MEDICINE

Most Dying Patients Should Be Told Truth

➤ A DYING PATIENT often should be told the truth about his condition, physicians at the American Psychiatric Association meeting in Chicago were advised by Drs. Thomas P. Hackett and Avery D. Weisman of Harvard Medical School.

A silent conspiracy between family and physician to hide the truth from a dying patient condemns him to a premature burial by isolating him from the living long before he is dead, the physicians said. The most agonizing aspect of dying is being separated from those one loves and respects.

The patient who is not able to face the truth that he is about to die will go on believing that he is going to get well despite the facts the physician lays before him. For this reason, the truth will not hurt the dying patient.

The ability of a physician to handle psychologically the dying patient depends partly on his success in dealing with his own unconscious fears of death, another psychiatrist, Dr. Charles William Wahl of the University of California Medical Center, Los Angeles, reported at the meeting.

• Science News Letter, 79:344 June 3, 1961

MEDICINE

Proposal Made to Change Foreign-Doctor Program

FOREIGN MEDICAL SCHOOL graduates should be allowed to take the required examination to serve as interns or residents in American hospitals six months after they come to this country, a New York physician has proposed.

Dr. Edward Kirsch, chairman of the intern and resident committees of the Greater New York Hosiptal Association and the Hospital Association of New York State, outlines his proposal in the Journal of the American Medical Association, 176: 603, 1961.

The establishment by the American Medical Association of the Dec. 31, 1960, deadline (now temporarily extended to June 30, 1961) "has received much critical comment by foreign medical graduates and medical staffs in many American hospitals," Dr. Kirsch said.

During the six-month waiting period proposed, a foreign medical graduate could get instruction in an approved hospital, including instruction in English, American medical terminology, basic medical sciences and the major clinical specialties.

Other reports included in the official AMA Journal are:

The milk diet is obsolete in the management of peptic ulcer because of the availability of excellent antacid preparations and the possibility that excess consumption of milk products is detrimental to the coronary arteries. This report was in answer to a question by Dr. G. L. Bauer of Belleville, Ill.—Dr. William H. Bachrach, University of Southern California, Los Angeles (p. 642).

A new antibiotic tested on 4,704 patients has shown side effects in less than a tenth of the persons studied. There were 721 patients who had been treated unsuccessfully with other anti-infective measures who responded to demethylchlortetracycline (Declomycin).—Dr. Franklin M. Phillips and Joel L. Shapiro, Lederle Laboratories, Pearl River, N. Y. (p. 596).

The closed-chest method of heart massage, which originated at Johns Hopkins University, Baltimore, has been reported effective in restoring the heart beat of 62 patients. Artificial respiration should precede and accompany heart massage, however, because restored heart beat without breathing is futile, and many patients recover after artificial respiration alone.—Drs. Peter C. Gazes and John A. Boone, Medical College of South Carolina, Charleston; and Drs. Peter Safar, Torrey C. Brown, Warren J. Holtey and Robert J. Wilder, Baltimore City Hospitals and Johns Hopkins School of Medicine (pp. 574 and 621).

• Science News Letter, 79:344 June 3, 1961

MEDICINE

Cortisone Hinders Fight Against Viral Diseases

➤ A CHEMICAL QUIRK of cortisone allows it to hamper the body's fight against viral diseases, scientists have reported.

Cortisone can prevent cells from producing a virus-fighting substance called interferon, and can stifle the action of that which is already present. This allows the disease virus to grow more rapidly. In addition, Dr. Edwin D. Kilbourne, E. Marilyn Smart and Barbara Ann Pokorny of Cornell University Medical College, New York, report in Nature, 190:650, 1961, cortisone inhibits the helpful viruses sometimes injected to boost production of interferon

Both actions of cortisone, the scientists believe, are the result of one chemical action, namely, cortisone's ability to influence protein synthesis.

• Science News Letter, 79:344 June 3, 1961

PUBLIC SAFETY

Hood Doubles Depth For Submarine Escapes

See Front Cover

➤ A SUBMARINE ESCAPE device will now enable men to get out of stricken submarines sunk as deep as 450 feet, or more than twice the practical escape depth now possible with other individual escape techniques.

U. S. Navy Lt. Harris Steinke, who developed the hood, set a depth-breaking record at the U. S. Navy Experimental Diving Unit, Washington, D. C., when he safely came up from the 450-foot level wearing the hood.

In the tank, seen on the cover of this week's SCIENCE NEWS LETTER, Navy chief Eugene Shipp prepares to repeat the test while Lt. Steinke watches.

• Science News Letter, 79:344 June 3, 1961



EDUCATION

Educational Strides Made But Need Still Acute

DURING THE PAST ten years, American educators have taken impressive steps to solve the problem of educating increased numbers of students. But the challenge of raising the quality of education throughout the country is still critically urgent.

This is the conclusion reached by the Fund for the Advancement of Education after its first decade of supporting promising developments in United States schools and colleges.

The Fund, established by the Ford Foundation in 1951, has spent some \$50,000,000 in grants for approximately 500 projects.

Fund president Clarence H. Faust emphasized the success of experiments aimed at improving preparation of teachers, providing more teacher aides, forming teaching teams, and increasing use of TV, films, tapes, slides and teaching machines.

• Science News Letter, 79:344 June 3, 1961

PHARMACOLOGY

Attacks Illegal Sale of Pep Pills, Barbiturates

➤ UNDER-THE-COUNTER sales of amphetamine (pep pills) and barbiturate drugs to teenagers were attacked in a bill aimed at putting teeth into the existing law.

Sen. Thomas J. Dodd (D.-Conn.), chairman of the Senate Subcommittee to Investigate Juvenile Delinquency, who introduced the bill, said the present Food and Drug law leaves a major portion of the underworld drug trade practically immune from Federal prosecution.

Under the provisions of his bill a violator caught in the act of unlawful sale could not escape conviction for lack of proof the drug had traveled in interstate commerce, as is now the case.

In amending title 21, U.S. Code, Sen. Dodd proposes two major provisions, neither of which calls for licensing. The first requires all manufacturers, compounders and processors of the drugs to list their names and places of business with the Secretary of Health, Education and Welfare.

The second provision requires every person selling, delivering or otherwise disposing of the drugs to keep a record of the kinds and quantity involved, including the name and address of the person to whom the drug is sold, except in the case of duly licensed medical practitioners.

The present situation, Sen. Dodd said, is more appalling in the cities throughout the country than prior to 1959 when amphetamine inhalers were commonly sold in drugstores without prescriptions.

• Science News Letter, 79:344 June 3, 1961

CE FIELDS

ROENTGENOLOGY

X-Ray Diagnosis Aims to **Prevent Heart Attacks**

➤ THE PREVENTION of heart attacks is possible as a result of advances in X-ray examinations, two New York Hospital-Cornell Medical Center scientists told the American College of Radiology X-ray forum in New York.

Recently developed examinations and studies called "selective coronary arteriography" show the presence of coronary artery disease in a living patient. Previously the coronary arteries could only be

seen at autopsy.

Dr. John A. Evans said it was now possible to follow the course of the blood through the arteries, thus obtaining knowledge through improved electronic equipment in addition to new understanding from X-ray examinations.

"Radiology can demonstrate the hereto-fore invisible," Dr. Evans said.

Dr. Edward I. Goldsmith said the greatest handicap in using surgical procedures for obstruction of the blood flow, which causes heart attacks, has been insufficient knowledge of the actual problem within the coronary arteries.

"The information received from the diagnostic X-ray examinations can now be used by the surgeon," he said, adding that the surgeon can select, "modify and develop" effective procedures. In this way he can try to alleviate the blood supply insufficiency and possibly prevent the occurrence of some heart attacks.

• Science News Letter, 79:345 June 3, 1961

TECHNOLOGY

Computers Now Demand Topnotch Human Brains

➤ TOPNOTCH human brains will be needed henceforth to make wise use of computers, Dr. John R. Pierce contended at the Massachuetts Institute of Technology, Cambridge, Mass.

Dr. Pierce is director of research in communications principles at the Bell Telephone Laboratories, Murray Hill, N. J. He gave the final lecture in a series on "Management and the Computer of the Future.'

Somehow, he said, executives "with more ignorance than knowledge about the func-tioning of human beings" manage people now; in the future they will have to get along with computers, too. But, he emphasized: "Machines are not men. Just because a computer can do something a man might do does not mean that it

Although machines have played checkers and chess, he noted, you still can get equivalent performance cheaper by hiring a good checker or chess player. Similarly,

it still pays to learn Russian if you want to know what the Russians are saying, even though machines have translated some Russian into English and much is being learned about languages from such research.

"Although machines can process data," Dr. Pierce said, "the results are no better than the data, and information may be lost in the processing.

"While machines can process the results of surveys, it takes a good social scientist to plan a survey, and a good statistician to evaluate the results.

"What computers should do depends not only on the computer and the problem, but on the ingenuity of the programmer.

Wise decisions about the use of computers, he concluded, cannot be made quickly or easily. "There is real doubt," he thinks, "whether they can be made by a man harassed with the routine of a large, multi-level organization.

They certainly cannot be made by even bright specialist in management unless that specialist is willing to devote years of hard effort to learning things quite outside of his specialty, things that have to do with machine and systems of machines, with data and information, rather than with organizations of people and human idiosyncracies. . . ."

• Science News Letter, 79:345 June 3, 1961

Violent Race Hatred Is Healed by Time

➤ THE ALABAMA DISORDERS focus new attention on race hatred, but for many years there have been places in the United States where Negroes could not live or travel in safety.

More recently, events in the Congo and other parts of Africa surprised the white man by showing him that there are parts of the world where he cannot go or live.

Hope for pacific race relations of the future lies in the little black republic of Haiti. As recently as the beginning of the 19th century, Haiti was torn by a revolutionary movement so violent that Negroes, infuriated by French treachery toward their leader Toussaint L'Ouverture and by injustices under slavery, engaged in a blood-thirsty massacre of all whites in Haiti.

Yet all this intense hatred for the whites was so far forgotten in 150 years that by 1950 no racial discrimination was evident. Visitors are served in the best restaurants, housed in the best hotels, permitted to swim on their world-famous beaches, and to dance beneath the stars and palm trees in the local version of night clubs.

Psychologists know that there is nothing innate in human nature to make persons of one skin color hate those of another hue. Race hatred develops when competition becomes too keen for jobs, for education which prepares for jobs, for freedom to move about or to live in one area or another. It develops when people come to fear one another either because of misunderstanding or deliberate misrepresentation by troublemakers. Race hatred is then "carefully taught" to children.

• Science News Letter, 79:345 June 3, 1961

MEDICINE

Strange Iodine Diversion Seen in Cancer Patients

➤ A STRANGE diversion of iodine occurs regularly in human cancers. The phenomenon was observed in all of 43 patients examined at the Fort Miley Veterans Administration Hospital in San Francisco, researchers told the American Cancer Society.

Drs. Kenneth G. Scott, W. A. Reilly and G. L. Searle of the Hospital and the University of California School of Medicine said much of the iodine stays in the blood stream or concentrates in cancers and other tissues, instead of going to the thyroid gland, as is normal.

The larger the tumor, the more iodine diversion, they said. Cancer patients' blood contained as much as 7.9 times the iodine in normal human blood. Their thyroids, on the average, took up only about 70% of the normal amount.

Checks of laboratory animals have shown that the tumor uses iodine to promote its own growth. It makes a miniature iodinecontaining protein that can burst body storage cells and feed the tumor.

Substances in the storage cells include histamine and serotonin, known to promote tumor growth. Efforts to arrest lung cancer growth by giving anti-histamine and/or anti-serotonin drugs are being made at a few experimental centers. No reports on the treatment's value are yet available.

• Science News Letter, 79:345 June 3, 1961

Children Brush Teeth Where Red Stain Shows

➤ CHILDREN will soon be brushing their teeth where the red stain shows, Dr. Quinton E. Williams, dentistry professor at the University of Texas, has predicted.

The red stain results from a dye called erythrosin acting on decay-causing bacteria in the mouth.

The dye is swished around in the mouth and turns red on the places where bacteria have collected, Dr. Williams said. The child then inspects his teeth with the aid of mirrors, including a small dental mirror, and brushes away the red stains and the bacteria, a process that keeps the child interested and gives his teeth a thorough cleaning.

Dr. Williams uses the dye in his private practice, and said it has been approved as safe by Federal testing laboratories and soon will be available generally. He said that he first educates children and their parents with a movie showing how tooth decay begins; then gives each child the dye and a dental mirror, with instructions for their use.

Use of the dye and mirror results in the formation of good dental habits by the child and does it in an interesting and informative way, Dr. Williams reported at a local meeting of the American Society of Dentistry for Children in Milwaukee, Wis.

• Science News Letter, 79:345 June 3, 1961