Social Sciences Notes

MENTAL HEALTH

Drugs for the Lower Classes

Psychiatric interviewers tend to give drugs to lower class patients and psychotherapy to those from better backgrounds, according to a study of treatment procedures at the Massachusetts Mental Health Center's outpatient service.

Moreover, the study reveals, interviewers will often prescribe drug therapy for patients whom they don't like.

All the 100 patients studied had the same problem—neurotic depression. Nevertheless, there was a clear link between "treatment assignments and the educational, economic backgrounds of patients," report Drs. Richard I. Shader and William A. Binstock, Harvard Medical School, and Dorothy Scott of the Mental Health Center.

"These findings need not occasion concern," said the researchers. "Lower class patients often expect and prefer a non-psychological approach."

SOCIOLOGY

Everyone Linked by Five Friends

A chain of only five people will link any two individuals in the country, although the two are completely unknown to each other, according to a Harvard study dubbed the "small-world problem."

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Social psychologist Dr. Stanley Milgram discovered the number five by tracing a message from Nebraska to Boston. The target was a Boston stockbroker living in Sharon, Mass. The senders were 160 randomly-chosen Nebraskans. None knew the stockbroker, but each had his name and a few elementary facts on him.

The trick was to move the message only through friends—people who knew each other on a first-name basis. Moreover, the message had to move in a straight chain, that is, no one could send it to more than one friend. They were instructed to pick a friend most likely to know the broker.

In some cases, the message reached the stockbroker through two intermediaries; in other cases, it took 10, but the average was five, reported Dr. Milgram.

One message, for instance, started with a widowed clerk in Omaha, went to a friend in Council Bluffs, Iowa, to a publisher in Belmont, Mass., and to a tanner in Sharon. From there, it went to a metal worker, a dentist, a printer and a clothing merchant, all in Sharon, before it reached the stockbroker.

Five intermediaries actually means five circles of acquaintances, and therefore represents an "enormous psychological distance," writes Dr. Milgram in the charter issue of PSYCHOLOGY TODAY.

PSYCHOBIOLOGY

Elderly Lose Deep Sleep

Elderly people appear to lose the capacity for the most effective sleep—stage 4 sleep.

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Three separate investigations have confirmed that stage 4—the deepest kind—sharply declines and in some cases disappears altogether from the sleep of people 50 or 60 years of age and older.

Dr. Anthony Kales, a psychiatrist from the University of California at Los Angeles, said he believes the condition is pathological and is related to the degeneration of the central nervous system. This would imply a link between loss of deep sleep and lowered intellectual functioning in the aged.

Loss of stage 4 also accompanies other conditions, such as depression and hypothyroidism, but after medication, these patients will recover deep sleep. The aged do not appear to be capable of recovering the stage, said Dr. Kales.

His 10 elderly subjects were all in good health and active for their age, but of their total sleep, only 1.4 percent was stage 4, compared to 11 percent in young adults.

Dr. Kales is now experimenting with physical exercise to see whether it might increase deep sleep among the elderly.

PSYCHIATRY

NIMH Backs Suicide Studies

The National Institute of Mental Health has created a new profession—suicidology.

To establish the curriculum and recruit teaching personnel, the Institute has granted \$110,500 for 1967 to the Henry Phipps Psychiatric Clinic at Johns Hopkins School of Medicine. The funds will also support four fellowships to study suicides for applicants from any of the mental health fields—psychiatry, psychology, social work, anthropology and others.

Altogether, NIMH plans four years of support, totaling \$852,000.

The program represents a "conspicuous step forward in the fight against suicidal deaths," commented Institute director, Dr. Stanley F. Yolles.

PSYCHOBIOLOGY

Learning Measured in Cat's Brain

Two Princeton University researchers have traced changes in electrical output from a cat's brain as he learned a simple task. It is thought to be the first time learning has been directly measured in terms of electrical activity.

Dr. Ernest Glen Wever, an authority on hearing, and graduate student James C. Saunders did their work on the cat's auditory cortex—the nerve center for interpreting sounds and making conscious decisions about them.

By implanting tiny electrodes in the cortex and training the cat to recognize a clinking sound, the investigators were able to measure learning changes.

At first, signals from the cortex were incredibly weak, about a microvolt—the cat had not yet connected the clinks with an approaching electric shock or learned that he could avoid the jolt by rocking his cage.

As he got the message, signals from the cortex grew

Then, suddenly they weakened dramatically. The investigators believed the cat somehow "shut down" his cortex after learning had become automatic. The job of keeping the cage rocking could then be taken over by some lower center, leaving the cortex free to handle new information.

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