

world health notes

Gathered at the annual Assembly of the World Health Organization in Geneva

FAMILY PLANNING

Delicate balance on birth control

A delicate balance on world birth control policy has been struck among the medical, social, economic, political and cultural forces that formerly delayed World Health Organization service, the UN medical agency's director-general reports.

"Quite apart from its role in relation to demographic problems," Dr. Marcolino G. Candau of Brazil told delegates from 129 countries, "family planning is now recognized as an important component in the care of mothers and children, and in the promotion of family health."

For several recent years, Dr. Candau and many delegates—notably from underdeveloped, Communist and Catholic countries—successfully resisted the pressures of the United States, India and others for direct, forceful birth control action by WHO. He insisted first on placing it in the context of each nation's Maternal and Child Health Services, which WHO assists professionally as one of its main functions.

WHO's advisory services are now being requested by a growing number of countries, Dr. Candau reports.

CARDIOLOGY

International meeting on transplants

Top transplant surgeons will discuss heart transplant problems in Geneva in a June meeting, according to Dr. Vittorio Fattorusso, executive director of the Council of International Medical Scientific Organizations.

Topics for discussion will include immunological and clinical problems, the clinical definition of the donor's death, moral and legal problems, and the prospect for heart transplants, Dr. Fattorusso reports. The council is working with the International Society of Cardiologists on the meeting, with help from the World Health Organization.

DOCTORS

Mideast women filling physicians' ranks

The surgical mask has replaced the veil of reticence for many Arab women, even some desert nomads.

Women are pioneering in medicine and public health throughout the Middle East today, according to World Health Organization regional director Dr. A. H. Taba.

"The appearance of women health pioneers in Yemen's uplands and the assignment of female medical assistants in the Ethiopian bush are typical, significant current events," he says.

"Women are swelling the medical ranks in such countries as Iran and the UAR, where girl students now account for up to 14 percent of students, as against 6 percent in the USA and only slightly higher in Western Europe."

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laser notes

Gathered at the International Quantum Electronics Conference in Miami

COMMUNICATIONS

CO₂ system moves ahead

An experimental transmitter-receiver hailed as the possible forerunner of a laser communications system capable of transmitting live voice, radio or television signals over interplanetary distances, has been developed by scientists at Honeywell Systems and Research Center, Minneapolis.

Hans W. Mocker of the Honeywell staff says the super-heterodyned system emits the most stable signal yet found via a CO₂ communications unit, with excellent clarity. With the new system, Mocker says, a signal as faint as one ten-trillionth of a watt could be picked up on earth from a craft 50 million miles out in space.

"Many physical and developmental problems remain to be solved, but the pieces are beginning to fit together," says Dr. Van W. Beariner, vice president of Honeywell Research Systems. He believes the rapid developmental pace of the CO₂ system could permit a space flight test by 1970-71. The company's latest experimental model, a portable five-watt unit, will be delivered to NASA's Marshall Space Flight Center, at Huntsville, Ala., for ground testing late this month.

MATERIALS

New crystal more efficient

A laser material based on calcium fluorophosphate produces coherent light more easily than any laser crystal that operates at room temperature, Westinghouse engineers report.

The material is found in nature as a fairly common mineral fluorapatite (FAP). A small amount of the element neodymium is added to the pure FAP to make it lase.

Although the new material absorbs light over a relatively wide range of frequencies—which is what allows it to start radiating easily with low amounts of input energy—its output frequency is highly concentrated at a single frequency, centered at 1.06 microns, in the infrared part of the spectrum.

Development of the new material is credited to K. B. Steinbruegge, R. C. Ohlmann and Robert Mazelsky.

HOLOGRAPHY

Compact reproducer

What is described as the world's smallest pulsed argon laser system for hologram readout applications, was introduced by RCA Electronic Components, Harrison, N.J.

The unit, including the power supply, is only 18 inches long and weighs about 10 pounds. It has a peak output of 50 milliwatts in the visible wavelengths. The system draws two amperes at 117 volts.

Laser light is used to reproduce the three-dimensional images recorded in holograms.