

MEDICINE

Smoking and Diseases

Recent medical reports have incriminated smoking in the occurrence of lung cancer and cited the habit of relighting cigarettes as a possible lung cancer hazard.

► **SMOKING** is reported to influence the number of deaths in Britain from respiratory diseases, including tuberculosis and bronchitis, as well as lung cancer.

The effect of smoking on lung cancer was firmly supported in a widely publicized report of London's Royal College of Physicians in 1962. A report on a U.S. study by the U.S. Public Health Service's advisory committee on smoking and health is due during December.

The effect of smoking on the occurrence of other diseases is not as well established. However, Drs. Eileen and John Crofton of the University of Edinburgh found that death rates from bronchitis and respiratory diseases in England and Wales started to become higher for men than women sooner than in Scotland.

They attribute this difference in male-female ratio of death rate to the fact that the cigarette smoking habit spread less rapidly in Scotland.

The rise in the death rate ratio probably also occurred in ischemic heart disease, caused by reduction of arterial blood to the heart, and possibly in peptic ulcer. However, the influence on both these diseases is confined to middle age, the scientists re-

ported in the British Medical Journal, Nov. 9, 1963.

A second of four reports on smoking effects in this issue incriminates the habit of relighting cigarettes, called "dimping" or "decking" in the Manchester area, as a possible lung-cancer hazard.

This is a comparable suggestion to one made by U.S. researchers to the effect that the shorter the stub smoked, the more likely the tars of tobacco are to cause lung cancer.

Drs. John Dark, M. Pemberton, M. O'Connor, with Marion H. Russell, all of Manchester, reported their study of 1,000 male smokers aged 50 and over, attending clinics in the Manchester area.

Four other researchers reported a study on tobacco smoking and blood groups, which they concluded were not related. This study was done in Cardiff, Wales, by Dr. I. T. T. Higgins, now at the University of Pittsburgh, Pa., R. J. Drummond, P. D. Oldham and R. Bevan.

Although no particular blood group has yet been found to be associated with the development of lung cancer, these researchers believe further studies are desirable.

Chest X-rays of men above the age of 40 were urged by Birmingham researchers, whose report reviewed a series of 1,523 cases of lung cancer in men. This procedure would help find early cases that could recover after surgery.

• Science News Letter, 84:325 Nov. 23, 1963

PSYCHOLOGY

Mother's Miscarriage Affects Whole Family

► **WHEN MOTHER** has a miscarriage, the whole family suffers along with her, a psychological study has indicated.

Looking at miscarriages mainly from a child's point of view, the study showed that reactions range from mild and passing to intense and enduring.

In some children, reactions are immediate and visible. They have nightmares, depressions or strange new fears. The influences of the "disturbed" reactions are not detected until years later.

A typical response of the child is confusion. If his questions about miscarriages are not answered adequately, he may make up his own answers based on his own understanding—or misunderstanding—of the situation.

Considering how often miscarriages occur, it is remarkable how little is known about their impact, Dr. Albert C. Cain, Dr. Irene Fast, Mary E. Erickson and Rebecca A. Vaughan of the University of Michigan, Ann Arbor, said.

• Science News Letter, 84:325 Nov. 23, 1963

NEUROLOGY

Physical Aspects of Mind Seen on the Increase

► **THE MIND** is getting to mean something concrete and physical rather than something abstract, Dr. Patrick L. McGeer told a meeting of the Society of the Sigma Xi at the Astrojet-General Corporation in Sacramento.

Dr. McGeer is a member of the University of British Columbia's Kinsmen Laboratory of Neurological Research, in Vancouver, Canada.

Recent research, Dr. McGeer said, has shown that pleasure and punishment centers exist in the brain. Drugs are known that can improve or harm an individual's mental state.

As greater knowledge accumulates, Dr. McGeer said, "what now seems an abstract property of the mind may take on a distinctly physical connotation as far as the brain is concerned."

• Science News Letter, 84:325 Nov. 23, 1963

MEDICINE

More Syphilis Tests Advised in Hospitals

► **ONE QUARTER** of a million syphilis cases go untreated because thousands of hospitals do not give routine tests to patients.

The American Public Health Association meeting in Kansas City, Mo., was told that if the 3,000 hospitals not now testing patients routinely were required to do so for accreditation, the eradication of syphilis would be speeded up.

Dr. William J. Brown, chief of the venereal disease branch of the Communicable Disease Center, Atlanta, Ga., said that even hospitals make mistakes in diagnosis, however.

He told of a syphilitic whose disease was not noticed at a hospital when her baby was born. Six weeks later she showed symptoms of syphilis, including falling hair.

Another woman had been checked by seven physicians, including one psychiatrist, each of whom diagnosed her syphilis symptoms as psychosomatic, he said. This woman was not treated for the venereal disease until she was named as a contact for another case.

The alarming increase in syphilis—with 22,000 cases reported last year—makes it a major public health problem in the United States today, Dr. Brown said. It would have been stamped out were it not by its nature a hidden disease, with its method of transmission involving one of the most supercharged combinations of human emotions—sex and guilt.

Half of the states now have laws requiring the reporting of names of syphilis patients.

A report and analysis of a survey of blood testing in all types of U.S. hospitals is being published in the Journal of the American Hospital Association, Nov. 1963.

The American Hospital Association in 1962 worked with the Communicable Disease Center in the survey of blood tests in U.S. hospitals.

• Science News Letter, 84:325 Nov. 23, 1963



Sperry

ATOM SMASHER DRIVER—The first of 72 giant klystron amplifiers that will help drive the two-mile-long atom smasher being built by Stanford University, California, is shown being lowered into its barrel-shaped magnet at Sperry Rand's Electronic Tube Division, Gainesville, Fla.