

Sherpa Goiter Studied

A New Zealand team of medics led by Sir Edmund Hillary has described how they lugged radioisotopes and equipment including an X-ray generator and scaled the Himalayas.

They helped to build a hospital and studied the grave results of goiter among the Sherpas dwelling atop the world, toward Everest. In one village every inhabitant suffered from the thyroid disorder.

Studying it in many regions has been a major medical project of the International Atomic Energy Agency of the United Nations in Vienna. The IAEA helped to support the Himalayan project.

Dr. H. K. Ibbertson of Auckland Hospital headed the medical research group.

The doctors conducted a therapy trial with four groups, put on various combinations of thyroxine, iodized oil and placebos. Many of the 600 goiters shrank dramatically and no side effects occurred. School children fed potassium iodate had less goiter than others.

Two months later, the team moved camp higher to Phortse, towards Everest.

He says the village of Phortse proved "a thyroid expert's dream—or nightmare." Everyone was afflicted, with obvious hypothyroidism in half the population.

Doctors saw the gross deformity, plus associated cretinism, deafness and other secondary effects. Among the 220 inhabitants they found 30 classical cretins and 31 deaf-mutes with less apparent mental disorder.

"An interesting discovery," says Dr. Ibbertson, "was that the villagers eat large amounts of buckwheat, excluding most other foodstuffs. It imparts a yellow color to the urine. We suspect it as an etiologic factor and brought back a large supply for human and animal experimentation.

"It might just account for the much higher incidence of hypothyroidism in Phortse compared with surrounding villages."

The specialists say they had unusual problems. Big daily temperature variations affected the counters, so standards had to be set for early mornings and late afternoons.

They used an abandoned Sherpa house outside camp for radioisotope handling; a snow-filled hole in the basement offered cold storage for radioactive stock solutions and urine samples.

They were unable to get dry ice from India to lower the temperature of urine and blood samples, so the team used snow from surrounding peaks

mixed with salt, dropping the temperature to minus 15 degrees Centigrade and freezing. Each evening they had to "swing down" the blood and to prepare ampules by sealing glass tubes with a butane flame. They swung down often because the intense cold separated the serum then solidified it.

David Alan Ehrlich

FROM ENGLAND

Communication by Surface Waves

Proposals which could pave the way for the successful launching of "surface waves" over the earth, at frequencies of about 1.5 megacycles per second, have been put forward by Prof. H. M. Barlow of University College of the University of London.

If successful, this technique would appear to allow highly directional communications signals to be launched along the surface of the earth with a very low attenuation.

A surface wave is one which propagates in the space where two different media join. Radiation outside the interface is small.

In the past, surface wave systems have been confined mainly to very high frequency waves due to the physical size of efficient horn launchers.

FROM MEXICO

Psychiatric Problems

At least four out of every 100 Mexicans, and possibly even more, suffer from some psychiatric disorder, according to Dr. Hector M. Cabildo Arellano, a psychiatric and assistant director of the mental health department of the Ministry of Health and Public Welfare.

With no firm statistics available, the doctors bases his figures on clinic and hospital data, through admitting that far too many disturbed persons receive no medical attention in Mexico.

"Fully 66 percent of Mexicans are liable to mental disorders because of inadequate attention during the prenatal period, and during birth," Dr. Cabildo Arellano says.

Only one out of three Mexican babies is delivered by a competent doctor. Also, 30 percent of preschool children in rural areas suffer from mental deficiencies due to malnutrition.

More Mexicans suffer from mental illness every day, with only part of this due to growing pressures of modern living and Mexico's changing status as an industrialized nation.

Childhood traumas, schizophrenia, imbecility and idiocy are the leading mental disorders.

Emil Zubryn
(see p. 278)

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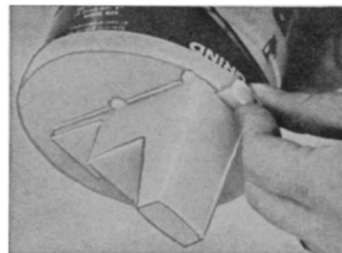
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