pupils and reddening of the eyes resembling conjunctivitis, dryness of the mouth and throat, and occasionally nausea, vomiting and diarrhea." (35)

The subjective and psychological effects of marijuana are dependent upon the personality of the user. Effects are also dependent upon the user's expectations and the circumstances under which he takes the drug. In most people, effects are pleasant at low levels and unpleasant at higher levels. Feeling of contentment and inner satisfaction, free play of imagination, loss of time awareness, laughter and hilarity may or may not be followed by moody reverie with or

without depression. Vivid hallucinations are found at high dose levels. (35)

In 1965 Mechoulam and Gaoni reported the first synthesis of trans-tetrahydrocannabinol (THC) which they stated was the psychotomimetically active part of hashish (marijuana). Synthetic THC is now available for research in a very limited supply. Until recently, few research studies have been done with marijuana due to the legal restrictions and the unavailability of the drug through legal channels. (11, 45, 46).

One published study of marijuana was done in the Canal Zone with thirty-four soldiers. A committee was designated by the Commanding General in June, 1931, to reinvestigate the effect of marijuana smoking upon military personnel. The committee included three health department officials, two army doctors and one navy doctor. It was decided that soldiers who were known to be users of marijuana would be hospitalized, permitted to use the drug and then the drug would be withdrawn. Throughout the period of hospitalization the patients were observed and studied by a psychiatrist. Thirty-four soldiers were observed. The marijuana used was grown at the Canal Zone experiment gardens to assure uniformity of product. The soldiers reported symptoms of hunger and hyperphagia, loss of inhibitions, sleepiness. Common effects observed in the users were symptoms of mild intoxica-

tion and increased pulse rate. No ill effects were observed even when soldiers were given marijuana ad libitum; there were no changes of performance on psychological and neurological tests. (44)

In 1968, at Boston University School of Medicine, Weil, Zinberg, and Nelson did a clinical and psychological experiment on marijuana by observing its effects on non-marijuana smokers. Subjects consisted of nine male volunteers twenty-one to twenty-six years old, all of whom smoked tobacco. Eight regular users of marijuana also participated. Chronic users of marijuana were tested on high dosages of the drug with no practice sessions while the non users were required to come to four sessions a week apart. Conclusions were: It is safe to study the effects of marijuana on volunteers in the laboratory. Non-smokers of marijuana do not have strong subjective experiences after smoking light or heavy doses of the drugs and do not report the same effects as those described by regular users. There was definitely some impaired performance on simple psychomotor and intellectual tests after smoking marijuana. It was found that regular users get high but show less impairment on tests than non-regular users. Marijuana increases the heart rate slightly but does not change the respiratory rate. No change was seen in pupil size in short-term exposure to marijuana. Marijuana causes dilatation of conjunctival blood vessels and produces no change in blood sugar levels. (46)

Smith and Mehl studied marijuana toxicity, using population from the Haight-Ashbury Medical Clinic, San Francisco, California. They defined acute toxic reactions as unpleasant effects from a single marijuana experience such as nausea, anxiety paranoia and disorientation. Chronic toxic reactions are said to be those undesirable effects resulting from chronic marijuana use. Since chronic physical damage has yet to be demonstrated, chronic toxic reaction seems to be an impairment of social functioning described as a loss of desire to work or face challenges. The authors found anxiety reactions, psychotic breaks and overdose reactions and believe the reactions to be dependent upon "the nature and strength of the drug used, the personality and mood of the user and the social context in which the drug is used". (46)

Several instances in the literature described adverse reactions to marijuana. (11, 34, 46) Statistics were not quoted but one inference was that these reactions more often turn out to be from the middle-aged naive takers of the drug. Reactions are often attributed to pre-psychotic personalities. The generations seem to disagree upon the consequences of marijuana smoking. There are law enforcement officers, judges, teachers, and physicians who claim that marijuana is addictive and that its use leads to moral degradation, psychological instability and antisocial behavior. It is also claimed that marijuana is the open door to opium,

the amphetamines or hard narcotics. There are ever increasing numbers of young pot smokers who claim that marijuana is harmless or less harmful than nicotine and alcohol. Researchers stress the importance of the individual's psychological environment upon drug reactions. (26)

A study done by the Haight-Ashbury Clinic under the direction of David E. Smith, M.D. (1967), showed that of 413 respondents, 51 percent of whom had had some college education; 94.6 percent males and 98.4 percent females had used marijuana. These people also had had various drug experiences other than marijuana. Marijuana use was first found at a mean age of 17.07 years with a range of 16.2 to 18.6 years. This study supports the premise that marijuana is being used by an increasingly younger group. Ninety to ninety-five percent of the users stated they would continue to use the drugs. (46)

According to Goddard, an estimated twelve million Americans have used marijuana in recent years. He indicated that although ninety to ninety-five percent of heroin users in the United States first used marijuana, there is nothing inherent in the drug to cause people to switch from marijuana to the more potent drugs. He stated that personality factors of the individual are responsible for the change to more powerful and addicting drugs. (21)

The National Institute of Mental Health's Dr. Stanley

Yolles, predicts that many unanswered questions about marijuana will be answered in the next few years. New federal funds for research will provide for adequate supplies of the drug for testing, for studies of the effects on various animals, and for clinical tests on humans. (48)

A 1967 survey by the National Institute of Mental Health indicated that twenty percent of the students on American campuses have made a habit of marijuana. Untold others have tried it. Yale University put usage at twenty percent but the student newspaper made it thirty-five percent. At Columbia University, the Dean of Students said he would not be astonished if marijuana users turned out to be one third of the student body. (48)

The literature indicates that there is an ever-growing drug problem of which marijuana is playing an ever-increasing role. Some sociologists have considered the laws to be for many as much a reason for usage of the drug as not. (11, 34, 46) The Federal law controlling marijuana is a tax statute enacted in 1937 and enforced by the Bureau of Narcotics. The statute authorizes the transfer of marijuana between persons, for example; importers, wholesalers, physicians, and others who have paid taxes. Since there is no medical use of the drug, only a few people are registered under the law and the drug is in actuality illegal. Unauthorized possession is a criminal act. Sale or purchase are also

criminal offenses. Possession and sale are offenses against the Uniform Narcotic Drug Act which controls marijuana in most states.

Marijuana is considered a dangerous drug by Oregon law (Oregon Revised Statutes regarding Dangerous Drugs and Narcotics 474.010). The definition of "Narcotic drugs" in the Oregon statutes is "coca leaves, opium, marijuana, and every other substance neither chemically nor physically distinguishable from them; or other drugs to which the federal narcotic laws may now or hereafter apply; or any drug found by the State Board of Pharmacy, after reasonable notice and opportunity for hearing, to have addiction-forming or addiction-sustaining liability similar to morphine or codeine, from the publication of such findings." (19) Any persons violating Oregon statutes pertaining to dangerous drugs will be penalized "by a fine not exceeding \$5,000 or by imprisonment in the state penitentiary for not exceeding ten years; or both." (19)

Judge John Murtagh, Administrative Judge of the City of New York Criminal Court said in 1966: "If there is success in fighting the problem of narcotics addiction, it will be due to the scientists." Basically, it is a public health matter. Punishment should be limited to deviant conduct which harms others. An enforcement law corrupts more than it corrects. (14)

Dr. James Goddard, former director of United States Food and Drug Administration, has said that marijuana should not be legalized and that although the law is not precisely defined, it may have a deterrent effect. Although using marijuana is a private act, it does have the potential to cause harm to society. He further stated that if alcohol and tobacco were not already legal, knowing what is now known, voters might decide against their legalization. (21)

Helen Nowlis in 1969 stated the story of marijuana is not yet written and called for research to find the answers. (34)

Tobacco

The active principle of tobacco is nicotine. The tobacco user may exhibit the following systems: gastrointestinal disturbances, nausea, headache, insomnia, anxiety, irritability, tremors, neuralgia, cardiac arrhythmia, palpitation, coldness of the extremities. Nicotine is an efficient vasoconstrictor which causes spasmodic contraction of the peripheral arterioles. Withdrawal symptoms may include restlessness, craving, discomfort and vague symptoms similar to opium removal. Diseases found more often in smokers than non smokers are: endarteritis obliterans; primary pulmonary carcinoma; carcinoma of the lips, tongue; and certain heart diseases. The Surgeon General's report on Smoking and Health definitely links it to pulmonary car-

cinoma and states that heavy smoking reduces life expectancy. (57)

In 1969 in London a study of school boys' smoking was undertaken as part of the research program carried out for the ministry of health in order to aid in an anti-smoking campaign. Questionnaires were completed anonymously by over 5,000 boys aged eleven to fifteen from sixty schools. The questionnaire covered smoking habits, attitudes and related characteristics. Data showed that most boys try smoking while they are still at secondary school. Of the youngest ones, only a few reach the stage of smoking one cigarette a week and of the oldest ones, only about one third do. The data show also that most boys smoke filter tip cigarettes and buy them in shops and machines. All schools taking part in the study have conducted health education campaigns which appeared to have little or no effect upon smoking habits. The researchers did find that in schools where the headmaster smoked, more smoking occurred among the boys and less when the principal was a non-smoker.

The anti-smoking information did increase the childrens' awareness of health hazards and smoking. Ninety-five percent of the boys were aware of lung cancer. Relationships between social background and smoking experience revealed that a permissive home, circle of friends who are smokers and poor school achievement accompany the tendency

to smoke. The authors narrowed the field of important influence upon smoking to these four: (1) number of friends who smoked, (2) anticipation of adulthood, (3) parents' permissiveness, (4) whether put off smoking by the danger of lung cancer. This study indicated that boys value toughness and precocity and that they saw these values in cigarette smoking. (8) Usage of this knowledge is shown in the recent anti-smoking commercials on TV depicting athletic youngsters who disclaim smoking.

The Council for Tobacco Research is the sponsoring agency of a program of research into questions of tobacco use and health. It was organized in 1954 by representatives of tobacco manufacturers. The Board consists of ten scientists and physicians who maintain their institutional affiliations. The council has worked towards one goal--to develop a research program to provide significant data about lung cancer, heart disease, chronic respiratory ailments and other diseases. The Board stated that the diseases being dealt with are not simple and therefore simple answers cannot be expected. They further believe that the restricted monofactorial interpretation of smoking as a causal factor in total mortality or in relation to certain diseases ignores the validity of a vast amount of research relating to the possible influence of many other factors or combination of factors. The council is trying to separate and analyze

data or clustered data to show that the statistically significant differences between smokers and non smokers may not have to do with smoking only, but may be of genetic, socioculture or psychological origin. (39)

A study by Coba Rasmussen of smoking by student nurses in Portland, Oregon, indicated that the "expressed opinions regarding the health hazards involved with smoking were not related to the personal smoking habits of the students who reported they smoked." This study corroborates the literature that knowledge of health hazards does not result in change of personal habits. (7, 9, 38)

Alcohol

The most commonly abused sedative is ethyl alcohol. In the United States, alcohol is the most widely used social drug. It is legal and acceptable in our culture. Actions are: general depressant of the central nervous system, capable of producing general anesthesia, coma, respiratory depression and death in doses about ten times greater than those producing mild effects.

Three ounces of ninety proof whiskey taken over a short period of time produce .05 milligram percent blood level, relaxation and a sense of well being; increased talkativeness and slightly reduced reflexes but no significant impairment of driving skills. Six ounces of ninety proof whiskey produce .10 milligram percent blood level, slightly

slurred speech, incoordination of movement, impaired judgment, reduced inhibitions, less emotional control and a six-times increase in driving accidents and fatalities. Nine ounces of ninety proof whiskey (.15 milligram percent blood level which is the present legal driving level) produce impaired memory, judgment, emotional lability and quarrelsomeness. At somewhere near the level of eighteen ounces of ninety proof whiskey, the dosage produces coma and death from respiratory depression. (42)

Alcohol has a high psychologic and physical dependence liability. Tolerance develops partly due to its depressant effects but very little to the lethal dose requirement. Mild withdrawal symptoms occur within a few hours after a single marked alcohol intoxication.

Withdrawal symptoms include tremulousness, nausea, anxiety, perspiration, cramps, vomiting, tremors proceeding to persecutory hallucinations, grand mal convulsions, delirium, exhaustion, cardiovascular collapse and death depending upon the physical dependence developed. Irwin stated that the withdrawal is more dangerous and potentially fatal than from heroin. Once delirium is developed, it is difficult to arrest and reverse. (22) Smith calls delirium tremens the most severe withdrawal state that is seen in medicine today. He defines the disease alcoholism as a state in which chronic repeated intoxication has most seriously compromised the individual's ability to function normally. (45)

The Alcoholism and Drug Addiction Research Foundation of Canada published a report (1969) of a survey of Toronto students grades seven through thirteen. Results showed the following percentages of users: 46.3 alcohol, 37.6 tobacco, 9.5 tranquilizers, 7.3 stimulants, 6.7 marijuana, 5.7 solvents, 3.3 barbiturates, 2.6 LSD, 2.6 other hallucinogens and 1.9 opiates. Data pointed out that boys tried drugs more often than girls and that alcohol was the most frequently used mood modifying substance among young people. (1)

The Foundation's research on the tolerance-producing physical adaption to alcohol suggests that physical dependence is not the cumulative result of years of abuse but can be brought on by repetitive drinking over a few weeks. This process can be reversed when drinking ceases. As a result, it is not necessary to become a socially or psychologically deteriorated alcoholic in order to experience physical dependence. Other Foundation studies report that a large percentage of alcoholics have from early in their drinking habits drunk heavily and that the individual's level of drinking affects the possibility of physical complications such as liver disease. It was also found that 250,000 Ontario drinkers averaged 3.4 ounces of alcohol daily. (1)

Progress toward understanding psychic dependence is also needed. Psychic dependence is evident in the tendency of recovered alcoholics to relapse, the loss of control over

quantity to be consumed, the chronic excessive use of drugs which have not been shown to involve physical dependence.

It is important that lack of a physical element in drug dependence does not negate the drug from being dependence producing. Drug dependence according to World Health Organization is always a psychic state but only sometimes a physical state.(60) The Alcoholism and Drug Addiction Research Foundation of Canada offers a practice of "prohibition without punishment" to alcohol and drug offenders. This means apprehension of the person, confiscation of supplies and provision for medical educational facilities with parole options. This kind of program requires an increase in personnel as probation officers, drug educators and youth guidance people. Basically, these personnel would offer services that are preventative rather than rehabilitative since the majority of people using these substances are not yet pathologically dependent upon their continued use.

Barbiturates

Barbiturates are most popularly used for sedation and hypnosis, ranging from simple sedation to general anesthesia. A large number of compounds have been synthesized but only a small number have proven to be therapeutically effective. These drugs are salts of barbituric acid which is a synthetic derivative of malonic acid and urea.

All barbiturates have a depressant effect on the central nervous system. Some preparations mainly affect the motor centers and are used as anticonvulsants. Large amounts of the drug can cause respiratory and cardiac depression and hypotension. Some can cause tolerance and dependency.

Side effects include a "hangover", depression, nausea, and emotional disturbances, also skin rashes, bad dreams, restlessness and even delirium. Acute poisoning can occur after ingestions of large amounts of the drugs. The patient demonstrates mental confusion, delirium, drowsiness, lethargy and then coma. Symptoms of chronic poisoning are headache, weakness, anorexia, anemia, visual disturbances, amnesia, renal damage and or psychosis.

It has been known for some time that alcohol and barbiturates are "a deadly combination". A fact sheet reprint from Time Magazine has been published by the Oregon Alcohol and Drug Section of the Mental Health Division. Biochemist Jack E. Wallace and Elmer V. Dahl, M.D., studied body enzyme alcohol dehydrogenase. This enzyme breaks down alcohol in the body to acetaldehyde, which another enzyme breaks down to acetic acid. By experimentation the researchers found that barbiturates disturb the first breakdown process and leave a large amount of alcohol in the system. In studying rats that have been given barbiturates, it was

found that they cannot metabolize alcohol. Thus, an ordinary sedative dose of barbiturate can combine with an ordinary amount of liquor (2-3 ounces) and leave behind a lethal dose of nerve depressant alcohol.

Barbiturate users may react more strongly at one time than another. These drugs produce physical dependence and body tolerance to them requires increasingly higher doses. Barbiturates are a leading cause of automobile accidents. These drugs are also a leading cause of accidental poison deaths in the United States and frequently implicated in suicides. Young people have easy access to these drugs as billions are used every year in millions of homes to put America to sleep. Slang names are "downers", "goofballs" and "barbs".

Types of barbiturate abusers include persons who are seeking hypnotic effects to deal with emotional distress, persons seeking the excitation reaction that occurs after tolerance has developed because of prolonged use, persons who use barbiturates to counteract the effects of stimulant drugs, and persons who use barbiturates in combination with other types of drug abuse primarily alcohol.

Amphetamines

Amphetamines are the "uppers", "speed", "crystals", "bennies" and "pep pills". Their pharmacological names

are methamphetamine (methadrine, desoxyn) d- and dl- amphetamine (dexedrine and benzedrine).

These drugs are powerful stimulants and affect the central and sympathetic nervous system causing increased wakefulness, alertness, activity, talkativeness, restlessness, euphoria and reduced appetite. Larger doses produce irritability, aggressiveness, anxiety, suspiciousness, excitement, auditory hallucinations and paranoid delusions (psychotic reactions). Also, amphetamines increase diaphoresis, increase respiration rate, elevate blood pressure and produce hand tremors.

Physical dependence upon the central nervous system stimulants does not occur in the classic pattern but central nervous system stimulants do produce high psychological dependence. When prolonged usage is discontinued, the individual lapses into an exhausted state, may sleep for twenty-four to forty-eight hours, may eat ravenously and usually has a prolonged depression reaction.

The injection of methedrine into a vein (called speeding) in large doses can be fatal. It produces a high level sense of well being, of power plus a sexual orgiastic experience. Intravenous speed users are good candidates due to contamination for serum hepatitis and liver damage. Chronic abusers also show social, intellectual and emotional breakdown. (22, 8, 13)

L S D

LSD -- D-Lysergic acid diethylamide

The diethylamide derivative of LSD, produced synthetically from lysergic acid has been under research for some time for use in certain psychosis, especially chronic alcoholism. It has not been proved that there is therapeutic value. It is an extremely potent chemical and a dose of fifty to two-hundred micrograms can produce a "trip" lasting eight hours. This amount is so small it is scarcely visible and has to be contained in some medium.

Physical changes may include lowered temperature, nausea, diaphoresis, dilated pupils, incoherent speech and tachycardia. Psychological changes include mood change, distortion of senses (illusions and hallucinations). The mental symptoms may recur days or even months after a single dosage. LSD may produce changes in the brain, spinal cord and chromosomes.

Hoffer and Osmond (20) in controlled experiments with "normal" subjects stated there is no typical LSD experience because it is affected by a large number of variables. These variables include the individual's personality, body physique and image, the entire environment and interpersonal activity. Most often, it has been found that the reaction is not predictable. It can be assumed that a quiet reflective person may have an experience he does not share with

observers. The expectation of the individual also affects his experience. The following have been observed during experimentation with LSD: vivid perceptual change, imagery filling the visual world such as things seen in three dimensional space within the subject's field of vision, space full of patterns and objects, lacework over everything, fog or smoke filling everything, floors and walls moving, faces changing, objects appearing endowed with life, halos and lights and colors, after images, illusions and hallucinations. (21, 52)

Individuals report qualitative changes in objects, increased auditory acuity, an inability to comprehend sounds, tactile changes and kinesthetic changes such as awareness of the relationship of body to gravity; heavy-headed feelings; emptiness or hollowness; and decreased awareness of limb position.

Sociological Aspects

"Mind altering drug use and abuse is best understood as a barometer of a sick and corrupt society, as a reflection of underlying social storm", stated Joel Fort, co-author of Utopiates. (5) He further stated that we are living in a drug ridden society where most adult Americans use between three and five mind-altering drugs each day. He included in this list coffee, alcohol, nicotine, tranquilizers, sleeping pills and stimulants. He indicated that the deep-seated

roots of drug use are ignored and society is engaged in political smoke screening and hypocrisy about drugs. Curiosity, experimentation of the young, poverty and racial discrimination, boredom and monotony, alienation, the generation and credibility gaps, the criminogenic laws and their fanatical enforcement, the ready availability of drugs, the sensationalism of the press, the peer-group pressures, advertising practices, all contribute to drug abuse. He pointed out that dual federal and state laws involve overlapping and are added complications. He saw as one of the inconsistencies the inclusion of marijuana in the narcotic law (its possession is a felony) while LSD which has been agreed to be more dangerous is under the "dangerous drug" laws (possession is a misdemeanor punishable by a fine or shorter jail sentence). The consequences of our present system of control have increased involvement with organized crime, the numbers of youth labeled as criminals, those being taught crime in jails. Society must view abuse of mind-altering drugs as a sociological and public health matter. Criminal penalties applicable to drug problems should only be used where there is illicit manufacturing and distributing.

According to Mr. Fort, comprehensive outpatient treatment and rehabilitative programs for drug abusers should be readily available and increased public health information about these drugs should be provided which utilizes objec-

tive factual information. Mr. Fort concluded that much material includes "propagandistic statements" which are rejected by young people and actually result in increased drug usage. It must be questioned why so many people need to turn to drugs. (52)

Young people take LSD for reasons which range from peer group pressure to curiosity, kicks and thrill seeking, a reaction to disillusionment about the adult world "living with the bomb", alienation and rebellion. According to Dr. Ungerleider, adolescence provides many clues to drug taking by youngsters. Especially when using LSD, adolescents feel they have no hangups with anger or sexual feelings. Life without obligations has been noted in the LSD users in the Haight-Ashbury section. Dr. Ungerleider noted the what-can-we-do responsibility should fall upon parents for intelligent limits and goals and educators in schools and health fields for intelligent answers. (52)

Psychological Factors

In order to facilitate programs of prevention of treatment of drug dependencies some philosophical theories have been promulgated. Rado's psychoanalytical concept embraces the belief that drug craving exists because drugs produce euphoria, give pleasure and delay pain. Widler views drug dependency as an instrumental conditioning process. As the

person tries one drug after another, he chooses the drug which allows him to react in a mode of behavior he prefers while alleviating anxiety. Thus, if a person prefers to be aggressive but experiences anxiety while displaying aggression, he is likely to choose alcohol or a short-acting barbiturate.

Another theory is that drugs are people substitutes as summarized sequentially. People get sick over people. Drugs are people substitutes. Drug effects are more predictable than people effects and, people become necessary to the user only to the extent that they can provide drugs.

Blachly sees drug dependence as a class of seduction, defined as any behavior having these characteristics: a quick reward and a delayed penalty; the victim actively participating in his victimization; negativism (the victim knows the usual consequences of his actions but persists in them anyway). Seduction type personalities are people with histories similar to those of criminals. These factors of past history include lack of affection by parents, lack of good home environment (divorce, unsuitable supervision, and erratic discipline). (4)

It has been stated that psychic dependence is the only factor common to all forms of drug dependence. Social and personal factors are contributory to the psychological need to experiment. Psychic dependence is also the most import-

ant factor in the continuation or return to drug abuse. These contributing factors include need to escape, thrill seeking, experimenting, emancipation and rebellion. (4)

King reported that adolescent users have not had enough control and that adults are confused and do not care about their young people. Adolescents have been found to feel that the world owes "me". They want immediate gratification. These young people may also seek to destroy for the sake of destruction with total rejection of the entire adult world. (4)

The psychological impact of rapid social change is an explanation of some of the unique characteristics of today's youth. Their growing-up-world has no values, skills or technologies that are considered absolute and final. They are living in an age capable of instant world destruction. Certain of these young people are against the violent world and search for personal experience, love relationships; they cultivate sensitivity, look for expansion of consciousness and adults who possess integrity. They mistrust our government and search for new values. All of these factors are related to drug usage as the users hope drugs will assist in the search for meaning. (10)

The literature generally reveals that the difficulties which surround the treatment and rehabilitation of drug dependence in young people are the strongest arguments for prevention. Responsibility rests with society to remove drugs

from the environment, to reduce the demand for drugs by treating and curing dependent persons and to modify environments conducive to drug abuse by educating those not now dependent in such a way that they will not experiment with or desire drugs.

Related Studies

Researchers at Stanford Medical School Department of Psychiatry distributed 1,708 questionnaires to medical students at four schools in different parts of the country. One thousand sixty-three questionnaires were returned with a response rate of sixty-two percent. The sixty-two percent who returned their questionnaires may not be representative of the thirty-eight percent who did not, the investigators admitted. The questionnaires showed that five-hundred medical students had experimented with marijuana. In two of the schools, over two-thirds of those responding had tried pot and many of those had smoked marijuana for several years. Benson stated those figures are higher than those reported for other groups, noting that University of California law students and Vietnam soldiers have similar usage.

Benson stated that the usage pattern varied from school to school and that the school the medical student attends is the most important factor correlating with using marijuana. He suggests that "medical students are influenced at least

as much by local cultural patterns as by widely promulgated scientific knowledge." The medical students surveyed, indicated that they would smoke pot more often if its physiological effects proved to be similar to those of alcohol. They further indicated if marijuana's chronic effects were comparable to cigarettes, they would not increase their usage and many said they would stop usage completely. Benson concluded from the questionnaires that the laws regarding marijuana are a definite deterrent to marijuana users. He and his staff agree with the sixty-nine percent of students surveyed that marijuana is relatively harmless. (25)

Morgenstern of the Department of Psychiatry of the University of Oregon Medical School conducted an anonymous survey of psychoactive drug usage as part of seventy-six sophomore medical students' psychiatry course in 1971. Students were asked about usage during the last month and the last six months. Four were total abstainers, sixty-seven of the students used coffee, twenty-one nicotine, fifteen used marijuana in the last month, twenty used marijuana in the last six months; fifty-six students used beer, fifty-three used wine and thirty used other liquors. Four students used amphetamines, three used barbiturates, three used hallucinogens and one used a narcotic and one used a tranquilizer. Seven students stated they had used codeine in the last month. Morgenstern commented, "In most cases, codeine was used to squelch

coughs, coffee was used to stay awake, beer washed down the popcorn, and drinking was done for 'social' reasons." (16)

In the spring of 1971, the freshman medical students at the University of Oregon Medical School were given a questionnaire similar to the one taken by the sophomores. Seventy-nine questionnaires were returned. Results were: sixty-six students used coffee or tea, nineteen used cigarettes, thirty used marijuana, six used amphetamines, seven used barbiturates, five used tranquilizers, five used hallucinogens, four narcotics, seven codeine, sixty-four used beer, fifty-one wine and forty-two used other liquor. When asked if they favor the legal consumption of alcohol sixty-five said yes; of tobacco, fifty-three said yes; of marijuana, forty-four said yes; of hallucinogens four said yes; of opiates, three said yes. (16)

An exploratory study was conducted at a large secular university for the College of Nursing in 1970. The survey was formulated to test the students on their knowledge and usage of drugs and to try to determine some causitive factors of drug usage. A questionnaire was given to two hundred forty-three students; sophomores, juniors and seniors. Scores for each group comparing measures of central tendency showed no significant difference in their knowledge. Findings showed thirty-four percent sophomores, thirty percent of juniors and thirty-five percent of seniors have used drugs that were not medically prescribed. The report stated that "virtually no one

had used LSD (sophomores zero percent, juniors five percent and seniors zero percent) or marijuana (sophomores four percent, juniors five percent, and seniors eight percent), amphetamines (sophomores four percent, juniors nineteen percent, seniors thirteen percent). Twenty-four percent of the sophomores had tried tobacco, thirty-three percent of the juniors and twenty percent of the seniors. Fifteen percent of the sophomores had tried sleeping pills, twenty-four percent of the juniors and nineteen percent of the seniors. Diet reducing pills were used by twenty-two percent of the sophomores, thirty percent of the juniors and thirty-three percent of the seniors; tranquilizer usage: sophomores eight percent, juniors twenty-four percent and seniors fifteen percent. Alcohol usage ranged at twenty-nine percent for sophomores, thirty-five percent for juniors and twenty-four percent for seniors. Factors leading to drug usage were difficult to define but the junior group registered a larger percentage of family members using dangerous drugs. Students most frequently gave their reason for trying certain drugs was to feel better. Eighty-nine percent said they had a good relationship with their parents. Students indicated they wanted an integrated approach to drug abuse education throughout their nursing education. Responding favorably for including drug abuse education in the curriculum were fifty percent of the sophomores, twenty-seven percent of the juniors and forty-four percent of the seniors.(2)

Pontliana (1967) studied the habits and attitudes of smoking, drinking and drug usage of adolescents in North Seattle. The population consisted of two groups. The first group was comprised of thirteen males and six females. The thirteen to eighteen year-old volunteers were chosen because of their unconventional dressing and grooming. One adolescent distributed the questionnaire to his group. The second group was comprised of fourteen teenagers, ten males and four females age fourteen to eighteen. They were "unconventional" and one of their members also gathered data. Data collection tool was a questionnaire which asked for designation of age, sex, grade and plans for the coming year. Adolescents were to indicate tobacco, alcohol and drug usage on a four-point scale from never to frequently. An objective questionnaire, the Interpersonal Adjective Check List was also used for the Purpose of measuring self image.

In conclusion, Pontliana stated that the groups did not differ from each other in habits of smoking and drinking. The unconventional group admitted to experimenting with drugs while the conventional group did not. The unconventional group reported themselves as less managerial and self effacing than was their view of the ideal teenager behavior. There was a significant relationship in the way the unconventional group saw themselves as compared to the ideal. (37)

The Research and Statistics Section of the Department of

Public Health and Welfare of San Mateo County, California, launched an on-going research program for surveying drug usage in the schools. The program started in 1968; the results were published in 1968, 1969, and 1970. The 1968 survey included the responses of 18,774 high school students; the 1969 survey consisted of responses from 23,649 high school students and 2,234 responses from seventh and eighth grade students. In 1970 over 25,000 responses were obtained from seventh through twelfth graders. Initially the survey requested answers regarding usage of five substances: marijuana, LSD, tobacco, alcoholic beverages and amphetamines. In the 1970 survey barbiturates were included and an extra level "used fifty or more times" seemed appropriate. Heroin is to be included for the 1971 survey. Some results of the 1970 survey show:

Seventeen percent used alcohol only, one percent used marijuana only, 4.4 percent used alcohol and marijuana, 1.1 percent used tobacco and marijuana, 12.6 percent used tobacco, marijuana and alcohol and 23.6 percent used tobacco, marijuana and one or a combination of drugs.

Tobacco appeared to be in the down trend for boys and in the leveling-off down trend for girls. The other four drugs appeared to have been in rapid up-trend periods between 1968 and 1969 and in an up-trend but slowing-down phase between 1969 and 1970.

Alcohol rates for usage increased sharply for each grade.

At least a 5.4 percent rate change occurred in every class-sex-level group between 1968 and 1969. Between 1969 and 1970 rates were down slightly for boys. Rates were still on the increase for girls but far less than the year before.

Amphetamines were used by a large number of students in every class to a limited degree, less than ten times during the year. Data indicated that general light to moderate use of the drug had leveled: boys' usage rose between 1968-1969 and declined slightly between 1969-1970; girls' usage rose considerably between 1968-1969 and rose slightly between 1969-1970. The use of LSD seemed to be leveling out, however, but a large number of responses listed other mind-expanding drugs. Marijuana usage had expanded each year but the increase was less between 1969 and 1970. Usage indicated on the survey, that at the high school level one out of every six girls used marijuana at least once a week in the San Mateo County Schools in San Mateo, California. Barbiturate data were only collected in 1970 and it was noted barbiturates were rarely reported alone. Senior usage one time was 14.3 percent of the students and fifty or more times, a percentage of 1.3. Seventh grade percentage for one time was 3.4 percent and none for fifty or more times.

A comparison of the surveys has made the San Mateo studies valuable. The 1970 study placed emphasis on retaining methodology, definitions, and administration of the previous years.

Nationwide, this appears to be the only set of data that have been produced in a reasonably controlled manner over a large enough population to permit statistically significant comparisons. (14)

The Beaverton, Oregon School District assessed the current status of drug usage among students in grades seven through twelve. Objectives of the study were to: 1) define the prevalence of drug use, 2) define the quantity of drugs used and 3) find what drugs are being used. A questionnaire was divided into three areas; tobacco, drugs and alcohol.

Participating in the study were 7,336 students in grades seven through twelve. Alcohol was the most commonly used drug: fifty-six percent of intermediate students stated they had tried it one or more times and eighteen percent used it more than fifteen times. Seventy-six percent of the high school students had used alcohol one or more times and thirty-six percent used it more than fifteen times.

The study showed tobacco to be the second most commonly used drug with fifty-two percent of the intermediate students using it one or more times and twelve percent of the senior girls and seventy-one percent of the senior boys used tobacco once or more with twenty-two percent of senior girls and twenty-nine percent of senior boys using tobacco once a day or more. Three to six percent of intermediate students also reported they had not smoked during the past six months al-

though they had smoked previously.

Marijuana was used by twelve percent of the intermediate students one or more times. Three percent of these students stated they used marijuana fifteen times or more. High school students indicated thirty percent of them had used marijuana one or more times and thirteen percent indicated they had used the drug fifteen or more times.

Ten percent of the intermediate students used amphetamines once or more and two percent stated they used them more than fifteen times. At the high school levels, sixteen percent stated they used amphetamines one or more times and two percent admitted to using them more than fifteen times.

Inhalants (airplane glue, gasoline, paint thinner, cleaning fluid) were used by fifteen percent of intermediate students and twelve percent of the high school group. Two percent of both groups stated they had used them fifteen times or more. Hallucinogens were used by fifteen percent of high school students one or more times with four percent indicating they had used them fifteen times or more. Barbiturates were used by eight percent of the intermediate students one or more times with one percent using them fifteen times or more. Thirteen percent of the high school students stated they had used barbiturates once or more and two percent used them fifteen times or more. Heroin was used at least once by three percent of the high school group and one percent stated they had used

it fifteen times or more. Intermediate students showed identical percentages.

In summary, Robert McElroy, Director of Pupil Personnel Services of Beaverton Schools, suggested that drug usage is symptomatic of the frustration or deprivation that the youngsters feel. He stated that the users cannot be categorized into any particular social or economic group. He further suggests that the present generation of parents seem determined to safeguard their children from all want and may be, in so doing, depriving the children of a human need, to strive and take risks. He further stated that the need for personalized measure of success is basic to all people and when comparing users and non users the former represent young people with self-confidence who experience healthy and positive success situations. (30)

Under the auspices of the Multnomah County Division of Public Health, Kit Johnson, M.D., a resident public health physician directed a study of drug usage in seventeen high schools. Three thousand eight-hundred and eleven students who were a ten-percent random sample participated in the questionnaire. The results of this study (1968), show percentages by the substances which have been used fifteen or more times. Marijuana 3.1 percent, Cocaine .3 percent, Heroin, morphine, Codeine 1.1 percent, LSD and hallucinogens .9 percent, inhalants 2.0 percent, Amphetamine and tranquilizers 2 percent. Forty-two per-

cent of the students used alcohol over fifteen times, eighty-seven percent used it once or more. Twenty percent used tobacco daily. Dr. Johnson concluded that drug abuse is symptomatic of deeper problems confronting society.

Summary of Literature and Related Studies

Drug usage and drug abuse is an increasing problem of the youth of this country. The literature reveals a decreasing age of beginning usage. Research is revealing the numbers of users, identifying the psychological and sociological reasons for usage and the damage to humanity from drugs. The medical profession is dealing with drug crisis patients across the country. Educators are developing research studies in a concentrated effort to collect data and to promulgate comprehensive and effective drug education. The literature agrees that responsibility rests with society to remove drugs from the environment, to reduce the demand for drugs by treating and curing dependent persons and to modify environments conducive to drug abuse by educating those not now dependent in such a way that they will not experiment with or desire drugs.

CHAPTER III

REPORT OF THE STUDY

Introduction

This study was undertaken to determine the amount of drug usage among student nurses enrolled in a selected diploma school of nursing and to determine the students' desire for more information regarding drug usage and drug abuse. The need for this type of study has been alluded to by Blum (6), Nowlis (34) and others who suggested that the increase in drug usage among youth can be understood, examined and effectively dealt with only by seeking knowledge from the source. The analysis of the data from the current study should be helpful in assessing student drug usage and in evaluating the need for implementation of curricular changes.

Procedure

The literature concerning youth and drug usage was reviewed to establish a frame of reference for this study. A data collection tool was developed by modifying the San Mateo County Health Department Drug Usage Survey Form.

The category for heroin usage was deleted from the original form as it was decided there would be no usage of heroin among the target population. The additional five items in-

cluded in the modified form were constructed to furnish information regarding familiarity with drugs, other drug usage, attitudes towards continuation of usage and future usage, also, whether or not the students desired more information regarding drug usage and drug abuse. (Appendix A)

Telephone communication with the director of the selected school of nursing resulted in the plan for student participation in the study. Students were asked by their instructors if they were interested in filling out the drug usage survey form and eighty-seven volunteered to participate.

The author visited the school three times by appointment, briefly addressed the students, explained the form and procedure. The form was distributed. After completion, each participant placed the form in an envelope, then into a large manila folder before leaving the classroom. Anonymity was assured. A few students at each of the three sessions exhibited interest and requested outcome information from the survey.

Findings and Discussion of Data

The population of this study consisted of eighty-seven student nurses who volunteered to fill in the survey form. Their ages ranged from eighteen to forty-six years. There were twenty-five female students of the first year class, thirty-three females and two males of the second year class and twenty-six females and one male of the third-year class. This information is depicted on Table 1.

Table 1

Distribution of Eighty-Seven Student Nurse Participants by Age.

Age Range	18	19	20	21	22	23	24	25	26	27	28	29	40	43	46	Total
1st Year																
25 F	4	14	5											1	1	25
2nd Year																
33 F 2 M		12	11	5	2	2		1		1		1				35
3rd Year																
26 F 1 M			5	12	5	2	2						1			27
Total	4	26	21	17	7	4	2	1		1		1	1	1	1	87

The next part of the form sought information regarding drug usage. The six drugs listed were alcoholic beverages, amphetamines, barbiturates, LSD, marijuana and tobacco. The respondents were instructed to indicate usage as never, one to two times, three to nine times, ten to forty-nine times or fifty or more times. The responses were analyzed by classes. Although there were twenty-five first year students, total responses for each drug ranged from twenty-two to twenty-five. Apparently some did not respond to all items. Only five had not used alcoholic beverages in the past twelve months; the other twenty were distributed unevenly according to usage with the majority in columns three (3-9 times) and four (10-49 times).

There were twenty-two responses regarding use of amphetamines; eighteen had not used the drugs; two had used one or two times and two others ten to forty-nine times.

Twenty-one disclaimed use of barbiturates; two had used the drug three to nine times. Twenty-three said they had not used LSD, but one indicated usage one or two times. Eighteen had not used marijuana, but six had used the drug; one once or twice, three for three to nine times and two for fifty or more times.

Fourteen had not used tobacco, ten had used it for varying times.

These data are shown in Table 2.

Table 2

Extent of Drug Usage by Twenty-Five First Year Student Nurses.

	(1) Never	(2) 1-2 Times	(3) 3-9 Times	(4) 10-49 Times	(5) 50 or more Times	(6) Total No.
Alcoholic Beverages	5	2	7	8	3	25
Amphetamines	18	2		2		22
Barbiturates	21		2			23
LSD	23	1				24
Marijuana	18	1	3		2	24
Tobacco	14	3	1	2	4	24

The responses of the thirty-five second year students were likewise tabulated. It was noted that only in reference to alcohol and tobacco did the total responses equal the number of participants. In both instances the number of users was distributed across all four columns. There was one user

of the amphetamines (3-9 times), one of barbiturates (1-2 times), none used LSD. Three used marijuana once or twice and four used the drug from ten to forty-nine times. The findings are shown on Table 3.

Table 3

Extent of Drug Usage by Thirty-Five Second Year Student Nurses.

	(1)	(2)	(3)	(4)	(5)	(6)
	Never	1-2 Times	3-9 Times	10-49 Times	50 or more Times	Total No.
Alcoholic Beverages	8	6	11	9	1	35
Amphetamines	33		1			34
Barbiturates	33	1				34
LSD	34					34
Marijuana	27	3		4		34
Tobacco	21	3	3	3	5	35

Twenty-seven third year students participated. As with the other groups, not all responded to each item. It is not known what significance to attach to the lack of responses. Only two had not used alcoholic beverages in the past year. Two had used amphetamines (three non-responses); three had used barbiturates (three non-responses); one had used LSD (two non-responses). Seven had used marijuana, one fifty or more times. Tobacco was used by all but thirteen respondents.

Table 4

Extent of Drug Usage by Twenty-Seven Third Year Student Nurses.

	(1)	(2)	(3)	(4)	(5)	(6)
	Never	1-2 Times	3-9 Times	10-49 Times	50 or more Times	Total No.
Alcoholic Beverages	2	6	8	7	4	27
Amphetamines	22	1	1			24
Barbiturates	21	2	1			24
LSD	24		1			25
Marijuana	20		2	4	1	27
Tobacco	13	3	2	3	5	26

Composite usage of students indicated twenty students had experimented with marijuana with three individuals using the drug more than fifty times and eight students using the drug more than ten times. Two individuals indicated usage of LSD, one first year student one to two times and a third year student three to nine times. Six students had used barbiturates, but indicated usage of less than ten times and seven students stated they had used amphetamines, two of whom indicated usage of the drug ten to forty-nine times. The composite data are shown on Table 5. It will be noted that not all respondents supplied information. As stated previously, it is not known what significance should be attached to a non-response. It might be inferred that there are more users of drugs than the survey revealed.

Table 5

Extent of Drug Usage by Eighty-Seven Student Nurses.

	(1)	(2)	(3)	(4)	(5)	(6)
	Never	1-2 Times	3-9 Times	10-49 Times	50 or more Times	Total No.
Alcoholic Beverages	15	14	26	24	8	87
Amphetamines	73	3	2	2		80
Barbiturates	75	3	3			81
LSD	81	1	1			83
Marijuana	65	4	5	8	3	85
Tobacco	48	9	6	8	14	85

The participants were then requested to name other drugs they had used during the past twelve months. First year students indicated the following usage: mescaline 3, opium 1, peyote 1, hashish 1, psilocibin 1, darvon compound 65 1, desbutal 1, edrisal 1. The only second year usage was one student who named cafergot. The third year group results indicated one student had used mescaline and one student had used darvon compound 65.

Although it appears that the first year students showed usage of more drugs, it was one individual who indicated usage of opium, mescaline, peyote, hashish and psilocibin. This same student No. 1 is the one who had experimented with LSD one or two times, marijuana fifty times or more, barbiturates

three to nine times, amphetamines one to two times. This student also indicated using tobacco fifty or more times, and alcohol ten to forty-nine times. This individual indicated planning to continue drug usage and answered negatively to desiring more drug information.

The participants were next requested to name additional drugs that are becoming popular. First year students named heroin twice, birth control pills once, psilocybin twice. Second year students named heroin twice. Other drugs named by second year students were marijuana, opium, ritalin, hashish and codeine. Third year students named hallucinogens, amphetamines, ritalin and darvon. Two third year students stated "no doze" was becoming popular. Most students left this item blank on the survey form. Some responses were: "I don't know", "have no idea", "I don't know much about them", "none", "I'm not that involved", "Can't think of any", "just the above mainly", "I hope none", "None at the present", "the ones above", "I'm not sure", "hard core".

The students were asked to respond with a yes or no to: do you know people who use drugs excluding cigarettes and alcohol? _____ close friends _____, classmates _____, relatives _____. The wording of this item was such that any individual could have inserted duplicate responses. To illustrate, close friends and classmates could have been the same persons. It may be assumed that the respondents regarded each category sep-

arately, but there is no certainty that the item was fully understood. The number of "no" responses were small from each year and for each category. The number of responses are shown in Table 6.

Table 6

Responses of Eighty-Seven Student Nurses Regarding Drug Usage by Others.

		OTHER PEOPLE	CLOSE FRIENDS	CLASSMATES	RELATIVES
1st Year	Yes	16	12	12	4
	No	5	5	5	9
2nd Year	Yes	25	21	17	16
	No	6	9	8	7
3rd Year	Yes	21	16	19	15
	No	2	6	2	5
Composite	Yes	62	49	48	35
	No	13	20	15	21

The next item was: "If you have not experimented with drugs, do you think you will in the future?" Table seven summarizes the responses to this item. Some of the responses to this item could not be categorized into a definite yes or no. Several of these responses are listed in class grouping below.

First Year

Student 9--"I don't know, but probably someday I will out of curiosity." Student marked alcohol ten to forty-

nine times, tobacco one to two times and other drugs never.

Student 11--"Possibility--I want to know what the kick is. Marijuana--only--as it looks now." Student indicated alcohol usage at fifty times or more, amphetamine usage at ten to forty-nine times, tobacco usage at one to two times and negative usage of other drugs.

Student 12--"Possibility--not because everyone else is but because I would just like to know what marijuana is like. Even though people say it leads to other things --which it could--I only want to try it once. Then only with someone I really trust." Student indicated usage of alcohol ten to forty-nine times and tobacco one to two times. Negative response to other usage of drugs.

Student 19--"No. Not things like LSD and marijuana; the risk is too great. But for late studying desbutal really helps." Student indicated the following usage: alcohol fifty or more times, amphetamines ten to forty-nine times, barbiturates three to nine times, marijuana three to nine times and tobacco fifty or more times.

Second Year

Student 26--"I do not think I would ever use amphetamines or barbiturates nor drink or smoke but I might try marijuana again if legalized." Student indicated negative usage except for alcohol three to nine times and mari-

juana one to two times.

Student 41--"I'm not sure--would like to try marijuana if it were legal. I might be called a chicken." Student indicated usage of alcoholic beverages ten to forty-nine times, tobacco one to two times and negative usage of other drugs.

Student 55--"I don't know--I strongly doubt it." Student indicated no drug usage except alcohol three to nine times.

Student 60--"Not anything beyond marijuana." Student usage was marijuana ten to forty-nine times, tobacco fifty or more times and negative on other drugs.

Third Year

Student 70--"I will not experiment with hallucinogens such as LSD, speed, reds and bennies." Student indicated usage of marijuana ten to forty-nine times, alcoholic beverages fifty or more times and tobacco fifty or more times. No other usage was indicated.

Student 85--"Nothing I haven't already used." Student usage of marijuana was ten to forty-nine times and alcohol three to nine times. No other usage was indicated.

This item was probably not clearly understood. The above responses were made by individuals already experimenting with drugs. A tabulation of responses shows that six probably will experiment with drugs and sixty-eight said they would not.

Apparently some did not respond. Table 7 shows the response.

Table 7

Responses to Possible Future Experimentation with Drugs.

	Yes	No
1st Year	3	18
2nd Year	3	29
3rd Year	0	21
Composite	6	68

The next item asked "If you are now using drugs, do you plan to stop or continue"; explain the answer. This item was left blank by most of the students; two planned to stop and fifteen planned to continue. Table eight summarizes responses.

Table 8

Responses Concerning Plans to Stop or Continue Drug Usage.

	Stop	Continue
1st Year		6
2nd Year		4
3rd Year	1	5
Composite	1	15

The final item asked students to indicate whether they would like more information regarding drug usage and drug abuse and to explain their reply. There were responses by seventy-eight students. Summary of data from item number seven may be found on table number nine.

Table 9

Responses of Eighty-Seven Participants Regarding Desire for More Information on Drug Usage and Drug Abuse.

	Yes	No	No Response	Total
1st Year	15	7	3	25
2nd Year	23	9	3	35
3rd Year	17	5	5	27
Composite	55	21	11	87

Fifty-five students indicated an affirmative answer and twenty-one answered no. Four of the students answering affirmatively specified qualifications:

Student 16 - First Year--"I'd like facts to use in talking with friends who want to experiment."

Student 48 - Second Year--"Yes to those youngsters forming ideas and no I don't ever plan on taking them and no info is necessary."

Student 72 - Third Year--"Yes - more "good" info - not biased."

Student 76 - Third Year--"I feel that as a nurse I will need to know more about the facts pertaining to drugs. True Facts - Not just movies and books telling you not to take drugs."

Of the twenty-one students answering negatively, seven were first year students, nine were second year students and

five were third year students. The following information describes the answers of these students and other factors from their individual questionnaires.

First Year

Student 1--Alcoholic beverages 10 to 49 times, amphetamines 1 to 2 times, barbiturates 3 to 9 times, LSD 1 to 2 times, marijuana 50 or more times, and tobacco 50 or more times.

The student named opium, mescaline, peyote, hashish and psilocybin as other drugs used during the past twelve months. She indicated she had close friends who use drugs.

She indicated she plans to continue using drugs. "I am satisfied that having used drugs for over 3 years with no discomforting or degeneration effects - that they are worth the enjoyment - if one only uses a little bit of caution."

Answering negatively to question number seven, "No- it is really a drag to have all these people who are already prejudiced against drugs and most of whom have never tried them - telling you all about it."

Student 20--Alcoholic beverages 10 to 49 times, amphetamines 1 to 2 times, marijuana 50 or more times, and tobacco 50 or more times. Organic mescaline was named under other drugs used in the last twelve months. The

student stated she knew people who use drugs including close friends and classmates. The student indicated she planned to continue using drugs and explained, "I enjoy it and I am satisfied that there are no apparent danger with those I have used." Answering the seventh question she said, "No--I feel we have adequate info available."

Student 21--Filled in the never column for all items. She denied knowing anyone who uses drugs. The information item was answered, "No, I wouldn't but I'm sure some people need it. I know that most drug usage outside of a Dr's. order is abuse."

Student 22--Alcoholic beverages 10 to 49 times, marijuana 3 to 9 times, and tobacco 10 to 49 times. Student named mescaline as a drug used during the last twelve months. Student indicated she knew people, close friends, classmates and relatives who use drugs. Student indicated she planned to continue usage, "Enjoy it once in awhile." Question seven was answered with "No."

Student 23--Alcoholic beverages 3 to 9 times, marijuana 3 to 9 times, tobacco 3 to 9 times. Student indicated knowing people and close friends who use drugs. Student indicated she planned to continue using drugs explaining, "I probably will once in awhile (smoke grass) but thats it." Student answered information question, "no".

Student 24--Alcoholic beverages 3 to 9 times. Student indicated she knew classmates who used drugs. To question asking whether or not she will experiment with drugs in the future student explained, "probably not--can't see any reason for it." To question number seven she replied, "No, all you have to do is pick up a magazine - there's information coming out our ears."

Student 25--Answered never to all usage items, no to knowing anyone who uses drugs. In answer to the question about future usage student said, "No, if they are injurious to my health why bother, and I'm happy enough in the life God has given me. I don't want to run the risk of harming or ending my life. To question number seven student replied, "No because I really don't see what there is to understand about it--except maybe helping a person get off this crutch."

Second Year

Student 52--Alcoholic beverages 3 to 9 times, never in all other categories. Student answered yes to knowing people, friends and relatives who use drugs. Question number five student answered, "Never, I have an adequate knowledge of drugs and know their potency and have no use for them." Question number seven student replied, "No, I have read many articles and books on the subject and have dealt with many drug users and hope to help many more."

Student 53--Alcoholic beverages 10 to 49 times, barbiturates 1 to 2 times, marijuana 10 to 49 times, tobacco 50 or more times. Student indicated knowing people, close friends, classmates and relatives who use drugs. Under question asking about future usage, student says, "I am not on drugs. I doubt very much whether I will ever be hooked on them." In answer to question seven the student replied, "No, I have read a number of pamphlets and information now."

Student 54--Alcoholic beverages 10 to 49 times, tobacco 10 to 49 times, yes to knowing people, friends, classmates and relatives who use drugs. "No, I have no need or desire. Drugs frighten me," answered question about future experimentation. Question seven student answered the following: "No, I have a great deal of information available to me now."

Student 55--Alcoholic beverages 3 to 9 times, all other categories never. Student answered yes to question knowing people, close friends, classmates and relatives who use drugs. Answering question about future usage student said, "I don't know--I strongly doubt it." Student replied to question number seven, "No, I think education on the use of drugs is important, but by this age it's overdone. We already have, for the most part, our values set."

Student 56--Alcoholic beverages 10 to 49 times, tobacco 3 to 9 times, answer to do you think you will use drugs in the future, "No, I'm no fool." Question number seven answered, "No."

Student 57--Tobacco 3 to 9 times, other categories never. Student indicated knowing friends, classmates who use drugs. Answered question five about future, "No, I need no escape from reality. I feel that my faith in Jesus Christ as my personal Savior offers full satisfaction and contentment in life." Question seven, the student answered as follows, "No, I have recently written a paper for sociology on Drug Abuse."

Student 58--Alcoholic beverages 10 to 49 times, never category for all other items. Student indicated knowing people, classmates and relatives who use drugs. Question five is answered, "No, it has absolutely no appeal to me. Student answered question number seven by saying, "No, I think kids now are beginning to get tired of hearing so much about it all of the time. Information is readily available and we get plenty of it really as a student nurse."

Student 59--Alcoholic beverages 3 to 9 times, marijuana 10 to 49 times, tobacco 10 to 49 times. Student answered yes to knowing people, close friends, classmates and relatives who use drugs. To question number six stu-

dent indicated plan to continue usage and then explained, "However I feel at the time--stopping seems to be in sight for me at the time." Question seven answered--"No, you can't tell propaganda from the truth any longer."

Student 60--Alcoholic beverages 50 times or more, marijuana 10 to 49 times, tobacco 50 times or more. Student indicated knowing people, close friends, classmates who use drugs. In answering whether or not you think you will use drugs in the future student wrote, "not anything beyond marijuana." Question number six was answered, "continue to use drugs". Student explained, "Nothing has happened to me or any friends with the use of marijuana and I maintain a realistic attitude with it more than alcohol." Question seven was answered, "No, I feel I have research the drug problem thoroughly."

Third Year

Student 61--Alcoholic beverages 1 to 2 times, tobacco 1 to 2 times, all other categories never. On question four student acknowledged knowing relatives who use drugs. Question five regarding future usage the student replied, "No, I don't feel it is necessary for me. Also, I don't want to take any chances with harmful side effects." A simple "no" was the reply to question number seven.

Student 62--Alcoholic beverages 3 to 9 times, amphetamines 3 to 9 times, barbiturates 3 to 9 times, mari-

juana 50 times or more, tobacco 10 to 49 times. Student answered yes to knowing people using drugs, close friends, classmates and relatives. Student indicated she would continue to use drugs "with moderation grass." Question seven student replied, "No, I feel I know enough--would like to know new info."

Student 63--Alcoholic beverages 3 to 9 times, all other items never. Answered yes to knowing people, friends who use drugs. Question number five about future usage: "No. From information received I do not have the curiosity to try them." Question seven the student answered, "No. Just need to be kept up to date on latest development with drugs."

Student 64--Alcoholic beverages 10 to 49 times, barbiturates 1 to 2 times, tobacco 10 to 49 times. Student answered yes to knowing people, friends and classmates who have used drugs. Question five about future usage student explained, "No. Have no desire to." Student answered question seven in the following manner: "No, topic is so discussed now, it would be boring to hear more."

Student 65--Alcoholic beverages 10 to 49 times, marijuana 2 to 9 times, tobacco 50 or more times. Student stated yes to knowing people, close friends and classmates who use drugs. Question five answer was, "No, I have tried grass, but it does nothing for me. I would

rather not have to resort to hard drugs to get through life." In question six answer, student indicated she would stop and explained, "like I said above, and I do not believe in hurting your own body by using drugs not prescribed by a doctor." Question seven student said, "No, in the school I am in I have had quite a lot of information about drugs."

Summary of data of students answering negatively to item number seven follows:

Table 10

Cumulative Responses of Twenty-One Students Who Did Not Desire More Information Regarding Drug Usage.

	(1)	(2)	(3)	(4)	(5)	(6)
	Never	1-2 Times	3-9 Times	10-49 Times	50 or more Times	Total No.
Alcoholic Beverages	3	1	7	9	1	21
Amphetamines	17	2	1			20
Barbiturates	17	2	2			21
LSD	19	1				20
Marijuana	7		3	3	3	16
Tobacco	7	1	3	5	5	21

Other responses of the students who did not wish more information regarding drug usage are as follows:

Item 2--Name other drugs you have used during the past twelve months: Opium, mescaline ii, peyote, hashish, psylocibin.

Item 4--Do you know people who use drugs, excluding cigarettes and alcohol?--People yes 15, no 2--close friends yes 17, no 1--classmates yes 13, no 2--relatives yes 9, no 3.

Item 5--If you have not experimented with drugs, do you think you will in the future?--No 13.

Item 6--If you are now using drugs, do you plan to stop or continue--Stop 1, continue 7.

The majority of students (55 of 76) answering question seven in the affirmative often responded that more information was needed or would be helpful in dealing with people both professionally and non professionally. Some of the comments are presented subsequently:

First Year

Student 2--Alcoholic beverages 3 to 9 times, other items never. Question four is answered with a yes to people, close friends and classmates. Student answered question five, "No, I feel it's not worth it." Answer to question seven was "Yes, I'm interested in the drug abuse situation and would like to know what's going on."

Student 3--Alcoholic beverages 3 to 9 times, student stated she doesn't know anyone using drugs. Student answered question five: "No, all drugs are something foreign to our bodies. God did not put us here on Earth to try things to get kicks. If we were to use drugs, we would not have been made the way we are." Answer to question

seven was, "Yes, for my own personal knowledge and to try to understand WHY others want to waste their lives."

Student 5--Alcoholic beverages 1 to 2 times, all other items negative. Student indicated knowing people, classmates who use drugs. In answer to question five student stated, "No I'm not stupid and I don't want to harm my body in any way. I can cope with my problems instead of trying to run away from them." Question seven was answered, "Yes, I'm always interested to learn any new findings about drugs."

Student 6--Alcoholic beverages 10 to 49 times, marijuana 1 to 2 times, tobacco 10 to 49 times. Indicated knowing close friends, classmates and relatives who use drugs. Answered question five, "No, I know health hazards involved." Information question seven was answered, "yes, I would like more information so I could help the people I know involved in quitting. Give them logical reasons."

Student 7--Alcoholic beverages 50 or more times, other items never. Affirmative to knowing people including relatives who take drugs. Answered question five, "No, they may harm me. They don't solve the underlying personality problem." Question seven, "Yes, would be helpful for persuading relatives not to use drugs."

Student 15--Alcoholic beverages 3 to 9 times, other items never. Student indicated knowing people, friends

and classmates who use drugs. Stated she will not use drugs in the future. Student's answer to question seven was, "Yes, for my friends about marijuana and the possibility of chromosome damage."

Student 16--Alcohol 10 to 49 times, tobacco 50 times or more, knows people, close friends, classmates who use drugs. Answered question five, "No, it's a bad scene. As a nurse I've cared for youth patients on a "bad trip" and never want to be involved. Also, I could be barred from ever nursing again." Question seven was answered, "Yes, I'd like facts to use in talking with friends who want to experiment."

Student 17--Alcoholic beverages 3 to 9 times, negative usage of other items; indicated not knowing anyone who uses drugs; "consider drugs to be a form of escape." Answered, "Yes, I would be interested in finding out why people take drugs, and more about what the drugs actually do to you," to question seven.

Student 18--No usage; indicated knowing people and classmates who use drugs; stated she will not experiment with drugs in future. "I feel that drugs are an escape from reality that benefits no one." Question seven was answered, "Yes, if people realize at a young age, that drugs used abusively can only be harmful there would be a decrease in their usage."

Student 19--Alcoholic beverages 50 or more times, amphetamines 10 to 49 times, barbiturates 3 to 9 times, LSD never, tobacco 50 or more times. Student marked yes to close friends in question four; plans to take desbutal "for late studying". Question seven was answered, "Yes, to help others who are really hooked and won't go to hard stuff."

Second Year

Student 26--Alcoholic beverages 3 to 9 times, marijuana 1 to 2 times. Acknowledged people, close friends and relatives who use drugs. Answered question five, "I do not think I would ever use amphetamines or barbiturates nor drink or smoke, but I might try marijuana again if legalized." Student answered question seven, "Yes, especially concerning the hallocenogins, because I feel information regarding these has been somewhat small."

Student 27--Alcoholic beverages 1 to 2 times, other items never, student answered yes to knowing people, friends who take drugs. Question five was answered, "No, I have no wish to try them I have no need to hide from anything. Student answered question seven, "Yes, it would help understand why people are on drugs better."

Student 28--Alcoholic beverages 3 to 9 times, marijuana 1 to 2 times, tobacco 1 to 2 times. Student answered yes to all of question four. Question five was

answered, "I tried marijuana once just to see what it was like. I thought it stunk. It was hot and burned. I do not feel I have any further use for this." Question seven was answered, "Yes, I think it would help greatly in understanding the patient who is on drugs."

Student 29--Alcoholic beverages 10 to 49 times, tobacco 50 or more times. Indicated knowing people who use drugs. Answer to question five was, "No, I have not and will not. I have no desire to because mostly of what I know they do to the body and because I just don't feel I need them". Answer to question seven, "Yes, I don't feel that enough people have enough information."

Student 31--Alcoholic beverages 3 to 9 times, other items never. Indicated close friends use drugs. Stated, "No, I'm fairly aware of hazards involved and don't feel need to experiment or use drugs," in answer to question five. Question seven, "Yes, problem of usage is so great, really need to be informed of what's happening."

Student 32--Alcoholic beverages 3 to 9 times, other items never. Indicated she doesn't know anyone who uses drugs in question four. Question five was answered, "No, I believe it's suicidal." In answer to question seven student wrote, "Yes, I believe it is a very real problem. I have young children at home and I would like to be informed so that I might prevent any possible likelihood of

them using them."

Student 33--Alcoholic beverages 3 to 9 times, other items never. Indicated knowing people and relatives who use drugs. Student answered question five, "No, I have really no desire and feel I am getting out of the age group that this is so fashionable in so I don't anticipate peer pressure in the future." Question seven, "Yes, I feel rather isolated here at nurses school--I think I should know more of the problem."

Student 34--Marked never usage on all items. Stated she does not know anyone using drugs. Answered question five, "No, I have no use for such a crutch. I am happily married and plan on staying that way." Question seven was answered, "Yes, the more people are made aware of the effects of the use of drugs, they will stop and think twice before using them; prevent hurting those you love."

Student 35--No usage; answered question four indicating she knows people, friends ("they aren't close friends just friends") and classmates who use drugs. Student answered question five "NEVER". In answer to question seven student wrote, "Yes, becoming nurses we should know up-to-date information which we aren't receiving."

Student 36--Alcoholic beverages 10 to 49 times, marijuana 1 to 2 times, tobacco 1 to 2 times. Student answered yes she knew close friends and relatives who use

drugs. Question five student wrote, "I took diet pills about four years ago and ended up with mono so I don't like pills." Question seven was answered, "Yes, I haven't been able to find any strictly object literature. Everyone seems to be emotionally involved one way or another."

Third Year

Student 66--Alcoholic beverages 1 to 2 times, all other items never. Student answered question four negatively. In answer to question five student wrote, "No, I know they are injurious to my health and a crutch." Student's answer to question seven was, "Yes, I feel with the increase in general usage I as a nurse will become more involved with the effect, both on a professional level and socially."

Student 69--Alcoholic beverages 3 to 9 times, tobacco 1 to 2 times. Answered question four yes to people, classmates and relatives. For question five student replied, "No, I have no desire to experiment with drugs. I'm happy like I am and don't feel I need the extra drugs supposedly give me." Student's answer to question seven was, "Yes, many new drugs will be potentially of use to kids and adults in future--I would like to be kept up on the latest."

Student 71--Alcoholic beverages 1 to 2 times, other

items never. Answered question four yes to all parts. Question five--"No, my life is full and I see no advantage to using drugs." On question seven student wrote, "Yes, I know very little about it. I don't even know which slang term goes to which drug."

Student 73--Alcoholic beverages 3 to 9 times, other items never. Indicated on question four knowing relatives who use drugs. Question five student replied, "No, I have never felt the need to take drugs. I don't even like taking vitamin pills--I often forget them." Student answered question seven, "Yes, I think it would help me to be better able to help other people with this problem and perhaps prevent someone falling into this problem."

Student 74--Alcoholic beverages 10 to 49 times, marijuana 10 to 49 times, tobacco 10 to 49 times. Answered yes to question four. Question six was answered, "Hard telling--haven't used my thing in a while." For question seven student replied, "Yes, be nice to know."

Student 75--Alcoholic beverages 50 times or more, tobacco 50 times or more. Student stated she knows friends and classmates who use drugs. Indicated she will not take drugs in the future. "NO, I am satisfied without experimenting." Question seven was answered, "Yes, more experiments are being made. I'd like to know the importance and dangers of drugs and drug abuse."

Student 76--Alcoholic beverages 10 to 49 times, tobacco 3 to 9 times. Answered question four yes to close friends, classmates. Answered no to question five about future usage. Answered question seven, "Yes, I feel that as a nurse I will need to know more about the facts pertaining to drugs. TRUE FACTS - Not just movies and books telling you not to take drugs."

Student 78--Alcoholic beverages 3 to 9 times, other items never. Student checked yes to knowing people, friends, classmates and relatives who use drugs. Answered question five, "I think I would probably be the type who might become dependent." Question seven was answered, "Yes, would like to know more about individual reactions and feelings of people using drugs."

Student 85--Alcoholic beverages 3 to 9 times, marijuana 10 to 49 times, tobacco never and other items never. Student indicated knowing people, classmates and relatives who use drugs. Question five and six answered as follows: Five, "Nothing I haven't already used." Six, "I intend to continue to use marijuana." Question seven was answered, "Yes, aspects of long range marijuana effects - more about it in general."

Student 86--Never usage to all items; answered yes to question four except close friends. Question five student answered, "No, I have no need for drugs - or liquor

or cigarettes - Besides physically harmful and believe they are morally wrong. Student wrote this reply to question number seven: "Yes, I would like to know what my brothers in high school and grade school are confronting and what I can help my future child by knowing."

Summary of data of fifty-five students answering affirmatively to question number seven follows.

Table 11

Cumulative Responses of Fifty-Five Students Who Desired More Information Regarding Drug Usage.

	(1)	(2)	(3)	(4)	(5)	(6)
	Never	1-2 Times	3-9 Times	10-49 Times	50 or more Times	Total No.
Alcoholic Beverages	11	10	17	12	5	55
Amphetamines	47	1	1	2	0	51
Barbiturates	49	1	1	0	0	51
LSD	51	0	0	0	0	51
Marijuana	45	4	1	4	0	54
Tobacco	36	6	2	3	8	54

Other responses of the students who desired more information regarding drug usage are as follows:

Item 2--Name other drugs you have used during the past twelve months: Darvon 1, Desbutal 1, Edrisal 1, Cafergot.

Item 3--What additional drugs do you think are becoming popular?--Heroin 4, hashish 1, magic mushroom 1, birth control pill 1, Darvon 1.

Item 4--Do you know people who use drugs, excluding cigarettes and alcohol? People, yes 33, no 10--close friends yes 25, no 14--classmates yes 28, no 12--relatives yes 20, no 14.

Item 5--If you have not experimented with drugs, do you think you will in the future?--Yes 4, No 47.

Item 6--If you are now using drugs, do you plan to stop or continue--Continue 5.

Thirteen students indicated that they were non users by checking never in all six drug categories. The five first year students were student numbers 4, 13, 18, 21 and 25. Second year students totaled six; numbers 34, 35, 38, 40, 43 and 44.

The two third-year students in this category were numbers 83 and 86. The following are responses from these students to the "name other drugs you have used during the past twelve months: Of the first year, three said none and two omitted the answer; of the second year, four said none and two omitted the answer; of the third year, both said none.

Responses to the item, "what additional drugs do you think are becoming popular?" follow: first year students, four did not respond, student number 21 replied, "I don't really know."; second year, student 43 wrote, "riddlin," student 40 wrote heroin, two students, numbers 34 and 35, did not respond. Student 44 wrote in a question mark and student 38 stated, "I don't know"; third year, student 83 said, "I

don't know" and student 86 said, "just the above mainly."

The following are responses to, "Do you know people who use drugs, excluding cigarettes and alcohol?" First year, students 4, 21 and 25 answered no to all categories, student 13 indicated yes to knowing people and classmates but indicated they were high school classmates, student 18 indicated knowing people and classmates who use drugs; second year, students 34, 38 and 44 answered no to all categories. Student 35 indicated yes to people, close friends, classmates and no to relatives. Student 40 said yes to people, "not that I know" to close friends, yes to classmates and no to relatives. Student 43 indicated yes to people, close friends and relatives; third year, student 83 indicated knowing relatives who use drugs, student 86 said yes to people, no to close friends, yes to classmates and relatives.

Responses to, "If you have not experimented with drugs, do you think you will in the future?" are as follows:

First Year

Student 4 said, "No, I am completely against their use."

Student 13 said, "No, I believe that the people who do use drugs are searching for an answer to life. I have found the answer in God. I don't need drugs."

Student 18 said, "No, I feel that drugs are an escape from reality that benefits no one."

Student 21 answered, "No."

Student 25 said, "No, if they are injurious to my health why bother, and I'm happy enough in the life God has given me. I don't want to run the risk of harming or ending my life."

Second Year

Student 34 said, "No, I have no use for such a crutch. I am happily married and plan on staying that way."

Student 35 answered, "NEVER."

Student 38 answered, "No -- I don't feel that I need to rely on drugs to solve my problems."

Student 40 answered, "No, I have no desire to take drugs now or in the future."

Student 43 said, "No, I have found the answer to life in Jesus Christ therefore I do not have the need or desire to try anything else because God completely satisfies."

Student 44 said, "No, never."

Third Year

Student 83 answered, "No."

Student 86 said, "No--I have no need for drugs - or liquor or cigarettes - Besides physically harmful and believe they are morally wrong."

The last item asking if more information is desired regarding drug use and abuse was answered in the following manner:

First Year

Student 4, "Yes, I am interested in being informed on drugs."

Student 13, "Yes, They need help!"

Student 18, "Yes, If people realize at a young age, that drugs used abusively can only be harmful there would be a decrease in their usage."

Student 21, "No, I wouldn't but I'm sure some people need it. I know that most drug usage outside of a Drs. order is abused."

Student 25, "No, because I really don't see what there is to understand about it--except maybe helping a person get off this crutch."

Second Year

Student 34, "Yes, The more people are made aware of the effects of the use of drugs, they will stop and think twice before using them; Prevent hurting those you love."

Student 35, "Yes, Becoming nurses we should know up-to-date information which we aren't receiving."

Student 38, "Yes, I don't feel that I know enough about drugs in relation to the problem it is."

Student 40, "Yes, what kind are more popular, almost anything."

Student 43: No answer.

Student 44, "Yes, we never can get all the informa-

tion and facts we need.

Third Year

Student 83, "A friend in our church who is quite interested in this keeps us well informed."

Student 86, "Yes, I would like to know what my brothers in high school and grade school are confronting and what I can help my future child by knowing."

In summary of the last item, nine students requested more information, three did not and one student left the item blank.

Of note in viewing data of this group are the religious or moral statements for not using drugs in the future. See student 4, 13, 25, 43 and 86.

Fifty-two students indicated usage of tobacco and/or alcohol only:

First year students: Thirteen students indicated usage of alcohol and/or tobacco out of twenty-five. Ten of these students indicated usage of alcohol only; no tobacco only usage, and three students indicated usage of both tobacco and alcohol.

Second year students: Twenty-two students of thirty-five indicated usage of tobacco and/or alcohol. Fourteen students used alcohol only; two students used tobacco only and six students indicated usage of both alcohol and tobacco.

Third year students: Seventeen of a total of twenty-seven students indicated usage of alcohol and tobacco; ten students used alcohol only; no students used tobacco only and seven students indicated usage of both.

Among the students admitting to drug usage, there were twenty-two as follows:

First Year: seven students

1--Alcoholic

Beverages	10-49	times
Amphetamines	1-2	times
Barbiturates	3-9	times
LSD	1-2	times
Marijuana	50 +	times
Tobacco	50 +	times

6--Alcoholic

Beverages	10-49	times
Marijuana	1-2	times
Tobacco	10-49	times

11--Alcoholic

Beverages	50 +	times
Amphetamines	10-49	times
Tobacco	1-2	times

19--Alcoholic

Beverages	50 +	times
Amphetamines	10-49	times
Barbiturates	3-9	times
Marijuana	3-9	times
Tobacco	50 +	times

20--Alcoholic

Beverages	10-49	times
Amphetamines	1-2	times
Marijuana	50 +	times
Tobacco	50 +	times

22--Alcoholic

Beverages	10-49	times
Marijuana	3-9	times
Tobacco	10-49	times

23--Alcoholic

Beverages	3-9	times
Marijuana	3-9	times
Tobacco	3-9	times

Second Year: seven students

26--Alcoholic

Beverages	3-9	times
Marijuana	1-2	times

28--Alcoholic

Beverages	3-9	times
Marijuana	1-2	times
Tobacco	1-2	times

36--Alcoholic
 Beverages 10-49 times
 Marijuana 1-2 times
 Tobacco 1-2 times

53--Alcoholic
 Beverages 10-49 times
 Barbiturates 1-2 times
 Marijuana 10-49 times
 Tobacco 50 + times

60--Alcoholic
 Beverages 50 + times
 Marijuana 10-49 times
 Tobacco 50 + times

Third Year: eight students

62--Alcoholic
 Beverages 3-9 times
 Amphetamines 3-9 times
 Barbiturates 3-9 times
 Marijuana 50 + times
 Tobacco 10-49 times

65--Alcoholic
 Beverages 10-49 times
 Marijuana 3-9 times
 Tobacco 50 + times

70--Alcoholic
 Beverages 50 + times
 Marijuana 10-49 times
 Tobacco 50 + times

74--Alcoholic
 Beverages 10-49 times
 Marijuana 10-49 times
 Tobacco 10-49 times

47--Alcoholic
 Beverages 10-49 times
 Amphetamines 3-9 times
 Marijuana 10-49 times
 Tobacco 50 + times

59--Alcoholic
 Beverages 3-9 times
 Marijuana 10-49 times
 Tobacco 10-49 times

64--Alcoholic
 Beverages 10-49 times
 Barbiturates 1-2 times
 Tobacco 10-49 times

68--Alcoholic
 Beverages 3-9 times
 LSD 3-9 times
 Marijuana 3-9 times

72--Alcoholic
 Beverages 50 + times
 Amphetamines 1-2 times
 Barbiturates 1-2 times
 Marijuana 10-49 times
 Tobacco 1-2 times

85--Alcoholic
 Beverages 3-9 times
 Marijuana 10-49 times

In summary, two students used just two of the drugs, student 26 and student 85. The rest of the students had experimented with alcohol and tobacco and marijuana and/or the amphetamines and/or the barbiturates. The only student who used alcohol and not tobacco and also another drug was number 68,

who used alcohol and LSD and marijuana. Eleven students of the twenty-two drug experimenters were users of alcohol, tobacco and marijuana. Eight students; 1, 19, 20, 47, 53, 62, 68, 72 included marijuana with their usage of alcohol and/or tobacco and/or amphetamines and/or barbiturates.

Although the literature revealed only a few studies about drug usage among nursing students, it is reasonable to believe that such students do not differ from those in other educational institutions and that some drug usage may be found in many schools of nursing. Medical schools have found drug usage among medical students as shown in the reports by Morgestern (16) and Benson (25). It would take further study to ascertain the reasons for drug usage among those preparing to enter health professions.

CHAPTER IV

SUMMARY, CONCLUSIONS, RECOMMENDATIONS FOR FURTHER STUDY

Summary

This study was undertaken for the purpose of determining the extent of drug usage by student nurses in a selected school of nursing and to determine if the students desired more information regarding drug usage and drug abuse. A modification of a survey form developed by the San Mateo County Health Department, California, was used as the data collection device.

The participants consisted of eighty-seven students in one selected diploma school of nursing. There were twenty-five first-year students, thirty-five second-year students and twenty-seven third-year students. The age range was eighteen to forty-six years, eighty-four females and three males. Information was obtained regarding usage of alcoholic beverages, amphetamines, barbiturates, LSD, marijuana and tobacco. Data were tabulated by classes.

Summary of First Year Usages

Five students indicated no alcoholic usage, two indicated usage 1-2 times, seven used alcohol 3-9 times, eight used alcohol 10-49 times and three students showed usage at fifty times or more.

Eighteen students indicated never using amphetamines, two used the drug 1-2 times, and two indicated usage at 10-49 times.

Twenty-one students indicated non usage of barbiturates; two used the drug 3-9 times.

Twenty-three students stated they had never used LSD, one student indicated usage of 1-2 times.

Eighteen students checked the never column for marijuana usage, one student checked 1-2 times, three students checked 3-9 times usage and two students used the drug fifty or more times.

Fourteen students indicated they had never used tobacco, three used it 1-2 times, one student indicated smoking 3-9 times, two 10-49 times, and four fifty or more times.

First year students indicated usage of mescaline, desbutal, edrisal, opium, psilocibin, hashish, peyote and darvon.

Students named psilocibin, birth control pill and heroin as drugs they thought were becoming more popular.

Sixteen students knew people who used drugs excluding cigarettes and alcohol, five did not. Twelve students indicated they knew close friends who used drugs, five did not. Twelve students indicated classmates used drugs, five stated no. Four students knew relatives who used drugs, nine answered negatively.

Three students stated they thought they would use drugs in the future; eighteen said they would not.

Six students indicated they would continue using drugs.

Fifteen students would like more information regarding drug use and drug abuse, seven would not.

Summary of Second Year Usage:

Eight students checked the never category of using alcoholic beverages. Six students used alcohol 1-2 times. Eleven used alcohol 3-9 times, nine used it 10-49 times and one indicated usage at fifty or more times.

Thirty-three students stated they never used amphetamines. One student indicated usage at 3-9 times.

Thirty-three students indicated no usage of barbiturates. One student used the drug 1-2 times.

Thirty-four students indicated no usage of LSD.

Twenty-seven students indicated never using marijuana; three used it 1-2 times and four used it 10-49 times.

Twenty-one students never used tobacco, three used it 1-2 times, three used it 3-9 times, three used it 10-49 times and five used it fifty or more times.

The only drug named as one used during the past twelve months was cafergot. Under the item, "what additional drugs do you think are becoming popular?", this group named opium, hashish, ritalin, heroin, marijuana and codeine.

Students' answers to, "do you know people who use drugs excluding cigarettes and alcohol?", twenty-five answered yes they knew people who use drugs; and six did not know people

who use drugs; twenty-one said they knew close friends who use drugs and nine said they did not; seventeen said they knew classmates who use drugs and eight said they did not; sixteen said they knew relatives who use drugs and seven did not.

Three students who had not experimented with drugs indicated that they thought they would in the future. Twenty-nine students said they would not.

Four students indicated they would continue using drugs. Twenty-three students requested more drug usage and drug abuse information and nine indicated they would not like more information.

Summary of Third Year Usage

Third year students indicated only two had never used alcoholic beverages. Six students used alcohol 1-2 times, eight students 3-9 times, seven students 10-49 times and four indicated usage of fifty or more times.

Twenty-two students never had used amphetamines. One student indicated usage of 1-2 times and one student 3-9 times.

Twenty-one students stated they never used barbiturates. Two indicated usage of 1-2 times and one student of 3-9 times.

Twenty-four students checked the never category for LSD usage and one student indicated usage of 3-9 times.

Twenty students indicated that they had not used marijuana. Two students used the drug 3-9 times, four used it 10-

49 times and one student used it fifty or more times.

Thirteen students reported they had not used tobacco. Three students indicated use of tobacco 1-2 times, two used it 3-9 times, three used it 10-49 times and five indicated usage of fifty times or more.

One student indicated usage of mescaline as another drug used during the past twelve months and another student named darvon compound 65.

Hallucinogens, amphetamines, ritalin and darvon were named as additional drugs they thought are becoming popular.

In answer to, "do you know people who use drugs excluding cigarettes and alcohol," twenty one students said they did know people who use drugs and two said they did not. Sixteen students indicated they knew friends who use drugs, six reported that they did not. Nineteen students wrote yes to knowing classmates who use drugs and two wrote no. Fifteen students reported they knew relatives who use drugs and five answered negatively.

Twenty-one students who had not experimented with drugs reported they would not do so in the future. Five students now using drugs stated they planned to continue drug usage and one student indicated she would discontinue usage.

Seventeen third-year students would like more information regarding drug usage and drug abuse and five students said they would not.

Conclusions

It is difficult to draw conclusions from a study of this size. The responses indicated that there is drug usage among the students of the selected school. It could be inferred that drug usage will continue and that the extent of drug usage may increase. The numbers who thought they would experiment in the future, those who planned to continue drug usage or expressed a desire for no further information regarding drug usage and abuse, were sufficient to indicate that the current situation will persist. It is apparent that as many third-year students plan to continue drug usage as first-year students. From this it may be inferred that the current drug information is not a deterrent from continuation of drug usage. It may be informative to note that although three first-year students and three second-year students who had not experimented with drugs previously indicated that they thought they would do so in the future, no third-year students indicated a positive response.

It may be concluded that the majority of the students indicated a desire for more information regarding drug usage and drug abuse.

Recommendations for Further Study

1--Replicate the study in other schools of nursing to ascertain if the findings of this study resemble the findings from

other schools. The need for revision of the survey form became apparent during data collection. Items should be numbered to facilitate summarization of data. A larger variety of drugs should be included in the form. The question of, "Do you know people who use drugs, excluding cigarettes and alcohol," was not clear. The question should ask the student the number of people she knows in each category and/or the relationship to her.

2--Replicate the study by administering to all freshman students and repeating when they are seniors for comparison of individual and class usage over a period of time of exposure of drug education.

3--Ascertain the students' sources of drug information regarding drug usage in the high school, school of nursing, and other.

4--Develop or research a tool which would include a personality identifying section as well as background material (economic, social, family) to seek some consistencies among drug experimenters.

BIBLIOGRAPHY

1. Alcohol and Drug Addiction Research Foundation of Ontario, Canada, 18th Annual Report. Ontario, Canada, 1969.
2. Anonymous, A Survey of Drug Abuse, Knowledge and Usage Among Nursing Students, 1970.
3. Andrews, George and Simon VinMenocog. The Book of Grass. Grove Press, Inc. New York, 1967.
4. Blachly, F.W., M.D. Seduction As A Conceptual Model In the Drug Dependencies. University of Oregon Medical School, 1969. (Mimeographed)
5. Blum, Richard, Ntopiates. Atherton Press, New York, 1964.
6. Blum, Richard. Students and Drugs. Joseey - Bass, Inc. San Francisco, 1969.
7. Borgatta, Edgar F. and Robert F. Evans, Smoking, Health and Behavior. Aldine Publishing Company, Chicago, Illinois, 1968.
8. Brenner, Joseph W., M.D., Robert Coles, M.D. and Dermot Neagher. Drugs and Youth. Liveright Publishing Corporation. Liveright, New York, 1970.
9. Bryner, J.W. The Young Smoker. Her Majesty's Stationery Office. London, England, 1969.
10. Cameron, Dale C., M.D. Drug Dependence - A Guide For Physicians. American Medical Association, Chicago, Illinois, 1969.
11. Cary, James F. The College Drug Scene. Prentice Hall, Inc. Englewood Cliffs, New Jersey, 1968.
12. Caskey, Matheryn. "The School Nurse and Drug Abusers" Nursing Outlook. 18:12:27-30 December, 1970.

13. Cory, Christopher, "Pop Drugs: The High As A Way of Life" Time, Time Life Henry Luce III, New York, New York, September 26, 1969.
14. Department of Health, Education and Welfare, San Mateo, California. Five Mind-Altering Drugs -(Plus One).
15. Department of Health, Education and Welfare. Students and Drug Abuse. Public Health Service Publication No. 1946, Washington, D.C. 1970.
16. Department of Psychiatry, University of Oregon Medical School. Introduction to Patient Evaluation. Conjoint Course 413 May 7, 1971; Conjoint Course 413 May 5, 1971 Psychiatry 512 February 11, 1971. (Class Outline - Summary)
17. Gaver, Kenneth. Man and Marijuana, Education Department, Alcohol and Drug Section, Oregon Mental Health Division No. 2, 1967.
18. Gottlieb, David Ph.D. Alienation and Rebellion Among the Disadvantaged. Alcohol and Drug Section No. 11, Oregon 1968.
19. Hain, David F. Compilation of the Oregon Statutes Pertaining to Narcotics and Dangerous Drugs. Education Department, Alcohol and Drug Section, Oregon Mental Health Division No. 15, March 1, 1969.
20. Hoffer, A. and H. Osmond. The Hallucinogens. Academic Press, New York, 1967.
21. Howard, Jane and Dr. James Goddard. "Marijuana", Life. Time, Inc., New York, October 31, 1969. Pages 27-35.
22. Irwin, Samuel, PhD. Drugs of Abuse - Their Actions and Relative Hazard Potential. University of Oregon Medical School. Portland, Oregon 1970.
23. Johnson, Roswell D. "Why So Many Teenagers Fall For Marijuana". Parents, Volume XLIV, No. 3, March, 1969.
24. Kalant, Howard. Experimental Approaches to the Study of Drug Dependence. University of Toronto Press, Canada, 1965.

25. Kangiloski, Joan. "Marijuana Smoking In Medical Schools." Journal of American Medical Association, Volume 216, No. 11. Chicago, Illinois, June 14, 1971.
26. Kaplan, John. Marijuana - The New Prohibition. World Publishing Company, New York, 1970.
27. King, Stanley H. Youth and Society. Alcohol and Drug Section. Mental Health Division No. 8. Oregon, 1968.
28. Land, Herman. "How A Parent Can Reach His Child About Drugs." Today's Health. American Medical Association. August, 1971. Chicago.
29. Masters, R.E.L. and Jean Houston, PhD. The Varieties of Psychidelic Experience. Dell Publishing Company, Inc. New York, 1966.
30. McElroy, Robert. Beaverton Schools Drug Study - 1970. Pupil Personnel Services. Beaverton Schools, Beaverton, Oregon, June, 1970.
31. McNaughton, Neil A.C.S.W. The So-Called Glue Sniffing Prohler: A Review. Alcohol and Drug Section, Mental Health Division. Oregon. November 17, 1970.
32. Moser, Marvin, M.D. and Linda Greenhouse. "Can We Counteract the Culture of Marijuana," Parents Magazine, Parents Magazine Enterprises, Bergenfield, New Jersey, July, 1971.
33. Multnomah County Medical Society. A Conference - The Drug Scene. Education Department, Alcohol and Drug Section, Oregon Mental Health Division No. 6, 1968.
34. Nowlis, Helen H. Drugs On The College Campus. Doubleday and Company, Inc. Garden City, New York, 1969.
35. Oursler, Will. Marijuana. Paul S. Eriksson, Inc., New York, 1968.
36. Pillard, Richard Comstock, M.D. "Marijuana." New England Journal of Medicine. Boston, Massachusetts, August 6, 1970. 283:6:294-301 August 6, 1970.
37. Pontliana, Joan. Today's Adolescents: Master Thesis, University of Washington, 1967. (Unpublished)

38. Rasmussen, Coba C. Smoking Habits and Expressed Opinions of 543 Student Nurses, University of Oregon School of Nursing. (Master thesis unpublished) 1969.
39. Report of the Scientific Director of the Council of Tobacco Research. Clarence Cook Little, ScD., 1969. Washington, D.C.
40. Russo, Robert J. Amphetamine Abuse. Charles C. Thomas, Springfield, Illinois, 1969.
41. San Mateo Drug Poll Summary. San Mateo County Schools, California, April, 1970.
42. Saylor, Louis F., M.D., M.P.H. Drug Abuse. California Health Department of Public Health. Berkeley, California, April, 1970.
43. Scott, Edward M., PhD. Some Considerations and A Few Reflections On Youthful Drug Users. Alcohol and Drug Section, No. 14, Oregon, 1969.
44. Silver, J.F., W.L. Sheep, L.B. Bates, G.F. Clark, E.W. Cook and W.A. Smith. "Marijuana Smoking in Panama", Military Surgery. 73:4:260-280. November, 1933.
45. Smith, David E., M.D. and Frederick M. Meyers, M.D. "The New Generation and the New Drugs." California Health, Berkeley, California.
46. Smith, David E. The New Social Drug. Prentice Hall, Inc. Englewood Cliffs, New Jersey, 1968.
47. Spray, Charles. Doctor Cutlandish, Criterion, Inc., Beaverton, Oregon, 1970.
48. Stearns, Jess. The Seekers. Doubleday and Company, Inc., Garden City, New York, 1969.
49. Sullivan, Ann. "Governor McCall Outlines Oregon's Efforts to Set Up Programs to Control Drug Crisis." The Oregonian. 34:514:3M:13 August 10, 1971.
50. Task Force Report: Narcotics and Drug Abuse. United States Government Printing Office, Washington, D.C., 1967.

51. The President's Advisory Commission on Narcotic and Drug Abuse, Report of. United States Government Printing Office, Washington, D.C. November, 1963.
52. Ungerleider, J. Thomas, M.D. The Problems and Prospects of LSD. Charles C. Thomas Publisher. Springfield, Illinois, 1968.
53. United States Department of Health, Education and Welfare. LSD, Some Questions and Answers. Public Health Service Publication No. 1828, 1969.
54. United States Department of Health, Education and Welfare. Marijuana - Some Questions and Answers. Public Health Service Publication No. 1829, 1969.
55. United States Department of Health, Education and Welfare. Narcotics - Some Questions and Answers. Public Health Service Publication No. 1827, 1969.
56. United States Department of Health, Education and Welfare. The Up and Down Drugs. Public Health Service Publication No. 1830, 1969.
57. United States Department of Health, Education and Welfare. The Health Consequences of Smoking; A Public Service Review. United States Surgeon General's Advisory Committee on Smoking and Health. Washington, D.C., 1967.
58. Vogel, Victor H., M.D. and Virginia E. Vogel. Facts About Narcotics and Other Dangerous Drugs. Science Research Associates, Inc. Chicago, Illinois, June, 1969.
59. Weil, R.T. and N.E. Zinberg and J.M. Felson. "Clinical and Psychological Effects of Marijuana in Man." Science Washington, D.C. 162:1234-1242. December 13, 1968.
60. World Health Organization 16th Report of Expert Committee on Drug Dependence. WHO Technical Reporting Service 407, New York, 1969.
61. Yolles, Stanley, M.D. Before Your Kid Tries Drugs. United States Department of Health, Education and Welfare, Public Health Service Publication No. 1947, 1969.

62. Zerwekh, Joyce and Nancy Jo Foreman. "Drug Crisis Intervention" The American Journal of Nursing. 71:9:1736-1739. September, 1971.
63. Zivick, Sister Dorothy. "Workshop on Drug Abuse." Nursing Outlook. National League for Nursing, New York. 19:7:476-478. July, 1971.

APPENDICES

APPENDIX A

Drug Usage Survey Form

DRUG USAGE SURVEY
May 1971

This study is being made to survey drug usage other than substances used under physician's advice. Please be honest in answering. The accuracy of the data is totally dependent upon the accuracy with which you fill out the questionnaire. This report is to be totally anonymous. Fold your questionnaire upon completion and put it in the envelope. Please state your year in the school, sex and age where indicated.

1st year _____ male _____ age _____
 2nd year _____ female _____
 3rd year _____

I HAVE USED (During the Last 12 Months)	NEVER	1-2 TIMES	3-9 TIMES	10-49 TIMES	50 or MORE TIMES
ALCOHOLIC BEVERAGES					
AMPHETAMINES (meth, speed, bennies)					
BARBITURATES (downers, reds, blues, yellows)					
LSD					
MARIJUANA					
TOBACCO					

NAME OTHER DRUGS YOU HAVE USED DURING THE PAST 12 MONTHS

WHAT ADDITIONAL DRUGS DO YOU THINK ARE BECOMING POPULAR?

Please answer yes or no to the following and explain if indicated.

Do you know people who use drugs, excluding cigarettes and alcohol? _____ close friends _____, classmates _____, relatives _____?

If you have not experimented with drugs, do you think you will in the future?
 Explain:

If you are now using drugs, do you plan to: Stop _____; or continue _____?
 Explain:

Would you like more information regarding drug usage and drug abuse? _____
 Explain:

Thank you for your time and help.

Lottie Mendelson, R.N.
 5455 S.W. 87th Avenue
 Portland, Oregon 97225

APPENDIX B

Raw Data

DRUG USAGE SURVEY
May 1971

This study is being made to survey drug usage other than substances used under physician's advice. Please be honest in answering. The accuracy of the data is totally dependent upon the accuracy with which you fill out the questionnaire. This report is to be totally anonymous. Fold your questionnaire upon completion and put it in the envelope. Please state your year in the school, sex and age where indicated.

1st year 25 male 3 range age 18-26
2nd year 35 female 24
3rd year 27

I HAVE USED (During the Last 12 Months)	NEVER	1-2 TIMES	3-9 TIMES	10-49 TIMES	50 or MORE TIMES	NO RESPONSE
ALCOHOLIC BEVERAGES	15	14	26	24	8	0
AMPHETAMINES (meth, speed, bennies)	73	3	2	2	0	8
BARBITURATES (downers, reds, blues, yellows)	75	3	3	0	0	6
LSD	81	1	1	0	0	6
MARIJUANA	65	4	5	8	3	2
TOBACCO	48	9	6	8	14	3

NAME OTHER DRUGS YOU HAVE USED DURING THE PAST 12 MONTHS

Opium	1	Psylocibin	1	Edrisal	1
Mescaline	4	Hashish	1	Desbutal	1
Devote	1	Darvon	2	Cafercot	1

WHAT ADDITIONAL DRUGS DO YOU THINK ARE BECOMING POPULAR?

Heroin	4	Hashish	Hallucinogens
Ritalin	2	Opium	Amphetamines
Darvon	2	Codeine	Birth Control Pill

Please answer yes or no to the following and explain if indicated. 62 Yes

Do you know people who use drugs, excluding cigarettes and alcohol? 13 No close friends 48 Yes, classmates 48 Yes, relatives 25 Yes?

If you have not experimented with drugs, do you think you will in the future? Explain: No 68, Yes 6, Maybe 5

If you are now using drugs, do you plan to: Stop 1; or continue 15? Explain:

Would you like more information regarding drug usage and drug abuse? Explain: No 21, Yes 55

Thank you for your time and help.

Lottie Mendelson, R.N.
5455 S.W. 87th Avenue
Portland, Oregon 97225

AN ABSTRACT OF THE THESIS OF

ZELOTTA M. MENDELSON

For The MASTER OF SCIENCE in NURSING EDUCATION

Date of receiving this degree: June 9, 1972

Title: A Survey of Drug Usage by Student Nurses in One
Selected School of Nursing

Approved:

Lucile Gregerson

(Associate Professor in Charge of Thesis)

The purpose of this study was to determine the amount of drug usage among student nurses enrolled in a selected diploma school of nursing and to determine the students' desire for more information regarding drug usage and drug abuse. The literature and related research studies provided a frame of reference for this study. A data collection tool was developed by modifying the San Mateo County Health Department Drug Usage Survey Form. The participants in the study were eighty-seven student nurses from a selected three-year urban school of nursing.

Findings

Of the eighty-seven student nurses who volunteered to fill out the form, there were twenty-five females of the first-year class, thirty-three females and two males of the second

year class and twenty-six females and one male of the third year class.

Age range of the students was eighteen to forty-six years. Information was obtained regarding usage of alcoholic beverages, amphetamines, barbiturates, LSD, marijuana and tobacco. Data were tabulated by classes.

From the first year classes, nine students used alcohol 1-10 times and eleven used alcohol 10 to fifty times or more. Two students used amphetamines 1-2 times and two used the drug 10-49 times. Two students indicated barbiturate usage 3-9 times. One individual indicated LSD usage 1-2 times. Four students used marijuana 1-10 times and two indicated usage of fifty times or more. Four students smoked tobacco 1-10 times, two students 10-49 times and four students more than fifty times. Six of the freshman who were using drugs plan to continue usage. Fifteen of these students requested more information regarding drug usage and drug abuse and seven indicated they did not desire more information.

Second-year students showed that twenty-seven were alcohol users. Seventeen reported use of alcohol beverages 1-10 times and nine students indicated usage of 10-49 times and one student reported usage at fifty or more times. One individual checked the 3-9 times category for amphetamine usage. One student used barbiturates 1-2 times. Three students used marijuana 1-2 times and four indicated usage at the 10-49 time

level. Four of the students who reported themselves as now using drugs indicated they planned to persist in usage. Twenty-three second-year students answered affirmatively to desiring more information regarding drug usage and drug abuse and nine students answered negatively.

The third year students indicated only two had never used alcohol. Fourteen students were in the 1-9 time category for usage of alcoholic beverages. Seven students indicated alcohol usage 10-49 times and four students used alcohol fifty or more times. One student reported usage of amphetamines 1-2 times and another student showed usage of the drug 3-9 times. Two students used barbiturates 1-2 times and one used the drug 3-9 times. Seven students indicated usage of marijuana, two used the drug 3-9 times, four used it 10-49 times and one used it fifty times or more. Five students reported smoking 1-9 times. Three used tobacco 10-49 times and five students reported tobacco usage of fifty times or more. Of the students who indicated they had used drugs previously, one student planned to continue usage. Seventeen students wrote yes to desiring more information regarding drug usage and drug abuse while five students wrote no.

Conclusions

1--Student responses indicate that there is drug usage among the students of the selected school. From the numbers who

planned to continue drug usage, who thought they might experiment in the future and who expressed a desire for no further information regarding drug usage and drug abuse, it could be inferred that drug usage will continue and that the extent of drug usage may increase.

2--The majority of the students indicated a positive response for more information regarding drug use and drug abuse for a variety of reasons.

Recommendations for Further Study

1--Replicate the study in other schools of nursing to ascertain if the findings of this study resemble the findings from other schools.

2--Do a follow-up study of the freshman class when they are seniors for comparison of individual and class usage over a period of time and exposure to drug education.

3--Ascertain the students' sources of drug information regarding drug usage in the high school, school of nursing and other.

4--Develop or research a tool which would include a personality identifying section as well as background material (economic, social, family) to seek some consistencies among drug experimenters.

Typed by Barbara J. Achziger