PSYCHIATRY

# **Drugs for Mental Diseases**

New remedies are reported for treatment of various mental disorders, and one to improve behavior of problem children. Hope for alcoholics suggested.

➤ LACTIC ACID, known to the layman in buttermilk and sauerkraut juice, adrenalin and medically induced delirium are new treatments for mental disease reported at the meeting of the American Psychiatric Association in Chicago.

Doses of lactic acid and sodium lactate given in milk helped seven severely depressed patients recover, brought marked improvement to five more and some improvement to another 14, Drs. Hans Lowenbach and Maurice H. Greenhill, of Duke University School of Medicine, reported.

The other 19 of the 45 patients treated were not helped.

The reason for giving the lactic acid was that this chemical is produced in the body in the violent muscular activity that occurs during shock treatment. The Duke psychiatrists thought that this might be the factor responsible for recovery of some patients following shock treatment.

Most of the patients and medical students on whom the treatment was first tried had a short period of stomach distress following the dose of lactic acid. This soon subsided and was followed by drowsiness and relaxation. Patients were able to sleep who previously had required sleeping medicine.

Adrenalin, one of the hormones produced by the adrenal glands, offers a definite prospect of aid to patients with persistent anxiety states, Dr. D. Ewen Cameron of McGill University believes from his experience with this treatment.

The chemical is given by injection into the muscles or veins. The treatment is time-consuming and tedious and should not be undertaken unless both patient and physician are convinced nothing else will help, Dr. Cameron warned.

Patients get some relaxation and symptoms disappear temporarily at the end of a day's treatment. In the course of many months, the symptoms gradually disappear altogether. Dr. Cameron believes the results so far warrant attempts to find better methods of using the treatment so that it can become practical.

The good results with artificial deli-

rium were reported by Dr. Thomas J. Heldt of the Henry Ford Hospital, Detroit. He finds it universally beneficial for patients with borderline psychiatric disorders.

The delirium is induced by sodium amytal given in large enough doses to keep the patients asleep from 12 to 20 hours every day for from five to 12 days. No solid food but plenty of liquid nourishment is given during this period. When signs of a toxic condition begin to develop, the drug is stopped, fluids reduced and delirium produced. The delirium usually lasts three to six days. During this time the patient's inhibitions are released and he can more readily answer the psychoanalyst's questions. Through this, he gains understanding of himself and can adjust better to life.

### **Problem Children**

➤ A DRUG THAT makes problem children behave better has been discovered by Dr. Charlotte F. Walker and Miss Barbara B. Kirkpatrick of Duke University School of Medicine.

The drug is diphenylhydantoin sodium and goes under the trade name of dilantin.

Before parents of unruly children start a run on the neighborhood drug store, they should consult their physician. The drug is sold only on a doctor's prescription.

It was developed about 10 years ago for treatment of epilepsy and has greatly aided some patients with that disease. Its new use for problem children was announced by the Duke researchers at the meeting.

Important advantage of the drug treatment is that the children do not have to be sent to an institution but can remain at home. Even without their being moved from a bad environmental or psychological situation, their bad behavior was controlled or improved by the drug.

The children studied by the Duke researchers did not have epilepsy nor was there any history of epilepsy in their families. The children did, however, have abnormal brain waves. The scientists believe that their discovery of the abnormal brain waves and good response to dilantin in these problem children should have further study because of the possibility of preventing the problem behavior becoming something more serious.

## Hope for "Lost Weekenders"

SOME DAY alcoholics may be able to use a treatment, somewhat like insulin for diabetics, that will keep them from having "lost weekends." This is a possibility that may result from research suggested by Dr. J. D. Reichard, medical director of the U. S. Public Health Service at Lexington, Ky.

The action of amphetamine, or benzedrine, known to the layman as "pep pills" which students took to keep awake while cramming for examinations, was specifically cited by Dr. Reichard.

This drug is familiar to psychiatrists for the sometimes successful and spectacular improvement of the mood of mental patients. Dr. Reichard did not suggest the use of amphetamine for alcoholics. His idea, however, is that if a chemical can induce a change in mood and behavior of one type of mental patient, some other chemical might be found to change the mood and behavior of the alcholic.

Search for this chemical to control alcoholism and other types of drug addiction as insulin controls diabetes must be based, he said, on a better understanding of normal anatomy, chemistry, physics and physiology as they are related to human feelings and behavior.

"Cures" of alcoholism are not cures in the sense of the word applied to other diseases, he pointed out. Cure of a disease ordinarily means that the ill person has recovered so completely he can resume his usual activities.

"If," he said, "we actually could 'cure' a person addicted to alcohol who for years prior to addiction had been able to drink in moderation, we should expect him then to be able again to return to moderate drinking. Such results of treatment are so uncommon as to be almost non-existent."

#### **Remove Frustration**

➤ A VERY serious chronic mental disease, schizophrenia, may be prevented in some cases by removing the frustration which threatens to unbalance the patient's mind.

Case histories showing how this could be accomplished were presented at the meeting by Dr. J. M. Nielson and Dr. George N. Thompson of Los Angeles County General Hospital.

Immediate recovery followed removal of the frustration in some cases. In one instance, the illness could be brought on again by simply reintroducing the frustrating situation.

Frustration does not always lead to schizophrenia, nor is the illness always caused by frustration, the Los Angeles physicians pointed out. They explained how frustration may lead to schizophrenia somewhat as follows:

A state of anxiety results when a person, once frustrated, cannot accept defeat but continues to strive for the unattainable goal. Emotional depression, on the other hand, results when frustration is accepted as final, yet the desire for the unattainable goal continues without active pursuit of it. When the depression comes to an end, they said, various forms of reaction may appear, depending on the make-up of the individual.

These reactions include an attack,

either verbal or physical, on the object or situation causing the frustration; sublimation of one's ambitions; or a psychotic response, that is, outright mental sickness. Only a relatively small number, the doctors said, will develop a psychotic reaction, resembling schizophrenia. If the frustration is then overcome by direct assault or by sublimation before it becomes thoroughly established, complete recovery can be achieved. If success is impossible a genuine schizophrenia may develop.

Children suffering from the very severe mental sickness called schizophrenia actually have a better chance of getting well when treated at the doctor's office than when sent to a mental hospital, Dr. J. Louise Despert of New York Hospital finds.

Although the prospect of complete recovery remains doubtful, results of this treatment which allows the child to live at home with his family have been encouraging.

Dr. Despert has tried the treatment on seven children ranging in age from three to seven years.

Science News Letter, June 8, 1946

SOCIOLOGY

# **Culture Theory Proposed**

➤ A MODERNIZED theory of culture which embraces nearly all known civilization since the beginning of recorded time, excepting the Americas before Columbus, has been postulated by Prof. A. L. Kroeber, anthropologist of the University of California.

Prof. Kroeber models his concept after the Greek theory of culture, called Oikoumene, meaning "the inhabited," which was actually the Mediterranean basin. This was all the inhabited world known to the Greeks.

The concept proposed by Prof. Kroeber holds that the known cultures of Europe and Asia form the parts of a whole pattern. These cultures have all drawn upon what Prof. Kroeber calls the root-stock of all higher civilizations.

Thus, for example, sculpture is a cultural expression of a wide range of higher civilizations, in different periods of time in widely separated geographical areas. While this art was developed in different forms and to different degrees of perfection, sculpture is a part of the root-stock of higher civilizations, and is unlimited by time or geographical considerations. It was borrowed by the ex-

change of ideas for differential development.

Prof. Kroeber pointed out that the interrelations of the different known cultures are such that it is extremely difficult and in many cases impossible to determine when or where a cultural expression such as the domestication of animals and plants or the development of games of mental skill took place.

The anthropologist said that his concept would involve a shifting of the Greek "Oikoumene," meaning from "range of mankind" to "range of man's most developed cultures," thus giving a significant designation to an interwoven set of happenings.

Prof. Kroeber, speaking recently as Huxley Medalist before the Royal Anthropological Institute of Great Britain and Ireland, meeting in London, England, excluded the pre-Columbian Americas from his "Oikoumene" because there is no definite interrelationship between the cultures of the Americas and Eurasia during this time.

Prof. Kroeber's Oikoumene encompasses not the totality of the culture of all humanity at all periods and all places,

but "as large a sector of it as the millennially interrelated higher civilizations in the connected mainland masses of the eastern hemisphere."

"The speed of diffusibility of culture content is so great under optimum conditions," Prof. Kroeber said, "that the period of half-a-dozen millenia which we have been considering would have sufficed for particular items—say something like smoking, or coffee—to have spread around the planet again and again and again.

"What counts for total comprehension of the story of man's doings, however, is not these flashing meteoric bits, but the concatenated masses of culture and the interrelations of these. . . . .

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