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HEW THIRD REPORT ON ALCOHOL & HEALTH

On May 15, the Third Report on Alcohol & Health by the NIAAA, a condensed version of a more extensive report submitted last fall, was presented to the office of HEW Secretary Joseph A. Califano, Jr. The longer document, with some revisions, will stand as a technical document containing backup data and information.

David Promisel, Chief of NIAAA's Policy Studies and Special Reports Branch, expects the report to receive an extensive review. A limited number of pre-print copies will be available within a few days of Califano's approval according to Promisel, although he declined to say when that might be. These copies will go to Congress, the media, state alcoholism authorities, and key alcoholism groups. General distribution should take place about two months later following publication of the report by the Government Printing Office (GPO). Copies will be available through the GPO and the National Clearinghouse for Alcohol Information. A list is being compiled for those interested in receiving a copy at: National Clearinghouse for Alcohol Information, P.O. Box 2345, Rockville, Maryland 20852.

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WELCOME TO WSCA'S Alco Info

Volume 1, Number 1 of the Washington State Council on Alcoholism's new newsletter, *Alco Info*, was issued in May, 1978. The editors of *Nepenthe* welcome this new publication and congratulate the Washington State Council on Alcoholism for its development.

Information concerning subscription to this newsletter can be obtained by writing to the Washington State Council on Alcoholism, 360 Bellevue Square, Room 217, Bellevue WA 98004.

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EDITORIAL OPINION

"BREAKING DOWN WALLS"

(The following is reprinted with permission from the U.S. Journal of Drug and Alcohol Dependence, June, 1978)

When James MacDonald, new NCA representative from St. Louis, charged the field of alcoholism with being populated by ego turfdoms he hit the nail right on the head.

The applause that erupted from the floor of the NCA's annual meeting when he made his statements affirmed clearly that a lot of people in the field are just as irritated by the walls that have been built as is MacDonald.

The walls encircle individuals, institutions, and philosophies.

People who believe that alcoholism is a "disease" in which the agent alcohol is but a minor contributing factor rail at those who argue that environmental stimuli do have some effect on the making of an alcoholic and almost anyone is a potential abuser.

Those who believe prevention ought to focus only on the deviant drinking population scoff at those who advocate moderating the way all of society uses alcohol.

Proponents of total abstinence look upon those who talk about controlled rehabilitative drinking as dangerous heretics.

There are those who believe early intervention is critical in the rehabilitation of an alcohol abuser...and those who are just as adamant that until an alcoholic reaches rock bottom and comes crawling on his belly for help he is just not ready to be helped.

Whole institutions have been built around key principles such as these and if you don't believe in the principle you don't belong.

Proselytizing is a way of life in the field of alcoholism and this can be destructive People with opposing views should be talking to each other and learning from each other, not building their walls ever higher and more secure to shut out voices and principles they don't want to hear.

To his credit, ex-NIAAA director Ernest Noble knew this and tried to do something about it.

James MacDonald sees it already and he is just new to the field. It is nice to hear that someone of MacDonald's obvious enthusiasm and intellectual skills is going to try to break down those walls.

Good luck.

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Nepenthe (ni-pen-the), n. (L. Gr. nepenthes, removing sorrow; ne-, not + penthos, sorrow, grief) 1. a drug supposed by the ancient Greeks to cause forgetfulness of sorrow; 2. anything causing this state.

NOTES ON RESEARCH IN PROGRESS:

The Effect of Acute & Chronic Ethanol Administration on In Vivo Aminopyrine Metabolism in the Rat

For drugs that are largely metabolized by the liver, their side effects and toxicity are enhanced in patients who have liver disease. Therefore, it is important to recognize that liver disease is present and that drug dosage may have to be adjusted accordingly. Since the most common cause of chronic liver disease in America is alcoholism, the importance of understanding drug metabolism in alcoholics is apparent.

Alcohol may influence drug metabolism in at least three ways. Firstly, with acute ingestion of alcohol simultaneously with the drug, it may directly inhibit the metabolism of the drug, and, therefore, lead to side effects or toxicity. A frequent example of this is when alcoholics mix sedatives and alcohol which may lead to severe overdose circumstances and even death. Secondly, the chronic ingestion of alcohol may cause an accelerated hepatic metabolism of some drugs. This explains, in part, the tolerance that some alcoholics have to various sedatives; that is, they may require larger doses for an effect than would non-alcoholics. Finally, alcohol, as mentioned above, causes severe chronic liver disease (cirrhosis) and this will lead to changes in hepatic drug metabolism.

Consequently, the research problem is the separation of these three alcohol-related effects. A recently introduced breath test utilizing radioactive carbon dioxide is relevant to this and allows the study of drug metabolism in the living organism (in vivo) in contrast to the test tube (in vitro). Research currently being conducted under ADAI auspices by Dr. Richard Willson (Head, Division of Gastroenterology, Harborview Medical Center) encompasses the study of this breath analysis technique on rats to help separate the effects of acute and chronic alcohol administation on drug metabolism from underlying liver disease. Since this radioactive breath test can be used in the clinical setting, it may be potentially useful for assessing drug metabolism in alcoholics.

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ARF PUBLICATIONS

The Alcoholism and Drug Addiction Research Foundation of Toronto which publishes The Journal and offers a wide selection of educational materials related to drug and alcohol abuse, provides samples of its publications free upon request to the Addiction Research Foundation, c/o Marketing Services, 33 Russell Street, Toronto, Ontario, Canada M5S 2S1.

The Journal covers a variety of topics from pinball addiction to oral contraceptives to drug and alcohol use and abuse, with a wide range of populations being discussed, including women, youth, and the elderly.

The range of educational materials listed in their 1978 Educational Materials Catalogue, are many and varied, including books, films, pamphlets, video and audio tapes, and microfiche bibliographies and articles on substance abuse and related individual, family, and societal problems. **********

WOMEN AND SUBSTANCE ABUSE

An article by Harvey McConnell on a report compiled by private consultants for the National Institute on Drug Abuse was recently printed in The Journal (June, 1978). As noted by Muriel Nellis, acting as national coordinator and principal author for the report, the results of the study, based on a compilation of data collected from public and private groups nationwide, were not scientifically conclusive, but there was a general agreement on the problems and recommendations.

Statistics, observations, and local surveys suggest that women account for 50% of the 10 million American alcoholics and more than half of the drug abusers, apparently cutting across "all economic, social, racial, and cultural boundaries." As was pointed out, there are no precise figures because only a small percentage of those actually affected seek treatment. One of the possible reasons cited was the stigma attached to drug and alcohol abuse by women, thereby preventing them from admitting the problem and seeking treatment until confronted by a crisis. This problem is further compounded for women who work in the home, often isolated during the day and hidden by family and friends.

Two indicators of the magnitude of the drinking problem among women are the large increase in drinking among teenage women and the increasing rate of death by cirrhosis among women. This is compounded by the high incidence of polydrug abuse and cross-addiction among women. One study of women alcoholics found that 80% used other drugs as often as they used alcohol. The report pointed out that there were little data available on women who work outside the home, with the symptoms of alcoholism (irritability, somatic complaints and fatigue) often being vague, nonspecific and thus misread. Furthermore, women in low-paying positions are easily replaced rather than being worked with towards the goal of improving work performance.

While physicians often fail to identify drug and alcohol problems in women, they may even encourage, perhaps inadvertently, drug use among women. Sixty percent of all psychotropic drugs, 71% of all antidepressants, and 80% of all amphetamines prescribed are prescribed for women. Eighty percent of all mood-altering drugs are prescribed by specialists, general practitioners, obstetricians, and gynecologists who have little training in psychopharmacology, and only 9% by psychiatrists. Perhaps the most susceptible group is middle-aged, middle-class women who are given medications to help them "cope."

The roots of this problem can be traced back to training in medical school where there is a lack of sensitivity and emphasis on the health problems of women and on drug and alcohol abuse. "Physicians are taught to treat symptoms, rather than to identify underlying problems, and are conditioned to believe that women are not as psychologically 'sound' as men, are inherently more dependent and likely to have emotional problems." This is compounded by advertising and promotion that reinforces the tendency of physicians to prescribe sedatives, tranquilizers, and mood-altering drugs by their portrayal of "women

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as anxious, depressed, in need of a medical 'crutch' to deal with their problems."

As the report points out, pharmacists are in a unique position. They could readily identify persons frequently refilling prescriptions, and persons acquiring drugs that could lead to cross-addiction. Further, they are in an excellent position to distribute educational materials.

According to the report, present services are fragmented, isolated, not widely available, and tend to treat problems in isolation, ignoring total needs. They point to the need for better coordination of existing systems and resources, comprehensive health service, and perhaps a redefinition of the problem. While alcoholism is seen as a "disease", drug abuse is seen as a "self-imposed addiction", thus separating the women who may perhaps face some of the same problems. The article does not, however, discuss whether or not existing facilities meet the needs of women substance abusers.

Several areas were recommended for further study, including: effect of drug and alcohol use in relation to hormonal changes occurring during a person's life; the relationship between monthly cyclical patterns and drug and alcohol metabolism; relationship between substance abuse and other factors, including isolation, violence, moving, employment, and education; relationship between substance abuse and crisis situations: alternative methods for coping with crisis; identification of possible groups facing high risk factors; search for warning signals; impact of advertising; relationship between prescribing patterns of physicians and abuse; the effects of smoking, marijuana, and obesity on the physical and mental health problems of women.

Finally, the report called for a Commission to be set up to investigate the causes and implications of substance abuse among women.

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NIAAA CHILDREN OF ALCOHOLIC'S CONFERENCE

NIAAA is considering plans for a conference to focus on the treatment needs of children of alcoholics to be held in Washington, D.C., this fall. The idea behind it, according to Willard Foster of the NIAAA, is to convene professionals who have actual experience with ongoing substantive treatment programs for such children, providing a place where the problems and successes of varying approaches can be shared.

Foster and William A. J. Fay, a Johns Hopkins University graduate student, have co-authored a discussion paper suggesting a number of possible stands NIAAA could take, including the training and placement of a "youth counselor" in each of the 75 NIAAA-funded treatment programs. They also suggest that a census be taken of the children now being treated by NIAAA-funded facilities and the kinds of treatment being used.

Foster was also responsible for the study on children of alcoholics commissioned by the NIAAA to the Booz-Allen & Hamilton consulting firm in 1974, and more recently has recommended that the HEW-wide review, to explore new initiatives being conducted at the present time, include the problems of children of alcoholics.

For further information, contact: Willard Foster, Executive Assistant to the NIAAA Director, Room 16c-06, Parklawn Building, 5600 Fishers Lane, Rockville, MD 20857. Their telephone number is: (301) 443-2530.

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SAAETP TRAINING MATERIALS

The Southern Area Alcohol Education and Training Program, Inc. (SAAETP) offers several books and treatment packages listed below, for individuals and organizations working with specific populations around alcohol abuse:

1. El Uso de Alcohol is a resource book for individuals and organizations working with alcohol-related problems in Spanish speaking communities. It includes an introduction to the problem and its dimensions; annotated bibliographies of cross-cultural issues, and alcohol & spanish-speaking groups in the U.S.; educational and prevention materials; original articles on solutions to problems in alcohol treatment and intervention systems; and a summary with recommendations.

2. A manual, A Model for Developing a Campus Alcohol Abuse Prevention Program, incorporating the principles of effective alcohol abuse prevention on college and university campuses, providing a step-by-step guide for implementation, needs assessment, and evaluation.

3. Youth Awareness, a complete package for a 2-day training program focusing on training "concerned individuals" who will train young people as "peer helpers". The program addresses positive and negative peer pressure, psychological aspects, and physical effects of alcohol on the body.

4. The Employee Assistance Program provides training in awareness of alcohol abuse and related problems for employee assistance program directors, treatment facility personnel, and counselors to aid in identification, confrontation, policy development, and development of a referral system.

5. The Manager & Supervisor Sensitivity Training Program for supervisors and managers providing training in identifying and assisting troubled employees. Also aids in the development of a referral system.

6. The Minority Populations Training Materials is a training package including a model program, specific training, & available resources for professionals working with alcohol abuse in minority populations--women, Native Americans, youth, aged, black, and Spanish-speaking individuals. Sociological and anthropological material related to the target group, and an overview of alcohol abuse are included.

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7. Physician's Role: The Diagnosis and Management of Alcoholism and Alcohol-Related Disorders is a complete package for the continuing education of medical professionals. It includes an overview of the problem, criteria for treatment, education on the physical effects, understanding the three stages of alcoholism, emergency problems, diagnosis, treatment, aftercare, and assertive training.

For further information contact: SAAETP, Inc., 4875 Powers Ferry Road N.W., Atlanta, GA 30327.

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STREET DRUG ANALYSIS IN WASHINGTON

The Street Drugs Analysis Laboratory of the Washington State University at Pullman recently released a list showing the results of their analysis of street samples submitted during the fourth quarter of 1977. From Washington State there were 10 samples tested for amphetamines, only one of which actually contained any amphetamine with the most common substitute being ephedrine and caffeine; five cocaine samples, all containing cocaine, with three also containing lidocane and some unknowns; seven Psilocybe and magic mushrooms from Whatcom and Skagit counties, only one of which actually contained any Psilocybin; one cannibinol and one hash oil, both containing Δ^9-THC plus other cannabinols; and 2 THC and one PCP, both containing PCP, two with PCC and piperidine or peperidine. There were also several out-of-state samples, including one purported LSD sample originating in Idaho, one from New Jersey, both containing LSD; and two purported Quaalude samples, one from Texas and one from Washington with the Washington sample containing Methaqualone and the other contained two unknowns. The other 25 samples were unmarked tablets and powders: 11 from Washington, 10 from Mexico, 4 from Idaho, and one of unknown origin. When these samples were analyzed the findings were as follows: four stimulants most commonly containing caffeine and ephedrine, two depressants, two with chemical compounds not usually used for mood changing purposes, and two with unidentified components, all from Washington; five diazepam and five unknowns from Mexico; the other five were all different.

Samples for analysis should be sent to: Street Drugs Analysis Laboratory, College of Pharmacy, Washington State University, Pullman, Washington 99164, with the following information:

1. The serial number from a dollar bill as a sample identification number;
2. Purported contents.
3. Physiological effects (mental and/or physical).
4. Route of administration.
5. Street price.
6. Location (city or town) where sample was obtained.
7. A self-addressed, stamped envelope if written reply is desired.

Results may be obtained by calling the laboratory at (509) 335-4773 between 2 and 5 p.m., Monday through Friday, asking for the results by the number submitted with the sample. Please allow a week for the analysis to be completed.

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PRESIDENT'S MENTAL HEALTH COMMISSION

The President's Commission on Mental Health filed its final report on April 27, recommending a funding increase of $9 million in the National Institute on Alcohol Abuse and Alcoholism's research budget totalling $30.2 million; a $9 million increase for the National Institute on Drug Abuse, bringing the total to $55 million; and a $30 million increase for the National Institute of Mental Health, with a new total of $165.4 million. During the formal presentation, President Carter stated that he would support the recommended increase in his budget to Congress next year.

The report placed a high priority on research, pointing out the need to rebuild mental health research over the next ten years. The report further stated that although "research needs have been eclipsed by service priorities" within the NIAAA, research is needed to develop the needed knowledge base for decreasing "the high incidence and prevalence of alcoholism and the resultant mortality and morbidity." Yet, of the three substitutes, the NIAAA spends the smallest percentage (9%) of its total budget on research.

The Commission's Liaison Task Panel on Alcohol-Related Problems stated that while "approximately 10 million Americans report recent alcohol-related problems...only one million are receiving treatment for alcoholism." In outlining the dimensions of the problem, the Commission reported that victims of alcohol abuse and alcoholism are among the large numbers of Americans suffering from serious emotional problems.

The Commission further stated that drug abuse is a poorly understood, complex problem having social, legal, health and mental health implications. And, while many people with drug-related problems turn to mental health facilities for assistance, "most treatment efforts are independent of the mental health services system."

Copies of the Commission's report can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Cite Stock Number 040-000-00390-8 when ordering. Price: $2.75. The various task panel reports are printed in appendices--Vols. II, III, and IV of the report. The alcohol and drug task panel reports are published in Vol. IV, which can be purchased for $8.50 from the Government Printing Office (Stock No. 040-000-00393-2). Individual task panel reports can be purchased from the National Technical Information Service, U.S. Dept. of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

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IMPACT OF LOWERED DRINKING AGE

Dr. Paul C. Whitehead of the University of Western Ontario, London, supported by funds from the Canada Council of Young Drivers and the Non-Medical Use of Drugs Directorate of Canada's Department of National Health & Welfare conducted a 7½ year study of the collision rate for drivers 16 to 20 years old. He concluded that lowering the legal drinking age from 21 to 18 in London, Ontario, had resulted in a

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substantial increase in alcohol-related motor vehicle collisions involving young drivers. This data "corroborates and supplements those of other researchers", according to Dr. Whitehead.

The study began 3½ years before the lowering of the drinking age (July, 1971) and ended 4 years after. During that time the collision rate for 18-20 year-olds increased 60% or five-fold compared with a 40% or three-fold increase for the 24 year-old comparison group. Interestingly, the collision rate for 16-17 year-olds increased 50% or eleven-fold during the same time period.

In all age groups, males were involved in five times as many collisions as females overall, with 17 times as many alcohol-related collisions.

For further information, contact Dr. Paul C. Whitehead, Chairperson of the Department of Sociology, University of Western Ontario, London, Ontario, Canada.

Complimentary copies of a monograph describing this research may be obtained by writing the Non-Medical Use of Drugs Directorate, Department of National Health & Welfare, 365 Laurier Avenue West, Ottawa, Canada. Request Monograph No. 1, "Alcohol and Young Drivers: Impact and Implications of Lowering the Drinking Age."

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USE AND EFFECTS OF COCAINE

Biased and poorly informed claims surrounding the use and effects of cocaine have led to myths and controversy surround the subject. Many, including some well-informed scholars, state that almost nothing is known about the effects of cocaine use. However, Dr. Oriana Kalant, a scientist in the research division of the Addiction Research Foundation of Ontario and a expert on amphetamines as well as cocaine and coca leaves, disagrees. In a recent article of The Journal (April, 1978), Dr. Kalant reports the principle findings of her research after four years reviewing the literature in English, French, Spanish, and German.

The leaves of the coca bush, which grows on the eastern slopes of the Andes, have been used for centuries to increase physical endurance and decrease feelings of hunger among the Indians of Peru and Bolivia, helping them "cope with the rigors of hard work at high altitudes." In 1860, a german chemist, Niemann, isolated, purified and identified cocaine, the main active drug in the leaves. Since that time, it has been "taken orally, subcutaneously, intravenously, and by application to the mucosa of the mouth, nose, rectum, and vagina."

In 1884, two reports were published, one by Sigmund Freud recommending the use of cocaine as a stimulant in treating depression and other conditions, including morphine withdrawal, while the other report, published by Carl Koller, discussed the use of cocaine as a local anesthetic on the eye. This led to two paths for the study and use of cocaine. The use of cocaine as a local anesthetic led to the discovery of synthetic substitutes having a lower toxicity, while its use in morphine withdrawal indirectly led to the self-administration of the drug. Initially, the drug was used by subcutaneous injection, with sniffing of the drug appearing around the turn of the century. Thereafter, the practice spread rapidly with use reaching its peak soon after World War I. Use gradually diminished after that time and was rare over the next fifty years with a recent resurgence, apparently confined in large part to multiple drug users who use cocaine only occasionally, although there is evidence that the use of large amounts of cocaine on a regular basis may be increasing. Not surprisingly, the drop in popularity occurred in conjunction with the rise in popularity of amphetamines which have very similar properties and were cheaper and easily available, while cocaine was by then under strict legal control. Further, there may be a partial connection between the resurgence of cocaine use and the drop in popularity of amphetamines.

Availability and price have affected the number of users, directly affecting the publication of scientific and clinical reports. Therefore, most of the information published comes from the time period 30 to 40 years following the introduction of cocaine into medical practice, and very little during the past 30 to 40 years. The most extensive, sound, meticulously reported and best documented clinical evidence was published in France and Germany in the 1920's when use was most prevalent.

Experimental evidence on drug use in animals indicates that cocaine and amphetamines are "the most powerful dependence-producing drugs available, which is consistent with the dependence-producing effects of cocaine in humans. Although cocaine as well as other dependence-producing drugs (alcohol included) can be used a few times or even periodically without addiction, a certain percentage of the users will become addicted, unable to give it up despite the ill-effects and difficulties. During the 40 years of widespread use, chronic users generally began with moderate doses (200-300 mg/daily), escalating quickly to 2-3 grams/daily, sometimes higher. Current usage levels, however, are not as high since the present illicit drug is dilute and expensive. Persistent use occurs not so much as an avoidance of withdrawal symptoms which are mild--primarily prolonged, disturbed sleep, mood depression, and exaggerated appetite--but because of psychological dependence.

The dosage and method of administration affect the onset and duration of acute effects, rapidity of dependency development, and physica consequences, while individual differences, mood, and setting affect the mood, and central and peripheral sympathomimetic effects. Injection by subcutaneous or intravenous routes may lead to complications from bad technique, with intravenous administrations sometimes leading to thrombophepitis, hepatitis or embolism. Sniffing may lead to eczema around the nose, stuffy and runny nose, perforated nasal septum, and possible disturbances of taste and smell with tickling, burning and crawling sensations of the neck, fact, and back. Small oral doses may increase muscular strength and shorten sensor-motor reaction time leading to an increase in talking and physical and mental activity.

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The use of cocaine stimulates the sympathetic and central nervous systems. This leads to a sense of euphoria and well-being, increased self-confidence and energy, and a diminished need for sleep, diminished appetite and an increase in sex drive with an increase in the time it takes a male to achieve orgasm. Other symptoms include an increased heart rate, pallor, dry mouth, sweating and dilated pupils. Prolonged physical use leads to continuation of the acute effects already mentioned with a loss of weight resulting from loss of appetite, and constipation, difficulty urinating and impotence in males resulting from continued stimulation of the nervous system. The primary effects from chronic, heavy use, however, are mental. Restlessness, hyperexcitability, sleeplessness, and suspiciousness gradually replace the initial euphoria progressing into hallucinations, delusions of grandeur and persecution, and "aimless compulsive repetitive behaviors" with continued use. This may be accompanied by itching or crawling sensations on the skin. These symptoms, which disappear if the drug is stopped, are identical to amphetamine psychosis with both being similar to paranoid schizophrenia.

Toxic reactions in the central sympathetic nervous system can result from individual sensitivity or overdose, intentional or unintentional. Symptoms of the sympathetic nervous system mentioned earlier are exaggerated causing severe discomfort--practically identical to the symptoms caused by acute amphetamine intoxication. Unlike amphetamines, the local anesthetic properties of cocaine can give rise to depressant effects, which in the most severe cases result in coma, muscular flaccidity, & slow, irregular breathing--possibly resulting in respiratory arrest. Other symptoms resulting from overstimulation of the central nervous system include: restlessness, agitation and possible anxiety. In fatal cases, death is most commonly caused by progressive respiratory depression or respiratory arrest occurring during an epileptic seizure. This is quite dissimilar to death caused by amphetamine poisoning which results from intracranial hemorrhage, cardiac arrest, and high fever.

While deaths by amphetamine and cocaine overdose are fewer than deaths caused by heroin and barbiturates, they do appear to be increasing. Further, deaths by suicide, accidents and homicides are higher for chronic amphetamine, and probably cocaine, users than for the general population.

It will be important to monitor the levels and consequences of cocaine use in North America in the coming years, but there are indications in the literature of what the effects will be if levels increase to those attained in the first quarter of the century.

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NOTES ON RESEARCH IN PROGRESS:
A Pilot Study of the Effect of Exogenous Estradiol on Alcohol Consumption In Females

The relationship of alcohol consumption to levels of steroid hormones in unclear at best. Alcohol use has been reported to be related to levels of testosterone and estrogen, but there is very limited data on what the relationship is, and what might explain the association. Furthermore, serious problems are encountered in any study where hormones are administered to humans. Therefore, a pilot study has been designed to work out some of these methodological problems, and to obtain insights into the interaction between alcohol use and one of the sex steroids, extrogen.

The study utilizes two groups of 15 normal cycling women. In the first month, all women record daily alcohol consumption and their basal body temperature. In the second month, one group is given estradiol (a natural estrogen) and the other is given a placebo. The subjects continue to record their daily drinking and temperature. At the end of the second month, subject records are examined to determine any interactions between daily alcohol consumption and estrogen intake over the menstrual cycle. Hopefully, the results of this pilot study will yield some indication of the role of one of the sex steroids in drinking behavior and pave the way for future research.

Dr. Ruth Little, Department of Psychiatry & Behavioral Sciences, is the principal investigator of this study, which is funded in part by the ADAI.

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NOTES ON RESEARCH IN PROGRESS:
Alcoholic Fathering as Related To Child's Intellectual Development

Clinicians have long suspected that paternal alcoholism is detrimental to child development. However, the effect of an alcoholic father or father-substitute in the home during the formative years of growth has not been studied carefully. Two groups of children are being examined in a study currently in process. One group has been raised by a male who was a problem drinker, the other group has not. Mothers of children in both groups have never had a drinking problem and did not drink heavily during pregnancy. The children are given a battery of tests to measure their intellectual and developmental level. Using the results of these tests, children in the group having alcoholic fathers will be compared with children who do not have alcoholic fathers, and significant differences in performance explored.

This research is supported in part with funds from the ADAI. Dr. Ruth Little of the Department of Psychiatry & Behavioral Sciences is the principal investigator.

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NOTES ON RESEARCH IN PROGRESS:
Brain Mechanisms of Stimulant Drug Effects

Drugs such as nicotine and amphetamine affect nerve transmission at many locations, both in the brain and in the body at large, The goal of a current research investigation with stimulant drugs is to identify the sites of action in the brain where they and related agents exert their euphoric effects. The study is being conducted with ADAI support by Dr. Douglas M. Bowden, Associate Professor in the Department of Psychiatry & Behavioral Sciences.

One approach has been to determine how these drugs influence the rates at which monkeys press a lever to obtain electrical stimulation of the so-called "reward" or "pleasure" systems of the brain. A series of experiments carried out in collaboration with Dr. Peter Blake and Donna Simmons in the Department of Pharmacology and the Regional Primate Research Center showed that amphetamine applied to a limited set of the brain structures that contain dopaminergic synapses greatly enhanced the electrical self-stimulation behavior. The results indicated

that these structures, the caudate nucleus, nucleus accumbens, and amygdala, may be particularly involved in the rewarding effects both of stimulant drugs and of electrical brain stimulation when injected in the vicinity of those structures.

In collaboration with David Dooley, a graduate student in the Department of Anthropology, Dr. Bowden is exploring the extent to which the stumulant drug, amfonelic acid, mimics the behavioral effects of amphetamine. While this work is not completed, it is now clear that monkeys, given the opportunity, take this drug the same as amphetamine. It has similar properties in that it disrupts performance on a task in which periodic withholding of a response is appropriate and, in high doses, it produces some of the behavioral changes seen in amphetamine psychosis in monkeys and humans.

The findings obtained to date in these studies have resulted from intravenous injections of amphetamine and amfonelic acid. In the near future, we will determine whether injection of the drugs directly into such brain structures as the caudate nucleus and nucleus accumbens produces similar effects.

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DRUG ABUSE STATISTICS 1977

The following are estimates of the numbers of people in the United States over 12 years of age who have tried or are current users of the drugs listed below. These figures are based on a complex scientific survey of 4,594 people. Sponsored by the National Institute on Drug Abuse, the survey concentrated only on non-medical or recreational use of these drugs. Drugs used under a physician's care are not included.

	12-17 Years (Pop. 24,855,000)				18-25 Years (Pop. 30,279,000)				26+ Years (Pop. 115,444,000)				Total (Pop. 170,578,000)			
	Ever Used		Current User		Ever Used		Current User		Ever Used		Current User		Ever Used		Current Us	
	%		%		%		%		%		%		%		%	
Marijuana	28	6,920,000	17	4,110,000	60	18,130,000	27	8,300,000	15	17,700,000	3	3,000,000	25	42,750,000	10	16,210,(
Hashish	12	2,960,000	6	1,410,000	33	10,030,000	9	2,530,000	5	5,960,000	6	640,000	11	18,950,000	3	4,870,(
Inhalants	9	2,220,000	.5	160,000	11	3,380,000	--	--	2	2,060,000	--	--	5	7,660,000	--	--
Hallucinogens	5	1,140,000	2	400,000	20	6,010,000	2	610,000	3	3,010,000	--	--	6	10,160,000	.7	1,140,(
PCP	6	1,440,000	*	*	14	4,210,000	*	*	1	1,270,000	*	*	4	6,920,000	*	*
Cocaine	4	990,000	.8	200,000	19	5,780,000	4	1,110,000	3	3,050,000	--	--	5	9,820,000	1	1,640,(
Heroin	1	270,000	--	--	4	1,090,000	--	--	.8	940,000	--	--	1	2,300,000	--	--
Other Opiates	6	1,520,000	.7	160,000	14	4,100,000	1	310,000	3	3,270,000	--	--	5	8,880,000	--	--
Sedatives	3	770,000	.8	200,000	18	5,570,000	3	860,000	3	2,930,000	--	--	5	9,260,000	.6	1,060,(
Tranquilizers	4	900,000	.7	190,000	13	3,920,000	2	730,000	3	2,980,000	--	--	5	7,810,000	.8	1,360,(
Stimulants	5	1,220,000	1	330,000	21	6,400,000	3	760,000	5	5,390,000	.6	690,000	8	13,010,000	1	1,780,(
Alcohol	53	13,050,000	31	7,740,000	84	25,520,000	70	21,220,000	78	89,850,000	55	63,350,000	75	128,420,000	54	92,300,(
Cigarettes	47	11.730,000	22	5,530,000	68	20,480,000	47	14,310,000	67	77,260,000	39	44,730,000	64	109,470,000	38	64,570,(

* Not included in the survey

\- Amounts of less than .5% are not listed

TERMS:

Ever Used = Use one or more times in a person's life

Current User = Use at least once in the 30 days prior to survey

SOURCE:

National Survey on Drug Abuse: 1977

Available from the National Clearinghouse for Drug Information
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Rockville, Maryland 20857

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