



Goodyear

UNDERWATER MISSILE—An anti-submarine missile test vehicle designed for long-range launching from a submarine under water is shown as it bursts out of the water and shoots upward during a test firing in the Pacific Ocean. The weapon is being developed by the Naval Ordnance Laboratory and Goodyear Aircraft Corporation.

MEDICINE

Legal Abortion Safer

In countries with legalized abortion, sterility from abortion is rare and there is no greater risk of death than at normal birth, Faye Marley reports.

► **DEATH** and sterility from abortion are rare in countries with legalized abortion, the International Conference on Planned Parenthood was told at Singapore.

There are fewer deaths from legalized abortions than from tonsillectomies, Prof. K. H. Mehlan of the University of Rostock, East Germany, said.

Only 2% of 2,000 women studied five years after abortions showed sterility as a result. Later examinations of 1,400 women in Japan revealed that 50% were either pregnant again 18 months following abortion, or had had another induced abortion. A Scandinavian study showed that between 1% and 6% of the women who had had legal abortions were unable to have children.

In the United States, deaths from surgery on tonsils and adenoids average about 17 per 100,000 operations, Prof. Mehlan said. An estimated 200,000 to 1,200,000 illegal abortions are performed in the U. S. yearly, but the death rate is unknown.

Although legal abortions have reduced the number of criminal abortions, Prof. Mehlan said, secret operations still occur in Eastern Europe with sufficient frequency to be considered a serious health problem. The reasons for secrecy are psychological, going back to former times when there was prejudice against women who interrupted their pregnancies. Sometimes women want doctors of their own choice rather than those

of the clinic.

Decrease in the birth rate has accompanied legalized abortion except in the USSR, Prof. Mehlan reported, but most countries showed a decline before the period of legalization began.

In 35,000 cases of abortion, Prof. Mehlan said he had proved that, in any interruption of pregnancy performed legally, there was no greater risk of death than at normal birth. He said recent figures for Sweden, Denmark and Finland confirm this statement.

Hungary leads all northern and eastern European countries in the recorded number of legal abortions, reporting 269,000 in 1957-58. Czechoslovakia comes next with 140,000 in 1958-59. Bulgaria had 67,000 in 1957-58, the German Democratic Republic (East Germany) had 28,775 in 1948-50. Finland comes next with 27,144 in the period 1950-57, Denmark next with 23,666 from 1953 to 1957, and Sweden last with 21,803 from 1953 to 1957.

There are more deaths per 100,000 in the northern European countries, Prof. Mehlan said, because in the eastern countries, abortion must be performed before the end of the third month, except where medical indications permit. In Denmark and Finland abortions are permitted in the fourth month, and in Sweden even after the fifth month.

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One Pill Birth Control

► **ONE TABLET** a month of a drug called ergocornine may replace the 20 tablets of birth control pills a month now necessary to prevent pregnancy.

The alkaloid drug has been successful for birth control in animal experiments and in preliminary tests on women, Prof. M. C. Shelesnyak, Chicago-born, but with the Weizmann Institute of Science, Rehovoth, Israel, since 1950, told the International Conference on Planned Parenthood at Singapore.

Ergocornine is now used for vascular disorders and to reduce blood pressure. It stops production of the female hormone, progesterone, which plays a vital role in making possible the housing of the fertilized ovum.

The next step will be to determine whether the lack of progesterone actually prevents nest formation in humans as it does in rats. Dr. Shelesnyak also hopes to shed light on the opposite aspect of the same problem—unwanted infertility due to some failure in the nest-building process.

One of the essential stages in early pregnancy is ovum implantation, or the nesting of the fertilized egg in the lining of the uterus.

The nesting action depends on at least three physiological phases involving the interplay of two female sex hormones—estrogens and progesterones—and a third body substance, histamine. By temporarily stopping the production of any of these three substances, the entire process of ovum implantation, and pregnancy, can be halted, Dr. Shelesnyak believes.

Dr. Shelesnyak was formerly head of the environmental physiology and ecology branch of the U. S. Office of Naval Research. Last year he received a \$675,000 grant from the Population Council, New York, to expand his present research program.

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GENERAL SCIENCE

New Scientists' Institute To Inform on Radiation

► **THE FUTURE** Ph. D. candidate should be queried by his tutors, not only on factual information, but in terms of the scientist's responsibility to the community, Dr. Jules Hirsch of Rockefeller Institute told a national conference for scientific information on nuclear age problems at New York.

The conference was held at the New York Academy of Sciences to plan a new Scientists' Institute for Public Information on Nuclear Age Problems. Six sponsoring groups—committees for nuclear and radiation information in St. Louis, Cleveland, Philadelphia, Palo Alto, Calif., New York City and New Jersey—merged their activities to extend scientific information on nuclear problems.

The new Institute does not plan to take any political stand on such problems as nuclear tests, but will keep the public informed on the hazards of such tests as well as the advantages of nuclear energy.

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