



VOL. 10 NO. 1

Physician's Alcohol NEWSLETTER



FEBRUARY 1975

Advisory Board evaluates NIAAA research efforts

A distinguished advisory board, including two Nobel Prize winners, evaluated an overview of research activities and needs in alcoholism as presented by outstanding research workers in the field at the National Academy of Sciences on January 10-11 in Washington, D.C. The conference, initiated by Dr. Britton Chance, was attended by Dr. Caspar Weinberger, Secretary of the Department of Health Education and Welfare; J. Isbester, acting director of ADAMHA; the NIAAA advisory board; the research review committee of NIAAA, and research officials of NIAAA. Also attending were representatives of the National Cancer Institute, National Institute of Mental Health, National Heart Institute, National Institute of Neurological Diseases and Blindness, National Institute of Arthritis and Metabolic Disease, and the National Institute of Drug Abuse.

The small investment in research, in comparison to other national institutes, was termed "scandalous" in view of the many unknowns available to investigation, and considering the gravity and extent of alcoholism in this country. The differential between the 8% of the funds provided to NIAAA devoted to research and the approximately 25% provided by the other institutes was central to this comment.

Dr. Morris Chafetz, speaking for NIAAA, commented that funds for research were provided through a line item in the budget, and that if Congress wished more funds for this purpose, it would have to make them available. More high quality research people would need to be trained and attracted into the field. He also stated that at present in actuality, a total of about \$20 million was being used in research, through availability of the contract mechanism.

Examining different aspects of the problem, participants focused on discern-

4,000 HEAR LATEST REPORTS ON ALCOHOLISM AT NORTH AMERICAN CONGRESS IN CALIFORNIA

More than 4,000 professional and paraprofessional alcohol workers, representing 59 sponsoring health organizations, attended the first North American Congress of Alcohol and Drug Problems held in San Francisco December 13-18, 1974.

World leaders sent messages of support to the meeting. Pope Paul VI expressed his encouragement "for all those patiently engaged in and magnanimously committed to the work of meeting the grave problems of alcohol and drug abuse." President Gerald R. Ford said that his administration "is keenly aware of the economic cost, social devastation and incalculable human suffering related to alcohol and drug abuse." Others who sent greetings were California Governor Ronald Reagan and HEW Secretary Casper Weinberger.

A special Humanitarian Award was presented to R. Brinkley Smithers in recognition of his many-faceted efforts to create a better understanding of alcoholism. The award was presented jointly by NCA, NIAAA, ADPA, ICAA, and Rutgers Center of Alcohol Studies.

Following are reports of some of the papers presented at the Congress:

ing which questions can successfully be attacked, given the current state of research technology, which ones should be given first priority, and how the research efforts can be most effectively supported.

Studies of the brain deserve high priority, said Ernest P. Noble, Ph.D., M.D., University of California, Irvine, since the most obvious effect of ethanol is exerted on the CNS and since growing evidence suggests that it is the biochemical and physiological alterations induced by ethanol which eventually lead to behavioral dysfunction. He specifically recommended biochemical and biophysical studies on natural and artificial membranes; biochemical, physiological and pharmacological studies of central neurons; comparative studies on various neural cell types; comparative neurophysiological studies of brain regions and systems; studies on information processing mechanisms, and on blocking agents. (See *Alcoholism and the CNS, Annals of the New York Academy of Sciences.*)

Longitudinal studies of the processes involved in producing drinking problems are probably the most important from the viewpoint of an epidemiology aimed at eventual prevention, said Mark Keller, Visiting Scientist, NIAAA. Few have

(Continued on page 6)

Estimating significance of state alcoholism legislation on new patient loads and programs

Using the state of Illinois as an example, G. W. Erdmann, Deputy Alcoholism Program Advisor of the Illinois State Department of Mental Health and Developmental Disabilities, described the significance of state alcoholism and intoxication treatment legislation on new patient load, facilities, personnel, programs, and fiscal costs. The legislation departs from historical precedent by making persons whose sole offense to society has been alcohol intoxication no longer subject to criminal prosecution. Such people must be assisted by law enforcement officers and may be assisted by others in obtaining prompt treatment for their illness, and such treatment is to be rendered in a non-discriminatory manner and in accordance with approved standards. Because needed data on projected increase in patient loads is difficult to obtain, Illinois is using temporary expedients of interpolation and sampling and projection.

Detoxification center on medical model shows successes

Eight years after it opened, the St. Louis Detoxification Center, at the St.

(Continued on page 3)

EDITORIAL

Increasing the underpinnings for research and treatment

The high quality of much of the research already performed under the grant mechanism of NIAAA, and the major advances which have been made, only highlight the many questions which have not as yet been solved in dealing with alcoholism. The conference at the National Academy of Sciences (see page 1) should give added impetus to an increase in the proportion of funds delegated to research efforts, a cause championed by this publication for many years. An integral part of this effort is increased availability of funds for the training and support of capable new investigators. We hail both the advisory council for recommending and the institute for effecting this stringent self-evaluation.

This issue also reports the mammoth North American Congress on Alcohol and Drug Problems. One significant activity accomplished at this congress, only hinted at in the papers, was the gathering of personnel from so many treatment centers, who had available staff from the Joint Commission on Accreditation of Hospitals to arrange the accreditation of treatment facilities. Rapid progress in the provision of third party payments for these extremely effective resources should make alcoholism care available for many more individuals. PAN salutes R. Brinkley Smithers for his well-deserved Humanitarian Award.

All in all, progress is being made on many fronts.

—FAS

BOOKS

The American Alcoholic: The Nature-Nurture Controversy in Alcoholic Research and Therapy. By William Madsen. Springfield, Ill.: Charles C. Thomas, 1974. 248 pp. \$11.50.

Professor Madsen, who teaches anthropology at the University of California, Santa Barbara, urges a holistic approach and synthesis of the various interpretations.

Alcoholism: The Hidden Addiction. By Ebbe Curtiss Hoff, M.D. New York: The Seabury Press, 1974.

Dr. Hoff, Professor of Physiology and Psychiatry at Virginia Commonwealth University, probes the behavior of the alcoholic person, focusing particular attention on the relationship between society's attitudes and abusive drinking. He compares a variety of therapies, including his own method, which depends on the nurturing of a sincere religious faith.

Detoxication, education top agenda at AMSA Annual Meeting in December

Detoxication and education were the main topics on the program of 5th Annual Meeting of AMSA, held in San Francisco December 11. Chester A. Swinyard, M.D. chaired the morning session on "Problems and Resources in Alcoholism Medical Education." The American Hospital Association demonstrated a multimedia program available to hospitals which wish to start an alcoholism service. Charles L. Whitfield, M.D., described the educational program at Southern Illinois University School of Medicine; and John A. Ewing, M.D., enumerated some "Stumbling Blocks in Alcoholism Education," especially the physician's ambivalent attitude toward alcohol. A panel discussed the "Career Teacher" programs now being implemented at various medical centers, in which professionals receive an in-depth

training in alcoholism.

Frank A. Seixas, M.D. chaired the afternoon session on "Organization and Supervision of Detoxication Programs." Charles E. Becker, M.D., discussed inpatient detoxication programs with drugs; and Daniel J. Feldman, M.D., analyzed out-patient detoxication with drugs. A model used in detoxication of 3,000 alcoholic patients was presented by Frank L. Iber, M.D. Detoxication without hospital, drugs or physicians was described by Robert G. O'Briant, M.D.; and Howard Denike, LL.B. discussed the legal responsibilities incurred in detoxication programs.

At the Dinner Meeting outgoing president Maxwell N. Weisman, M.D. presented the AMSA Medal to John Norris, M.D., Chairman of the Board of Trustees of AA.

MEETINGS

FEBRUARY 23-28—31st International Conference on Alcoholism and Drug Dependence, Bangkok, Thailand. Contact ICAA, Case Postale 140, Lausanne, Switzerland.

APRIL 28-MAY 2—NCA Alcoholism Forum, Marc Plaza Hotel, Milwaukee, Wisconsin. AMSA-NCA Medical-Scientific Meeting will be held as part of Forum on APRIL 28-29. For information, contact NCA, 2 Park Avenue, New York City, N.Y. 10016.

MAY—First Pacific Congress of Psychiatry, Melbourne, Australia. Joint Meeting of the American Psychiatric Association and the Australian and New Zealand College of Psychiatrists. For information, contact Floyd S. Cornelison, Jr., M.D., Department of Psychiatry and Human Behavior, Jefferson Medical College, Thomas Jefferson University, 1025 Walnut St., Philadelphia, Pa. 19107.

JULY 30-AUGUST 3—Annual Meeting, International Doctors in AA. The Breakers, Palm Beach, Florida. Contact Information Secretary, IDAA, 1950 Volney Road, Youngstown, Ohio 44511.

SEPTEMBER 1-5—Fifth International Conference of the International Association for Accident and Traffic Medicine and the Third International Conference on Drug Abuse. Royal Lancaster Hotel, London. Information from Professor A. Keith Mant, Guys Hospital, London SE 1 9RT.

AMSA scholarship available

A scholarship is available for physicians, including medical students, at the Physicians Institute of the Rutgers Center of Alcohol Studies summer program, to be held June 22-July 11. The scholarship provides tuition and room and board. Interested persons may apply to the American Medical Society on Alcoholism, 2 Park Avenue, New York, New York 10016.

JCAH develops alcoholism accreditation standards

Traditionally, standards for treatment facilities have been based almost exclusively upon "clean and safe" requirements.

The Joint Commission on Accreditation of Hospitals is developing accreditation standards for alcoholism treatment facilities under contract to the NIAAA. Friedner D. Wittman is assisting the JCAH in developing more positive standards for alcoholism service environments. In addition to traditional "clean and safe" requirements, the new Accreditation Manual for Alcoholism Programs considers the individual's basic psycho/social needs in the environment; and considers the service program's needs for environmental resources to carry out the service mission.

TIMELY REPORTS ON TREATMENT, RESEARCH, EDUCATION FROM

(Continued from page 1)

St. Louis State Hospital, has showed considerable success in decriminalizing public drunkenness and treating chronic inebriates. The center, according to David J. Pittman, Ph.D., Chairman of the Missouri Advisory Council on Alcoholism and Drug Abuse and Director of the Social Science Institute of Washington University, uses a socio-medical model of treatment, which has proved effective. A follow-up evaluation study showed that approximately 20% of the 200 chronic inebriates were abstinent when reinterviewed in the community three months after discharge, 56% were gainfully employed, and 31% showed marked improvement in their drinking patterns. Only 51% of the patients have been admitted two or more times. Only 9% have left against medical advice.

AA's 1974 membership survey

The third membership survey of more than 14,000 members of AA, covering U.S. and Canadian groups, showed an increase in female members, 28% in 1974, compared to 22% in 1968 and 26% in 1971. The majority of members (55%) are in the 31-50-years age group. The number of respondents who indicated that an AA member had brought them to AA declined somewhat, from 55% to 51%, indicating that other outside factors are directing more members to AA. About 30% responded that medical, psychological, or spiritual counseling was important in their coming to AA. Approximately 40% of the survey sample were sober less than one year, 35% one to five years, and 25% from five to more than 20 years. The survey was reported by John L. Norris, M.D., Chairman of the Board of Trustees, AA.

Problem Oriented Medical Record valuable in alcohol treatment

The Problem Oriented Medical Record (POMR) has proved valuable in treating alcoholics at the Malcom Bliss Mental Health Center, said a team from the center and from Washington University School of Medicine, led by Jorge A. Viamontes, M.D. The POMR minimizes the danger of sloughing off any specific problem because the treatment emphasis happens to be biased by the primary therapist and makes it simpler for the primary therapist as well as other team members to keep posted on all the problems of the patient and the progress in each of them. It also enables the team to establish the therapeutic parameters and to evaluate the overall treatment rationale, since each facet of therapy is linked to a specific problem, and encourages more staff to read the notations of others, thereby getting a better picture of the patient as a whole person.

Drinking problems change in national sample of men

Individually measured drinking problems are subject to considerable turnover, a reinterview of a national survey of 725 men first interviewed in 1969 has revealed. The study, part of a series of longitudinal surveys, was reported by Don Cahalan, Ph.D., and Ronald Roizen, M.A. of the Social Research Group, School of Public Health, UC (Berkeley). Prevalance rates for particular "drinking problems" therefore underestimate the proportion of the population who will experience a given problem at some point in a four-year period and overestimate the proportion who will

experience a given problem at both points in time. Individual drinking problems did not differ substantially in their capacities to "predict" some future problem. Because of the difficulties in predicting future problems, the authors suggest that the significance of a "drinking problem" should not be located so much in the future as in the present. They also noted that the high rates of turnover in specific drinking problems points to the likelihood that specific circumstances and life events have important effects.

Hypothyroidism in alcoholic outpatients

In a consecutive series of 50 patients, male and female, given a thyroid function test, 10% showed evidence of hypothyroidism. The study was conducted by Mary DeNardo, M.D., Senior Psychiatrist, and Nancy Burnak, R.N. at the East Valley Alcohol Clinic, San Jose, Calif.

Rate of drinking affects rate of impairment

Fast-drinking subjects are more impaired than those who drink slowly, a test of 40 men indicates. The study, conducted by Marcelline Burns and Herbert Moskowitz of UCLA and California State University, Los Angeles, measured hand steadiness, body sway, visual identification, and visual information processing rates.

The men were assigned to each of four alcohol and one placebo groups; alcohol treatments were calculated to produce mean expected BAC's of .10% when consumed in 15 min., 30 min., 1 hour, or 4 hours. The data indicate that BAC alone may be an insufficient measure and that rate-of-drinking is an important variable.

Treatment outcome in a drinking-decisions program

After six month follow-up on a group of 98 male alcoholic patients who participated in a six-week research and treatment program during which they were able to make decisions about drinking, the patients who were able to resist drinking tended to show more improvement following treatment than patients who drank. During the program 44% of the patients did not drink at all, while 56% drank to some extent. A large proportion of those who drank during the program apparently also benefitted from treatment, although not to the same extent as the non-drinkers. The study was conducted by a team from the VA Hospital, Coatesville, Pa., and presented by Thomas E. Skoloda, Ph.D.

Physician's Alcohol Newsletter

is published quarterly by the American Medical Society on Alcoholism, Inc., a component of the National Council on Alcoholism. Publication has been made possible by a grant from the Christopher D. Smithers Foundation.

For membership information, contact AMSA at address below.

Copyright 1974 by American Medical Society on Alcoholism, Inc.
Two Park Avenue—Suite 1720
New York, N.Y. 10016

All rights reserved.

Editorial Board

Editor-in-Chief:

FRANK A. SEIXAS, M.D., Internist,
New York City

Managing Editor: CAROL LEVINE

Associate Editors:

CHARLES E. BECKER, M.D., internist,
San Francisco, Calif.

LUTHER CLOUD, M.D., internist,
New York City

JOHN EWING, M.D., psychiatrist,
Chapel Hill, N.C.

RUTH FOX, M.D., psychiatrist,
New York City

DONALD G. MACKAY, M.D.,
Montreal, Quebec

ALFONSO PAREDES, M.D., psychiatrist,
Oklahoma City

NORTH AMERICAN CONGRESS ON ALCOHOL AND DRUG PROBLEMS

Identifying high-risk drivers

An index of potential risk on the highways, which can aid in separating alcoholic drivers who cause accidents from those who do not, has been developed by Margaret L. Clay, Ph.D., of the Mental Health Research Institute, Ann Arbor, Mich. The number of non-alcohol-related moving traffic offenses, violations involving such irresponsible behavior as speeding, reckless driving, drag racing, failure to stop or to yield, and driving with a suspended or revoked license, best separated the driving samples into risk categories. Another indicator of high risk was admissions to hospital for accidental trauma, violent trauma, emergency room admissions, and admissions in which the patient left the hospital against the doctor's orders on the same day admitted. High and extra risk categories had more short stays and fewer long stays than the lower risk subjects. More young people (18-29) were in the high risk categories than people 60 or older. A further study indicates that the index can be used to measure the potential for risk-taking behavior in non-drinking drivers as well.

Drinking by addicts

In comparing the drinking behavior of a sample of 100 drug addicts interviewed at the time they entered treatment for narcotic addiction with the behavior, motivation, and symptomatology of a national sample of male drinkers, Harriet L. Barr, Ph.D., Donald J. Ottenberg, M.D., and Arie Cohen, Ph.D. of Eagleville Hospital and Rehabilitation Center, Eagleville, Penn. identified five patterns. At one extreme, a third of the addicts have at some time in their lives exhibited patterns indistinguishable from those of alcoholics. At the other extreme, a quarter of the sample were abstainers with no history of regular drinking. A group of moderate drinkers showed no evidence of psychological dependence or symptomatic drinking. Two groups appear to be at high risk for the development of serious drinking problems; those that drink heavily but not continuously and give evidence of psychological dependence and those who drink as much and as frequently as the Eagleville alcoholic patients but who report neither psychological dependence nor symptoms. These subjects will be followed for two years to discern the implications of their alcohol histories for their progress in treatment and rehabilitation.

Patterns of instability in alcoholics

A follow-up study of 64 alcoholic patients in a 3-4 week rehabilitation program in the Alcoholism Treatment Unit at Mercy Hospital and Medical Center, Chicago, indicated, even in their pre-alcoholic years, instabilities, shown by failure to complete schooling and problems of steady employment. Margaret A. Fleming, M.S.W., Treatment Coordinator, report on the study.

Role of hydrogen peroxide production and catalase in hepatic ethanol metabolism

Recent technical developments, reported by Ronald G. Thurman of the Johnson Research Foundation, University of Pennsylvania, make it possible to determine rates of hydrogen peroxide production in a wide variety of biological materials. Substrates for flavoproteins located within the peroxisomal space such as glycolate, urate, and D-amino acids strongly activate H_2O_2 production in both liver and kidney. According to Dr. Thurman, catalase has been identified as a component in microsomal ethanol oxidation. Quantitative evaluation of ethanol metabolism as a function of ethanol concentration showed nearly all ethanol oxidation at low ethanol concentrations (less than 20mM) was dependent upon alcohol dehydrogenase. However, at higher concentrations (80mM), Dr. Thurman claims that catalase participates in up to 50% of the rate.



Storm, a 40-year-old male chimpanzee, drank consistently to intoxication. If permitted, he would drink as much as a fifth of 80 proof vodka, mixed in fruit juice, in 30-60 min. Photo: F. L. Fitzgerald, Ph.D., Miami.

Other reports

● Alfonso Paredes, M.D., et al. of the Department of Psychiatry and Behavioral Sciences, University of Oklahoma, described the operation of a "deviation amplification" model, which states that as financial resources for alcohol rehabilitation programs increase, so do the number of providers and recipients of those services. To inhibit an unnecessary increase in the population of dependents in the community, a Contract Management System has been developed which will monitor the cost effectiveness of alcoholism services.

● The process by which the Georgia Mental Health Institute expanded its Alcohol and Drug Service to a 24-hour 7-day inpatient service for a 26-county catchment area was outlined by George P. Dominick, Unit Director. The entire staff of the detox-crisis intervention unit of approximately 25 persons was divided into three teams, each including members of different disciplines. Patients as they were admitted were assigned to one of the teams.

● According to Dan E. Beauchamp, Ph.D. of the Department of Health Administration of the School of Public Health, University of North Carolina at Chapel Hill, a public health perspective on alcohol problems should focus on alcohol, labelling it an agent, and seek to alter the physical and community environment so as to reduce the rates of hazardous exchanges of alcohol rather than teaching people "how to drink."

● Significant differences were found between male alcoholics who were treatment successes and treatment failures in a study by Lloyd Irven Cripe of the University of Minnesota. The treatment successes were somewhat older, had fewer previous admissions to alcoholism treatment centers, had worked more consistently in the previous year, and had greater job tenure. There were also a greater number of significant MMPI changes with the success group, particularly on the K scale.

● In order to successfully integrate alcoholism services in a psychiatric setting, the major conflict for the psychiatrist is the difference between the models of private practice and team unity, said Robert F. Stuckey, M.D., Director of Mental Health Services of John E. Runnels Hospital, Berkeley Heights, N.J. Another conflict concerns the traditional role of the psychiatrist and his role in the alcoholism model.

Brief reports from North American Congress

● Low pain threshold may be associated with a tendency to drop out of treatment, according to a study of patients randomly assigned to four groups offering different kinds of treatment or a control group. The study is being conducted at the University of Kentucky Department of Psychiatry by a team led by Maxie C. Maulsby, Jr., M.D.

● Preliminary results of a three-year research project at the VA Hospital in Miami indicate that alcohol patients have a higher dropout rate (43%) than drug addicts (38%). Alcohol dropouts are more difficult to identify; the only variable so far that separates the alcoholic dropout from the completer is how he views the hard drug user, that is, more tolerantly and more accepting of others with addiction problems. The report was made by Margaret W. Linn, Director of Social Science Research at the hospital.

● F. Bennett, Ph.D. described a monitored Antabuse-counseling program in the nonmetropolitan area of Polk County, Fla. Clients are court-referred persons with serious alcohol problems and are required to attend the program for one year.

● The MacNeal Memorial Hospital in the suburban Chicago area has developed a treatment program which also provides an in-depth training program for undergraduate medical students and family practice residents, said Kenneth F. Kessel, M.D.

● Defense mechanisms such as denial, prominent in an alcoholic's life, can be used to advantage during the initial stages of treatment for alcoholism, said John Wallace, Ph.D., Associate Professor of Psychology, University of California, Irvine.

● Intense confrontations are used in the treatment of chronic alcoholics at the Community Addictive Treatment Center in Topeka, Kansas, said Schalom Camenietzki, Ph.D., consultant in psychology. The technique is useful for emphasizing alcoholics' self-destructive life patterns and their responsibility to reverse them.

● An alcoholism treatment program in rural Idaho, where no treatment specifically programmed for alcoholism has ever been available, emphasizes breaking through denial to an awareness of the benefit of positive action. Mary Zanis Crosby, R.N., described the program, of which Gestalt therapy is an integral part.

● Psycho-therapeutic recreation is part of the comprehensive alcoholism

treatment at the Warm Springs Rehabilitation Center in Los Angeles County, said Kurt M. Freeman, M.S., and Ronald R. Koegler, M.D. A recreation and exercise program improves general health and self-image, research results show.

● Art therapy, as part of a milieu program, is used to create motivation and awareness, strengthen personality, integrate past and present and future experiences, and clarify goals and explore emotions, said Tom Mills Smith, M.D., and Carolyn Stenzler, O.T.R.

● Biblio-therapy groups, which use non-moralistic self-help paperbacks as texts, have been a useful part of group therapy experience in a U.S. Navy installation, said Larry A. Lail.

● Teenagers in ten cities who report using drugs illegally seem also to be consumers of alcohol, cigarettes, and over-the-counter medications, according to a study reported by J. R. Block, Ph.D. of Hofstra University; and Michael S. Backenheimer, Ph.D. National Institute on Drug Abuse. The drug group also drinks more frequently than their non-drug counterparts.

● Drug abuse patients of both sexes showed extensive histories of involvement in a criminal life style prior to treatment, said John C. Ball, Ph.D., et al. of the Department of Psychiatry, Temple University Medical Center, Philadelphia.

● In a study of 215 alcoholics, those who remained abstinent 90 days following treatment were most often married men, with a mean age of 44, referred by employers or self-referred, with a minimum of high-school education and a blue-collar occupation. Abstinence was significantly related to self-referral, one-to-one counseling, attendance at AA, and longer periods of time in treatment, said Claude T. Ware, Ph.D., Research and Evaluation Section, Office of Alcohol Abuse and Alcoholism, Los Angeles.

● On the assumption that many alcoholics drink as a coping response to stimuli perceived as aversive, a therapeutic strategy tested to help alcoholics cope with alcohol emphasizes self-statements which counteract negative interpretations of stimuli. The strategy of "defensive thinking" was reported by Martha Sanchez-Craig and Keith Walker of the Addiction Research Foundation, Toronto.

● Detoxification at home with the spouse in normal free-choice surroundings, plus the involvement of the spouse in therapy, encourages alcoholics to continue outpatient treatment, said H. T. Smith.

● Four years after its inception, the Alberta (Canada) Impaired Drivers' Program is entering a new phase of evaluation—where not only recidivism but also the degree of intoxication will be considered, said R. M. Anthony.

● Vermont's Alcohol Safety Action Program, which began as alcohol education for people convicted of driving while intoxicated, now offers education, screening, diagnosis, treatment, and referral for anyone abusing alcohol. Preliminary evaluation indicates that drunken drivers who complete the program are less likely to repeat alcohol-related offenses, said Darwin G. Merrill and Robert F. Aiken.

California conference moves to prevent alcohol problems

Many approaches to the prevention of alcohol problems were assessed at an expert conference held Dec. 9-10 in Berkeley, California, sponsored by the California Health and Welfare Agency. The conferees representing many countries and many approaches, brought forward arguments for and against control of production, control of distribution through taxation of net disposable income, criminalization, secondary control by treatment, the possibility of treatment initiating an epidemic of health, and control by educational measures, by the discovery of a chemical preventive measure, and the insulation of drinking from its consequences. The question of making a decision on creating a floor for the diagnosis of alcoholism and differentiating measures for preventing alcoholism and those designed against problems associated with a variety of other drinking activities was also raised. The proceedings will be utilized by the California Health and Welfare Agency in suggesting programs for the state legislature to consider.

Participants in the conference included Nils Christie of the University of Oslo Institute of Criminology and Criminal Law; Griffith Edwards of the Addiction Research Unit, Institute of Psychiatry, London; Jan de Lint, Addiction Research Foundation, Toronto; Dr. Klaus Makela, Social Research Institute of Alcohol Studies, Finland; Dr. Marc Schuckit, Department of Psychiatry, University of California, San Diego, Professor Howard Blane, School of Education, University of Pittsburgh; and Dr. Frank A. Seixas, Medical Director, NCA.

Alcohol research: present and future needs

(Continued from page 1)

been undertaken so far because they are expensive and can be carried out only by organizations with enduring interest.

Donald W. Goodwin, M.D., Professor of Psychiatry, Washington University, reviewed the studies pertaining to a possible genetic factor in alcoholism—twin studies, adoption studies, half-sibling studies, genetic marker studies, and animal "self-selection" studies. Evidence from all these suggests that alcohol problems to some undetermined extent are related to events that occurred in infancy or earlier, and all warrant further investigation. (See *Nature and Nurture in Alcoholism*, *Ann. N.Y. Acad. Sci.*)

Investigations designed to examine environmental variables which influence ethanol preference in experimental animals should continue, said R. J. Reiter, Ph.D., Professor of Anatomy, University of Texas Health Science Center at San Antonio. Additionally, consideration should be given to development of the hamster as a model for experimental alcoholism. In view of the remarkable influences of the pineal gland on endocrine physiology, it is possible that changes in ethanol intake after pineal manipulation are secondary to hormonal alterations. Identification of any such interrelationships would be basic to understanding interactions between environmental photoperiod, pineal gland, and ethanol consumption.

Between the initial experiences with alcohol, and the hepatic damage that may show up several decades later, there is an intervening period of great behavioral intricacy that determines their linkage. According to Richard Jessor, Ph.D., Institute of Behavioral Science, University of Colorado, an understanding of the patterning of experience, including experience with alcohol, would contribute to a rational account of the nature and development of alcohol abuse. Social psychological research in the coming years needs to be large scale, theoretically guided, multivariate in measurement, and longitudinal in design. Studies, focused especially on critical periods in the lives of youth and socioculturally varying groups, have promise of yielding considerable returns.

Herbert Barry III, University of Pittsburgh School of Pharmacy, outlined categories of experiments in psychological research which would be beneficial: experiments on chronic, excessive drinking in humans; acute effects of alcohol in humans; chronic drinking in laboratory animals; acute effects in laboratory animals; observations of drinking in

humans and in animals. Techniques which can be applied to each of the categories are: dose-response and time-response studies, especially with low doses and after short and long time intervals; blood alcohol level measurement, especially after oral intake and after long time intervals; comparison of alcohol with other drugs; and identification of individual differences in attraction for alcohol and in response to alcohol intoxication.

Research on the medical complications of chronic alcoholism should center on hepatic complications, the nervous system, on other systems and organs, said Rudi Schmid, M.D., Professor of Medicine, University of California, San Francisco. The elaboration of specific measures for the prevention or treatment of alcoholic hepatitis is hampered by the almost complete ignorance about the pathogenesis of the condition. It is unknown whether alcohol exerts a direct "toxic" effect on the liver or whether the hepatic injury is the result of major ethanol-induced metabolic alteration. The most serious handicap is the lack of an adequate and easily reproducible animal model. Direct toxic or metabolic effects of alcohol on specific structures or functions of the nervous system may be more important pathogenic factors in neurological lesions than various facets of malnutrition commonly associated with chronic alcoholism. Chronic alcohol abuse produces a number of other pathological defects whose mechanisms in most instances are poorly understood: abnormalities in the production and release of erythrocytes, leukocytes and platelets, chronic myocardopathy with intractable heart failure, hypogonadism,

pancreatitis, hypoglycemia, hypercholesteremia, hyperlipemia, and excessive iron storage. (See also *Medical Consequences of Alcoholism*, *N.Y. Acad. Sci.*, in press.)

Present knowledge about psychiatric treatment is fragmented and poorly documented, said Robert A. Moore, M.D., Medical Director of Mesa Vista Hospital, San Diego. Needed are: a definition of alcoholic states and the kinds of people who suffer from them; definition of treatment techniques, matching of people to programs; and a research model. Being uncertain of etiology makes primary prevention a hazardous undertaking. Secondary prevention—early case finding—and tertiary prevention—reduction of disability—are more nearly within our capacity given our present state of knowledge. (See also *The Person With Alcoholism*, *N.Y. Acad. Sci.*)

The advisory board of eminent research scientists who participated in the conference were Dr. Julius Axelrod, Laboratory of Clinical Science, NIMH; Professor Ronald Estabrook, Department of Biochemistry, University of Texas Southwest Medical School; Dr. Howard F. Hunt, Department of Psychology, Columbia University; Professor Richard Keynes, Department of Physiology, Cambridge University, England; Hans A. Krebs, M.D., Emeritus Professor of Biochemistry, University of Oxford, England; Marshall Nirenberg, Ph.D., National Heart and Lung Institute; Dr. Richard Solomon, Department of Psychology, Princeton University; Dr. Albert J. Strunkard, Department of Psychology, Stanford University; Dr. Carl Branden, Uppsala University, Sweden; Dr. Ralph Blomstrand, Karolinska Institutet, Stockholm, Sweden.

—6—

PHYSICIAN'S ALCOHOL NEWSLETTER
Two Park Avenue
New York, New York 10016