# **Dealing With Alcohol and Drug Abuse and Mental Illness**

GERALD L. KLERMAN, MD

THE MISSION of the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) is to lead the Federal effort to prevent, control, and treat alcoholism, drug abuse, and mental illness. ADAMHA's components are the National Institute on Alcohol Abuse and Alcoholism, the National Institute on Drug Abuse, and the National Institute of Mental Health which conduct a three-pronged attack on a variety of stubborn, still baffling diseases.

Gratifying inroads have been made on these diseases, and the promise of further advancements in the foreseeable future is genuine. Nonetheless, alcoholism, drug abuse, and mental illness are crippling realities for millions of Americans and a burden to our economy.

#### Epidemiology

In the United States an estimated 10 million persons have drinking problems. Their affliction also adversely affects the lives of an estimated 28 million others—relatives, friends, and co-workers. Recently, there has been increasing evidence that the use of alcohol by women during pregnancy causes abnormalities in infants and may result each year in the birth of as many as 1,500 babies with severe and irreversible physical and mental impairments. The annual cost of alcohol abuse and alcoholism to the country is estimated at close to \$43 billion.

In the drug abuse area, heroin remains a continuing concern, with more than one-half million addicts in the country today. Cocaine usage has risen in recent years, as has use of the potent and dangerous hallucinogen phencyclidine, known as PCP. To the nation, drug abuse represents an economic and social cost in excess of \$10 billion, of which nearly twothirds is from heroin use alone.

New evidence indicates that 15 percent of the population needs some form of mental health care in the course of a year. Of these estimated 20 to 32 million people, 1 to 2 million have been or would be diagnosed as schizophrenic, and a far larger number suffer from depressive disorders. Patients with mental disorders occupy nearly one-third of all hospital beds. The economic and social cost of mental illness is close to \$40 billion a year.

The estimated prevalence of selected alcohol, drug, and mental disorders in a year is as follows:

Disorders by age group	Percent of prevalence per 100 persons	
Children, under 18		8–10
Adults, 18-65		10-15
Depression and affective disorders		4.5-8
Anxiety, phobia, and other neuroses		4-7
Alcoholism and alcohol problems		2.5-8
Drug dependence		0.5-1
Schizophrenia		0.5-1
Aged, over 65		10

Yet, these problems are not insoluble and we can

Dr. Klerman is Administrator of the Alcohol, Drug Abuse, and Mental Health Administration. Tearsheet requests to Sheila Carroll, Parklawn Bldg., Rm. 6C-15, 5600 Fishers Lane, Rockville, Md. 20857.

report progress in dealing with them. Our alcoholism research program has identified risk factors that predispose persons to alcoholism, and we have alcohol treatment programs in which 70 percent of persons treated remain abstinent. Development of psychiatric drugs has both shortened time in treatment for mental patients and helped to reduce State hospital populations by 50 percent. We are also advancing steadily in testing new therapeutic drugs for heroin addiction, such as the narcotic antagonists and "LAAM," a long-acting form of methadone. Buprenorphine, a new drug yet to be fully evaluated, may be the methadone of the future. The drug appears capable of blocking the heroin "high," produces minimal dependence, and need not be taken as frequently as methadone.

## **Role of Science**

The preceding steps forward stem from one base scientific knowledge. From the time the National Institute of Mental Health was established, nearly 30 years ago, research has been its highest priority. The same importance and emphasis is accorded to research by the entire agency, including the other two Institutes.

It is true that our mandate also covers support for services, training, and prevention efforts. But the form and quality of these are determined by continuing investigation and the scientific data that broaden and strengthen the base of knowledge on which we build our programs.

Scientists in ADAMHA intramural programs and

in research centers across the country contribute to that base of knowledge through collaborative and complementary studies. For example, the recent concern about the fetal alcohol syndrome resulted in the launching of a large epidemiologic study of pregnant women in Loma Linda, Calif., in addition to two other NIAAA-supported studies in Seattle and Boston. Ten research centers are collaborating with NIMH in studies of the clinical and biological aspects of depression. And NIDA has funded basic research on endorphins, the naturally occurring morphine-like substances in the brain that can further our understanding of opiate action and may prove to be involved in more general processes that control normal behavior and influence mental health.

These few, out of the hundreds of ADAMHAsupported studies underway, are in the classic tradition of basic research as the fount of clinical knowledge. In the years ahead, we will be adding to them a form of scientific investigation which current developments in our health system make inevitable—the assessment of treatment through controlled clinical trials.

#### **Treatment Assessment**

We are currently in an intensive and unprecedented period of review of American health policy. Many forces have contributed to the genesis of such a review. Among these are the enormous rise in health costs, greater public interest in health, and the anticipation of national health insurance.

At ADAMHA we are concerned that treatment for

alcohol and drug abuse and mental illness be included in any national health insurance plan. But we also recognize that if these disorders are to receive coverage in the health care system, we must generate research to demonstrate the relative efficacy, efficiency, and safety of psychotherapy and drug and alcohol therapies. In shaping a national health policy, it has become increasingly apparent that all health practitioners will be called upon to demonstrate to the third-party payer not only that they are qualified and authorized to offer health services, but also that the treatments they offer are effective, safe, and cost efficient. For workers in the alcoholism, drug abuse, and mental illness sectors, the prospect of reimbursement will probably constitute the greatest impetus to date for the generation of evidence of the efficacy of their treatments.

The development of the clinical trial has been an important scientific advance, as significant in the history of therapeutics as was the discovery of any particular treatment modality such as Antabuse or chlordiazepoxide (Librium), because it is an established experimental method for demonstrating the efficacy of new interventions. It is a form of targeted or programed research with ample precedent in the Public Health Service.

Public and economic pressures for empirical evidence of the efficacy, safety, and cost effectiveness of our treatment programs are increasing. Clinicians, researchers, government administrators, and others are responsible for joining forces to produce scientifically sound evidence to answer these questions that are so crucial to our field at this time and necessary for formulating the most effective health policies.

In ADAMHA we accept this responsibility, and we will give a high priority to treatment assessment research. Where data are lacking—in alcoholism, or depression, or behavioral techniques for obsessive compulsive neurosis—we will earmark funds for the development of appropriate knowledge of the safety and efficacy of treatments.

## **Strengthening Peer Review**

At ADAMHA we also attempt regularly to improve and refine the methods of selecting and administering the research grants that are funded with public monies.

One such improvement in the grant selection process will be the centralization, in each Institute, of the peer review process in which Initial Review Groups, composed of experts in the various fields and disciplines required by the nature of the different programs, review and evaluate the scientific and technical merit of some 4,500 grant applications submitted annually to ADAMHA.

Historically, the strengths of this system include the availability of the best technically qualified experts, and it provides for the participation of a large number of persons from the various constituencies, operating in a system of careful, procedural safeguards to assure—to the extent possible the absence of bias and conflict of interest.

At the National Institutes of Health such review groups are deliberately organized apart from the programs which they serve, since an unbiased technical review of projects is considered essential whether or not program or other priorities are imposed ultimately by a particular awarding organization. At ADAMHA, through successive organizational development, the review of grant applications came to be carried out within the particular branches and divisions concerned with individual programs.

We are now shifting to centralized initial review, in the belief that it permits a clean separation of the quality consideration of projects from the many programmatic, budgetary, and other considerations in making award decisions, allowing the opportunity for greatly increased emphasis on the quality of projects, while conducting the public business in the most equitable and responsive fashion.

## **Manpower and Training**

We also anticipate changes in the training of service personnel in our three fields and in their assignments in treatment programs. A marked increase has occurred in the number of professional and paraprofessional mental health practitioners over the years and, in the past decade, of workers in the drug abuse field. But rural areas, small towns, and poor urban areas still have only a fraction of the personnel they need. The mental health professions still have too few minority members. There are shortages of workers who have the specific skills to train personnel and to develop services in certain settings and for underserved populations.

The special population groups most notably underserved in ADAMHA areas of concern are minorities, children and youth, the elderly, deinstitutionalized adults with severe mental impairments, and juvenile delinquents and adult offenders.

Recent reports from the President's Commission on Mental Health and an ADAMHA Manpower Policy Analysis Task Force discuss the maldistribution of manpower for alcoholism, drug abuse, and mental health and make a number of recommendations. Among them are recommendations that-

• Federal support for students in the core mental health professions be in the form of loans or scholarships that can be repaid by a period of service in designated geographic areas or facilities where there is a shortage of personnel.

• Grants and contracts to educational institutions for training mental health specialists be awarded only to programs specifically aimed at meeting major service delivery priorities or the needs of underserved populations.

• The Department of Health, Education, and Welfare make a multilevel effort to increase the number of minority professionals in alcohol, drug abuse, and mental health services—and develop special projects to interest minority high school students in specialty health careers, provide scholarship support in the sciences to minority college students, and expand minority fellowship programs at the graduate level.

For the future we see training as less oriented by professional discipline and more by public health problems. Instead of being funded by the category or discipline such as psychology or medicine, training will be designed to meet the public's need: more child mental health workers, more people in rural areas, more concern for general health care, and more people in research.

## **Services Networks**

Since the majority of people who have drinking, drug, or mental or emotional problems initially visit a general practitioner, it behooves us to strengthen the primary care level of the general health care system and contribute to the skills of family practitioners. About 5 million persons in the United States now receive their primary health care from neighborhood health centers or rural health centers, and the Federal Government hopes to double that number through a program of direct grants-in-aid, particularly to inner-city neighborhoods, rural areas, and for such special populations as children and migrant farmworkers. One effort will be to staff these primary care facilities with nurse practitioners, social workers, and, where appropriate, psychiatrists who are specially trained for alcoholism, drug abuse, and mental health services.

An estimated 15 percent of the population, 31,955,000 persons, have an alcohol, drug abuse, or mental health disorder within a 1-year period: 60 percent receive care under the general health care sector of the health system, 20 percent receive care in the specialty mental health sector, and 20 percent are not in the health system. The Community Mental Health Centers (CMHC) program, the largest single Federal support program, has created a network of specialized services, mostly at the secondary level, sometimes linked to health centers, but often in isolation. Recently, with the use of Federal funds, we also have created a network of narcotic and other drug abuse treatment facilities, and we are expanding a specialized system for alcoholism treatment. At this time there are too few linkages among the specialty systems and, more importantly, between the specialty systems and the general health care system. Another ADAMHA goal is to increase these linkages.

In its final report (April 1978), the President's Commission on Mental Health recommended transition to a new Federal grant program that would provide more flexibility than the CMHC program for communities seeking to develop mental health, alcohol, and drug abuse services and called for development of a "national plan" for States to phase out their large mental hospitals and build systems of comprehensive community services. The proposed new program of Federal grants for community services would attempt to encourage creation of necessary services where none exist and supplement existing services to help each community develop the system it requires to meet its particular needs. The "national plan," to better serve persons with chronic mental illness, would provide for upgrading care in smaller State hospitals while phasing down, and where appropriate, closing the larger ones.

#### Linkages with Other Health Programs

If collaborative efforts and integrated action are necessary in the health system, they also have an important role within and among government agencies, across the boundaries that delimit those agencies. At ADAMHA and in each of our Institutes we can anticipate linkages and commonalities in dealing with a variety of problems.

For example, automobile accidents are one of the leading causes of death among young adults, and the responsibility for the major aspects of this unfortunate situation lies within the Department of Transportation. However, we know that high levels of blood alcohol or marihuana impair driving ability, and that many teenagers use both drugs at worrisomely high levels. Thus, the ADAMHA Institutes have an important role in determining what drug usage contributes to automobile accidents.

Another example of joint programing and coordination could arise in the course of attempts to work toward "a more positive approach" to drugs for example, a study designed to find new and better methods of treating sleep disturbance. To NIDA's expertise on the treatment of insomnia with drugs, we would add NIMH knowledge about the physiology of sleep and about such non-pharmacological techniques as biofeedback for dealing with sleep disturbance.

Yet another opportunity for collaborative linkage is afforded by the agency's concern with the fetal alcohol syndrome—the harmful effects on the fetus of drinking during pregnancy. If the epidemiologic research now underway results in a program to counter this problem, ADAMHA would be involved with a number of other agencies: the Food and Drug Administration to handle the possible labeling of drugs that contain alcohol; the Treasury Department since it has the legal responsibility for labeling alcoholic beverages; the Health Services Administration, whose maternal and child health services could play a critical role; and the Office of Education if we proposed to educate teenage mothers about avoiding alcohol during pregnancy.

## Prevention

Prevention has been added to the three traditional components of ADAMHA programs—research, training, and services. Prevention has emerged as a major Administration and Public Health Service priority.

There is growing evidence that treatment alone will not solve all the health and other problems connected with alcoholism, drug abuse, and mental illness and that many may be at least partially preventable by application of present knowledge.

At ADAMHA the form of prevention to be stressed will be primary prevention which we define as follows:

"Primary prevention is directed at reducing the occurrence or incidence of alcohol, drug abuse, and mental health disorders. This goal is achieved through the promotion of physical, mental, and social growth toward full human potential. Prevention activities are directed toward specifically identified high-risk groups within the community who can be helped to avoid the onset of mental and emotional dysfunctioning and to inhibit the use of alcohol and drugs."

Traditionally, prevention has been viewed from two contexts—health promotion and disease prevention. The ADAMHA conceptual framework adds to disease prevention the prevention of behavioral consequences and antecedent behaviors. The first refers to interventions to prevent such high-risk behaviors as teenage drinking, smoking, and experimental drug use—behaviors that increase the probability of the development of physical, emotional, and behavioral problems. Prevention of behavioral consequences refers to interventions to prevent the deleterious effects of high-risk behavior, that is, accidents that result from driving under the influence, suicides or homicides as a consequence of emotional disorders, or excessive drinking or substance abuse.

The Public Health Service Task Force on Prevention has delineated 12 high-risk behaviors for which PHS should develop strategies to modify lifestyles. Of the 12, 10 either in whole or in part, fall under the legislative mandate of ADAMHA. They include smoking, alcohol use, habituating drug use, driving, sexuality, risk management, family development, coping, stress management, and enhancing self-esteem.

If ADAMHA is to make significant strides in reducing death and disability from these 10 high-risk behaviors, major initiatives will have to be mounted to inform and educate the public, as well as elicit the cooperation of community organizations and groups. Communities must be involved if creative alternatives are to be offered to individuals and groups, particularly young people. Once again, it will be essential for our programs to establish linkages not only with health service systems and primary care physicians but also with a wide variety of community and social supports.

## **Past and Present**

One hundred years ago, alcoholics and drug addicts went untreated, and the mentally ill were committed to "asylums" that had become human warehouses.

Twenty-five years ago most alcoholics dried out in jail. Drug addicts went through the "revolving doors" of two Federal hospitals, and the mentally ill still crowded State hospitals. Since then, psychoactive drugs have revolutionized treatment of long-term mental patients and released them from hospitals. Easily accessible community-based treatment facilities are now available to drug abusers. In a less spectacular manner, alcoholism has become recognized as a disease, not an immoral weakness, and a public health problem whose victims should be treated rather than incarcerated. Now, alcoholism is to be examined across the nation by a proposed broadbased National Commission on Alcoholism and Other Alcohol-Related Problems which will assess the scope of the problem, analyze what is presently being done, and recommend national policy and action for the future.