



I.I.A.A.

BUILDING A BETTER HEMISPHERE SERIES NO. 11

*Miracle on  
the Amazon*

By  
JOHN W. WHITE



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POINT 4 IN ACTION

THE INSTITUTE OF INTER-AMERICAN AFFAIRS

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TECHNICAL COOPERATION ADMINISTRATION

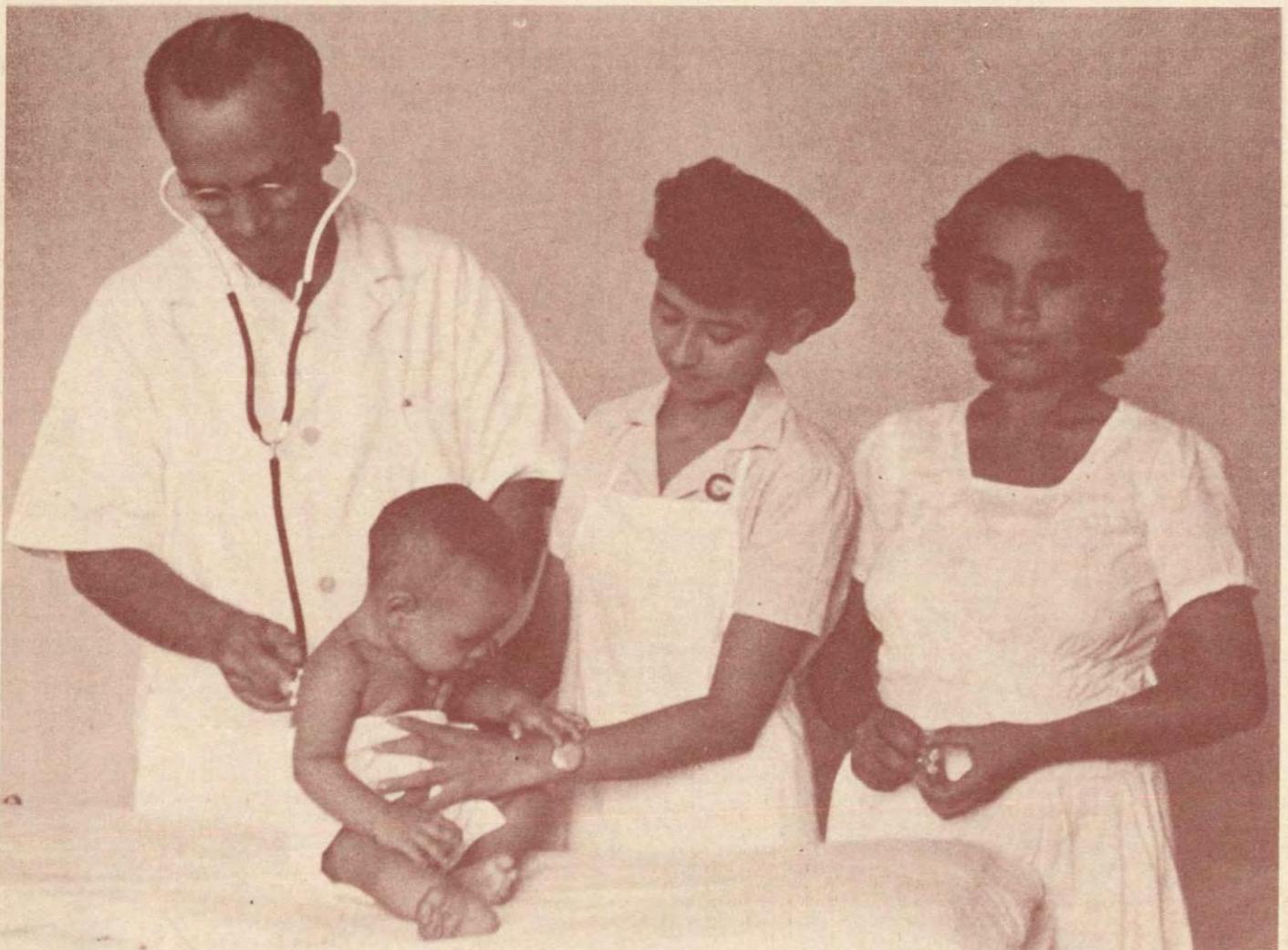


Maria José Ribeiro, in nurse's uniform, inspects a vegetable garden she showed health club members how to plant. Gardening is one of 50 things she learned, to get her \$90-a-month job



One of Maria José's most difficult tasks is to banish ignorant folks' fear of hospitals

# MIRACLE



Dr. Duval G. Tinoco, who was sent to the U.S. to study, examines a baby, held by Maria José, in Cametá, Brazil



Thatched huts along the riverbanks are gradually being replaced by modern dwellings. All homes are sprayed three times a year, and malaria has been eliminated in many pest spots

# on the AMAZON

By JOHN W. WHITE

Disease and poverty are being driven from the great river basin by an American-launched program, which in one Brazilian town has cut the yearly death rate from 20 per 100 to 7

Among the foreign policy aims which President Truman outlined in his 1950 inaugural address was a "bold new program" to provide American technical aid to the backward and undeveloped areas of the world. The program, now under way in 39 countries, is known as Point Four. But seven years earlier, a campaign was launched to lift the standards of health, education and agriculture in Latin America. This successful campaign set a pattern for world-wide Point Four

## II

Belém, Brazil

OF THE \$40,000,000,000 which Americans yield up in taxes every year, none is better or more excitingly spent than the \$9 which each month goes to a black-eyed, black-haired, olive-skinned twenty-three-year-old Brazilian *senhorita* named Maria José Ribeiro.

Maria José is only four feet eleven, and weighs a mere 89 pounds. At first she would reply no more than "Sim, senhor" or "Não, senhor" to my queries, but her timid voice expressed all the music in the Portuguese language, and her even teeth flashed a quick smile. Maria José Ribeiro is completely *simpática*.

Also, she is one of the tiniest cogs in a new kind of war machine with which the United States government, through its Institute of Inter-American Affairs, has fought a magnificent battle in 14 of the 21 republics south of the U.S. to free millions from the centuries-long bondage of disease and dirt which made their lives no better than that of animals.

The institute now carries on the Latin-America part of the Point Four program launched by the United States last July to help the backward, distressed nations of the world to help themselves to a better life.

The program—which seeks to raise standards of health and sanitation, agriculture and education—has got under way in 39 countries.

Maria José is a visiting nurse's aide, trained in American medical know-how, and her post is Cameté, Brazil, a little river town of 3,000 not far from here on the Amazon. Eight years ago, Cameté was notorious as one of the worst pestholes on the Amazon, itself known as a green hell. To-

day Cameté's death rate is lower than ours back home, and Maria José helped lower it.

This slim young *visitadora* and several hundreds like her have, in fact, helped write one of the most heart-warming chapters in the history of man's attempt to help his fellow man, and one of the most ambitious.

In seven years the institute, working through U.S. doctors, nurses, technicians and Latin Americans coached by them, has improved the health and sanitary conditions of some 23,000,000 people—one in every six south of the Rio Grande.

This project, so gigantic as to defy the imagination, began on a note of strictly American self-interest. But soon—well before President Truman announced the Point Four program—it turned into a full-scale fight to help this underdeveloped neighbor continent of ours help itself to a better life and shed the weaknesses which make it prey to Communism.

During World War II's most desperate phase, in 1942, when we urgently needed the rubber and other raw materials of the Amazon Valley, the men we sent into its steaming jungles required protection from the diseases which had always plagued the river people. The U.S. and Brazil agreed on a co-operative health program. Nelson Rockefeller, then Co-ordinator of Inter-American Affairs, asked Major General George C. Dunham to fly South and organize it.

Dunham, who had helped clean up the Canal Zone and the Philippines, was a natural for the job. Traveling 400,000 miles in Brazil, he set up hospitals, dispensaries, clinics and public health centers—all co-operative projects in which American doctors and nurses passed on public-health know-how to Brazilians. When the Institute of Inter-American Affairs, an autonomous outfit under the State Department, was organized to take over some of the co-ordinator's duties, Dunham returned to Washington.

Co-operative programs similar to Brazil's were set up in the other republics where we had bases or needed war materials. Eventually, we had 336 U.S. doctors, nurses, lab workers and other technicians working in all the republics except Argentina and Cuba. As fast as they could, the Americans trained local people and returned home. Only 140 Americans now are left in the field; but

with them today are some 10,000 local doctors, nurses and technicians, many of them trained at U.S. universities on scholarships.

In time the institute took on two other major Latin-American headaches besides health: food production and education. But because no man can think of farming or schooling when he is sick and disease-ridden, health-and-sanitation remains the institute's biggest program, and in many ways its most spectacular.

Certainly one of the most gripping human achievements of all time is the institute's cleanup of the strange jungle-and-water world of the Amazon Valley.

Superimposed on the United States, this fabulous region would reach from Manhattan to Yellowstone Park, from Duluth to New Orleans. The Boundaries Commission here in Belém, which is mapping the area, wouldn't even venture a guess for me as to how many thousands of miles of rivers flow into the Amazon; they do know, though, that only one of the many islands in the Amazon delta is bigger than Switzerland.

### Few Children Survived First Year

The Amazon is a place of serious endemics that feed on the underfed state of its people. Living in thatched huts (now gradually being replaced by modern dwellings) along the riverbanks or a mile or two inland, most of these wretches, until the institute came, ate only fish, yucca root and a small palm berry called *assashy*. The few children who survived their first year went naked, their sorry little bellies protruding tightly over their overloads of worms.

Perhaps you, as a tourist, have seen some of the undernourished riverfolk and thought them lazy sleepers-in-the-sun. The grim truth is that the Amazon's 1,500,000 inhabitants carried around in their abdomens three and a half tons of intestinal worms—hardly a spur to enterprise. The region's intestinal parasites include almost everything in the catalogue, from near-invisible hookworms to six-foot tapeworms; thousands of people walked around with two pounds or more of 10-inch roundworms inside them. And if that were not enough, 90 per cent of the Amazon's population had malaria.



SESP brings new babies into the world, checking their health every three months until they start to school.



Cametá babies used to die almost as fast as they were born. Now there are 1,158 lively youngsters underfoot.



More than 93 Brazilian laboratory technicians have been trained as part of the health and sanitation program. Here two of them are examining slides made in the field.



Patients at SESP health center wait to have samples taken for laboratory examinations. All persons attending health centers benefit from this laboratory service.

Before the arrival of the institute's SESP—*Serviço Especial de Saúde Pública*, Portuguese for Special Public Health Service—there were two physicians in the roughly 2,000,000 square miles of Amazon region. People were born, managed somehow to exist for 30 or 40 years, then died.

How all this has changed is told in some cold, clear statistics on Cametá, the small shipping point 80 miles above Belém where Maria José Ribeiro operates. The yearly death rate there used to be 200 out of every 1,000; by 1948, Brazilian doctors and nurses trained by institute public-health personnel had the rate down to 9 per 100, a little better than our own all-time low in the U.S., the same year, of 9.9. In 1949, Cametá's rate slid down to 7.

The first thing they tell you in Cametá is: "More than a third of the population are children!" They say it with an exclamation point in their voices. Cametá babies used to die almost as fast as they were born. Now there are 1,158 lively youngsters underfoot.

But these are only statistics. To get the story behind them, to understand how such a miracle could have been effected, I went along with Maria José, trig in the blue-and-white-striped seersucker dress which is her uniform, on one of her morning rounds.

We left the new Cametá health center, a modern one-story brick building surrounded by neat lawns and gardens filled with flowers and vegetables, in the blazing heat of 8:00 A.M.

The little *visitadora* swung over her shoulder the strap of a big, heavy, black leather bag; among its many contents were the file cards of all members of the five families she aimed to visit before noon.

#### The Visitadora's First Call

At the first house, Maria José opened her bag, took out a piece of white paper, unfolded it on the kitchen table, and neatly settled the bag on it. She then took out her own soap and towel, washed and dried her hands, walked over to the clean white crib near the window, and solemnly patted the baby in it.

"Joaозinho is six months old today," she reminded his smiling mother. "Time to begin changing his feeding habits. Be sure to come to the center this afternoon so the doctor can examine him and I can weigh him."

Carefully she explained how to start feeding little John orange juice, tomato juice and soup; it was akin to teaching an American housewife how to prepare Martian pheasant. Maria José made pertinent notations on the baby's file card, then took five envelopes of seed from her bag, went out behind the house and planted a row each of carrots, lima beans, string beans, turnips and eggplant. The soil had been prepared according to instructions she had left on her last visit.

She explained to me: "Three months from today, the baby will be weaned, and these vitamin-rich vegetables will be ready for him." Strange talk for the Amazon!

Planting vegetables was just one of fifty things Maria José had to learn to qualify

as a *visitadora*, including medical ethics and professional secrecy, how to take blood samples, how to bathe a baby, how to raise chickens, how to sterilize surgical instruments, how to care for a woman during labor, and how to set a schoolboy's broken arm. One of her most important jobs was to learn how to talk sick people out of their fear of hospitals; hordes of Amazon folk have died because of this fear.

My second call with Maria José was on a young lady celebrating her third birthday. Out of the big black bag came an American-made toothbrush and a tube of American tooth paste. The mother was more intrigued than the little girl; it was the first toothbrush she had ever seen.

Maria José took the child to the kitchen sink and showed her how to use the strange implements. The lesson was a flop; it wound up in tears and sobs. But the child promised to try it every morning, and Maria José in turn promised a nice surprise if she had learned to brush her teeth by the next visit.

At our fifth and last call, I was treated to the unexpected sight of the shy and amiable Maria blowing up. She snapped at the young mother: "Why didn't you come to the clinic? You had an appointment! Think the doctor has nothing else to do but wait for you?" Getting a mother and baby to the center for examination when the child is a month old is one of the *visitadora's* toughest jobs, for Amazon women are superstitious about leaving the house until 40 days after they have given birth.

By noon, Maria José had checked the health of 16 people; collected samples of urine, blood and spittle for laboratory analysis; checked the feeding of four infants and the pulse and temperature of their mothers; and given helpful information to a young wife pregnant for the first time.

Nor was this a cue to call it a day. In the afternoon, Maria José, acting as clinic receptionist, helped examine 18 patients and wrote out the doctor's instructions for them, promising to explain them on her next visit for those who could not read. When I left, she was planning, for the next day, her weekly class for midwives, and, for the day after that, her talk to the juvenile health club.

These clubs, for boys and girls from seven to fourteen, are yet another institute "first" on the Amazon. On the sensible theory that these youngsters will largely mold the future of their communities, institute experts have taught club members personal hygiene and home sanitation. They are under word-of-honor pledges to enter—truthfully—on their own charts the daily care of their teeth and other personal functions. They are also putting vegetables into river homes for the first time in history, for tending garden is a major club activity.

The clubs also serve as a training ground in democracy. Each year, after two weeks of excited electioneering, members elect their officers by secret ballot. Three of the largest clubs on the Amazon—at Breves, Cameté and Santarém—chose girls as presidents for 1950. A generation ago parents would not have let girls join such clubs.



Aide in prenatal clinic uses doll to instruct expectant mothers in child care.



Milk given by the SESP nurse helps the youngster pick up strength



Young patient is treated for tropical ulcer on leg.



Student nurses in Manaus get practical lessons in patient care.



Young lady gets treatment for pleuritis.



Waiting for the SESP nurse to fill her cup with milk.



This building—the symbol of a Good Neighbor Health Policy—was constructed by the United States of Brazil and the United States of America.



Children of the health club see a demonstration by the SESP nurse. Youngsters from 7 to 14 learn personal hygiene and home sanitation.

For her labors, Maria José earns the equivalent of \$90 a month—top bracket for the job. Since Brazil finances nine tenths of the health program, the U.S. the other tenth, she knows that \$9 of her salary comes from the *nortes*.

The Amazon people, too, know that their new welfare comes from the U.S. At all the six new hospitals and 27 health centers in the Amazon Valley, there are two bronze tablets, one outside, one inside, saying: "This building—the symbol of a Good Neighbor Health Policy—was constructed by the United States of Brazil and the United States of America." Maria José can't remember how many times she has explained these plaques to townsfolk who cannot read them.

But they have even better evidence than plaques. The institute's SESP brings their new babies into the world, checking their health every three months until they start to school. SESP pulls teeth, vaccinates, kills mosquitoes, runs Four-H clubs, builds privies, plants vegetable gardens, teaches mothers what a diaper is and how to fold and pin it. SESP even supplies the safety pins, and supplies dried milk from the U.S.A. when mother's milk fails. Almost all the people in the Amazon—all over Brazil, in fact—who have had anything worse than a stomach-ache in the last seven years can and do thank SESP for getting them over it.

Along with Maria José, the Cameté health-center staff includes a physician, trained nurse, pharmacist, two other visiting nurse's aides, a sanitary guard, and a lab technician—all Brazilians. They are headed by thirty-six-year-old Dr. Duval G. Tinoco, a modern version of the old-style country doctor, who uses a Diesel-driven launch instead of a horse and buggy. Dr. Tinoco, a general practitioner, was sent by SESP to the University of North Carolina to study the control of epidemics and insect-borne diseases, then assigned to clean up the Cameté pesthole. In 1949 his center treated, without charge, 19,727 patients, gave 5,417 injections, and filled 27,340 prescriptions. It treated only 27 cases of malaria—all of them out-of-town patients.

In Ecuador the institute's health and sanitation program spread over three large areas in Brazil, then reached out to embrace other countries. It now operates in 14 republics from Chile and Uruguay in the south to Mexico in the north.

The programs vary, of course, to meet the particular problem of each nation. But the building of sewers and water-supply systems has been a first step everywhere, as has the elimination of the mosquito.

Wherever Health and San—as the Americans call it—goes to work, houses, huts and hovels are sprayed with DDT three times a year; in fact, the practice has produced a new word in the Spanish language, *Deedeteización*. Mosquitoes are no longer the health hazard they used to be in Latin America; any that land on walls, floors or ceilings as late as four months after the spraying are finished.

#### Pest Spots Freed of Malaria

Health and San spraying crews have

completely eliminated malaria in such widely separated pest spots as Leogane, in Haiti, where 71 per cent of the people had it; Chimbote, Peru, where one fourth of the population suffered from it, and Breves, on the Amazon, where 95 per cent of the people were its victims.

Each of the particular problems in the republics where the institute program operates has been given the full treatment—the benefit of our own 80 years of public-health experience.

In Paraguay, the problem has been T.B., leprosy and venereal diseases. Some 25,000 patients are treated at five institute health centers each month. One of the two centers in Asunción, in a zone with a population of 40,000, suddenly found that it had on file 96,000 case histories. Investigation revealed that thousands of patients had given the same address—corner of Peru and Pettrossi Streets. That's where the out-of-towners get off the suburban streetcars and busses to go to the health center; knowing that they are supposed to live in the zone where they get treatment, they had all given that address.

In Peru's copper mines, the problem has been silicosis, and American methods of industrial hygiene have been introduced to combat it.

In Bolivia, where the standard problem of intestinal parasites and mosquito-borne malaria has been terribly aggravated by lice-borne typhus—with 70 per cent of the people afflicted—institute staffers last year treated 373,000 cases, vaccinating 100,000 of them.

In all the republics, because the health programs are primarily meant to help people help themselves, preventive medicine and prophylactic work come first. Nevertheless, nearly 100 hospitals have been built, as well as more than 100 health centers and 150 related facilities such as clinics, dispensaries, laboratories, nursing homes and nursing schools.

The total cost of the program? At first, we in the U.S. contributed heavily because of our war needs. Since V-J day, the Latin-American governments have increased their share and we have cut ours. We now give only \$7,210,000 a year, in addition to

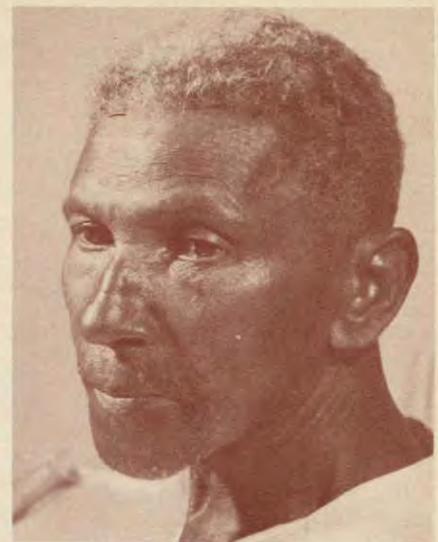
expenses of American personnel. The 14 republics contribute \$10,390,000 a year; they have, on top of that, spent more than \$15,000,000 in the U.S. for equipment and supplies.

A lot of the American money which has gone into the program in its 10-year span has also been spent right at home—for American-made machinery, vaccines and medicines. Some of it has gone into scholarships under which Latin-American doctors, nurses and technicians are trained in the United States to take over when the Americans return home.

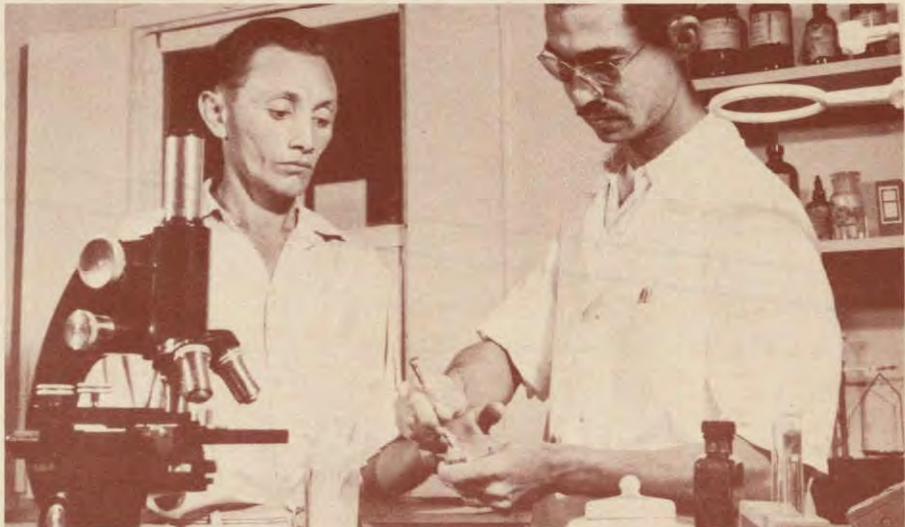
All told, the U.S. contribution to health and health care has totaled \$71,091,000, or \$3.09 per taxpayer. That works out to 39 cents per family per year. Like the price of insurance, it's a price not to boggle at for proving that we are good neighbors—and for winning good neighbors in return.



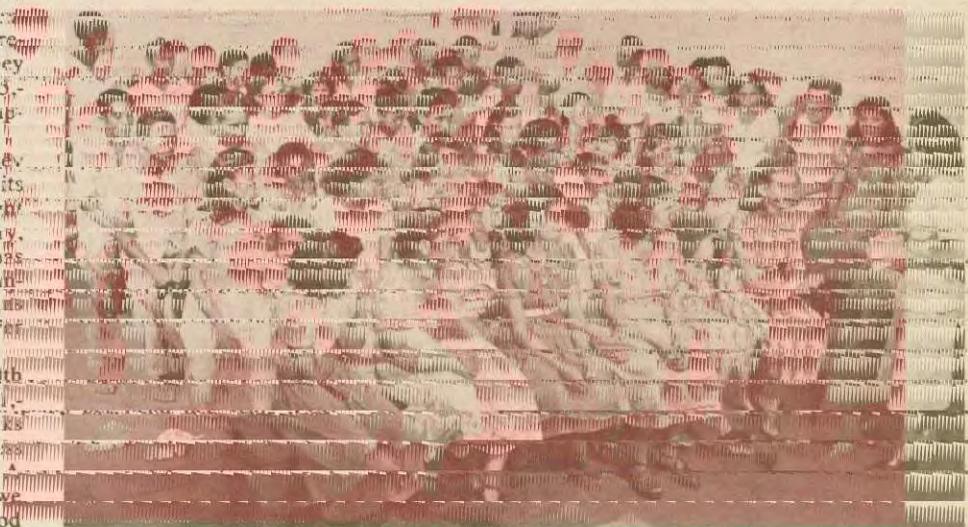
Dr. Duval G. Tinoco checks health center patient for heart disease.



Jungle farmers, rubber workers, rivermen receive treatment at the cooperative U.S.-Brazilian clinic.



Doctor takes blood test for malaria. Before the cooperative health program got under way, 90 percent of the people in the Amazon had malaria.



While waiting at the health center, the nurse gives a short lecture on a health subject. Some of these people have come as far as 20 miles by canoe to obtain advice and treatment.

**BRAZILIAN NURSES  
VISITING AMAZON HOME**



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