

MEDICINE

U.S.S.R. Exports Doctors

Soviet Russia's competition with the United States in the field of science has been extended to include the exporting of trained medical personnel to needy countries.

➤ RUSSIA is methodically preparing to export trained doctors, nurses and other health personnel throughout the world.

Russia now has 2,750,000 such persons, better than one out of every 100 citizens. According to Russian statistics, U.S.S.R. medical schools are turning out 16,000 physicians a year, or more than twice as many as the United States.

These facts were told to the Manufacturing Chemists' Association meeting in White Sulphur Springs, W. Va., by John T. Connor, president of Merck & Company.

The most noteworthy aspect of the Russian doctor is her sex, for three out of four physicians are women, he pointed out. By 1956, Russia had 164 doctors per 100,000 people compared with 130 per 100,000 in the U. S.

However, quality is something else again, he noted. American doctors receive approximately 22 years of education before starting a practice of their own. The Russian counterparts receive only 16 years. But since there is no "family doctor" in Russia, the physicians there never enter private practice. Instead, physicians work at state controlled polyclinics, where they are on duty for certain hours daily.

The care the patient receives at the clinic may not be up to American standards, the drug laboratory president said, but Western observers have noted that it is warm, thorough and human.

Other aspects of Russian public health which he compared with American standards included:

1. Medical research that seems to have suffered from a relatively low priority since the Revolution. However, while well behind the West, it is beginning to pick up again.

2. Development of drugs that the Russians themselves admit is completely in the negative. The West has discovered every major drug group since the Russian Revolution, 1917: antibiotics, vitamins, sulfa drugs, anti-diabetics, hormones, anti-hypertensives and mental health drugs. So far, Russia has produced none.

Rather than investing millions of dollars in research, development and testing, they can pirate drugs from the West. Even so, Russian production of these drugs lags because they lack the complex experiences and facilities needed to produce them.

Mr. Connor cited one case, that of cortisone. The Russians are still unable to produce it satisfactorily, although they have translated the correct formula for it from available journals.

3. Life-expectancy in Soviet Russia in 1955-56 was 67 years. The American counterpart is 69.5 years. This was done, for the main part, by adopting American standards of sanitation and control of contagious diseases.

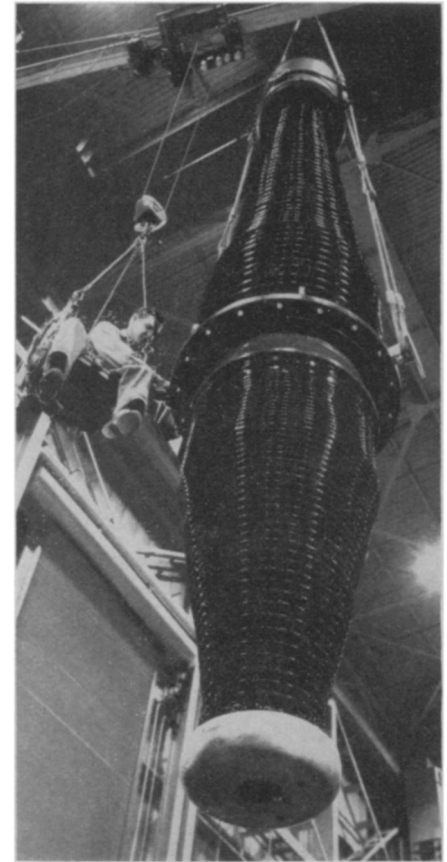
Most of us have never thought of medicine as an instrument of foreign policy, Mr. Connor explained. Yet, the export of trained health personnel by Russia to needy countries will bring a promise of long life to many peoples, he predicted.

Science News Letter, June 21, 1958

ceived polio vaccine does not necessarily mean that the vaccine failed, the investigators stress.

The six investigators, five of whom are at the University of Pittsburgh Graduate School of Public Health, include Dr. William McD. Hammon, Dr. David S. Yohn, Rose A. Pavia, Gladys E. Sather, Lambert W. McCloskey, and Dr. Ernest H. Ludwig who is now at Pennsylvania State University, University Park, Pa.

Science News Letter, June 21, 1958



SUPER BUSHING—This bushing is being checked before it is lowered into an oil tank for testing at the General Electric Company's High Voltage Laboratory at Pittsfield, Mass. The G-E has announced plans to transmit three-quarters of a million volts over a four and one-half mile line being built near Pittsfield. Electric power at super voltages higher than ever before transmitted will be carried on the line, enough power to supply a city of 1,000,000 persons.

MEDICINE

New Viruses Paralyze

➤ TWO NONPOLIO viruses have been found to cause paralytic disease.

Thus an individual can receive adequate vaccine protection against polio and still develop a paralytic disease.

The two viruses are called ECHO and Cocksackie. They have been associated with aseptic meningitis, a disease that attacks the membranes that envelop the brain and spinal cord. It is characterized by fever, headache and stiffness of the neck.

Polio viruses have been believed to be the only ones that cause paralysis. But two properties formerly thought to be unique for polio viruses were found to be shared by ECHO and Cocksackie viruses, the scientists report in the *Journal of the American Medical Association* (June 7).

They found six cases of paralytic disease originally diagnosed as polio were probably caused by the two viruses. These viruses, but no polio viruses, were isolated

from the affected patients during the acute phase of illness. In the past, the demonstration of a polio virus infection during the acute phase has been accepted as the established cause of the disease, the scientists explain.

In addition to the six cases of paralytic disease, ten cases of aseptic meningitis and a group of normal individuals were studied to observe the antigen-antibody response produced by the viruses. An antigen is a protein foreign to the body, which, when it enters the blood stream, causes antibodies to be produced to fight it.

The University of Pittsburgh scientists found that the two viruses have an antigenic reaction similar to that of polio viruses.

On the basis of their study, they say that in certain situations, the Cocksackie and ECHO viruses may produce disease similar to polio. Therefore, the development of paralytic disease after the individual has re-

● RADIO

Saturday, June 28, 1958, 1:30-1:45 p.m., EDT "Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio network. Check your local CBS station.

Dr. Ralph A. Krause, associate director, Stanford Research Institute, Menlo Park, Calif., will discuss "Research for Future Progress."