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Health Workers in the Peace Corps

The PURSUIT of LIFE



**YOU CAN HELP
IF YOU ARE:**

A Nurse

see page 4

**A Paramedical
Specialist**

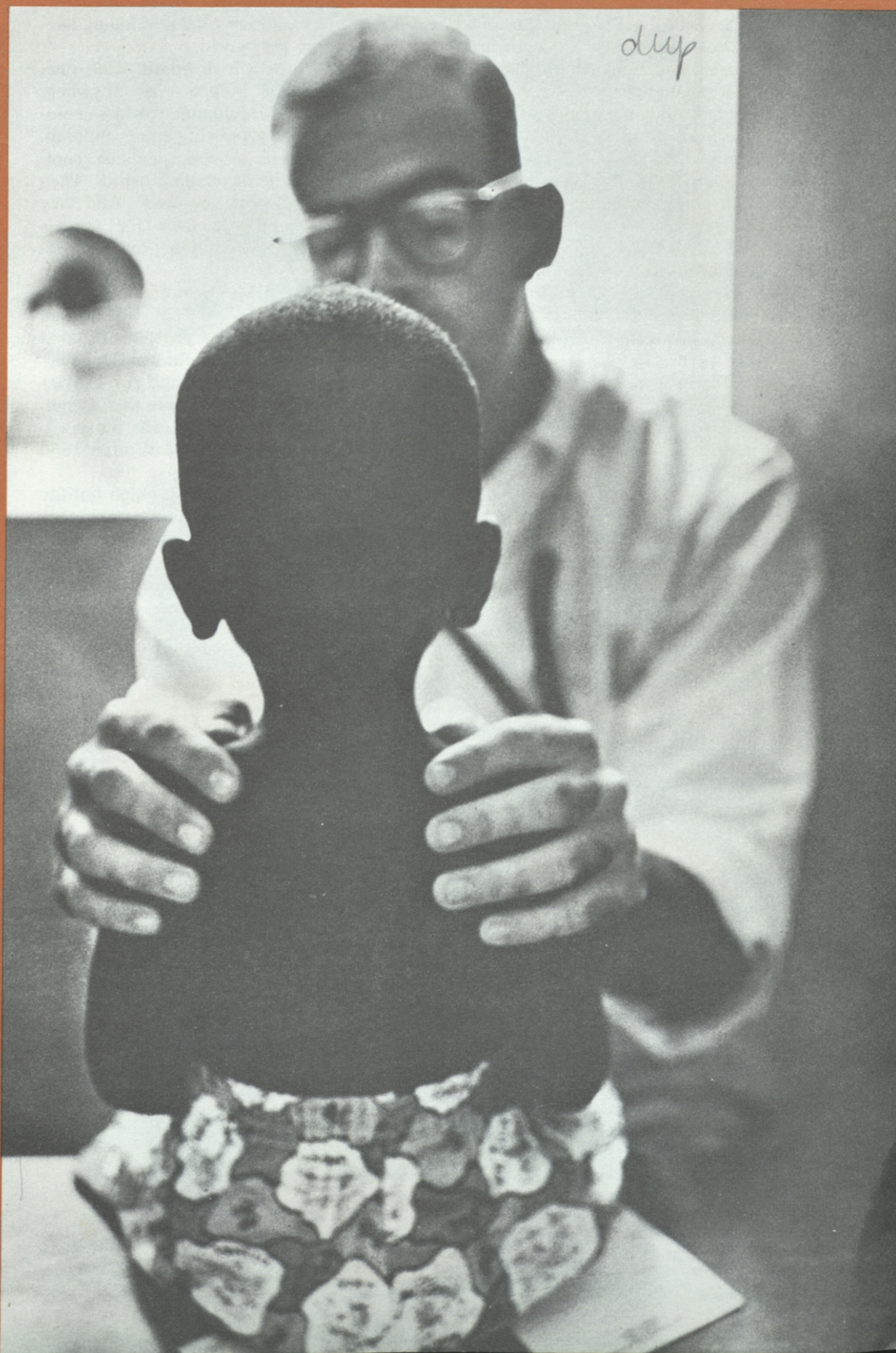
see page 8

**A Liberal Arts
Graduate**

see page 10

A Doctor

see page 12



CONTROLLING DISEASE in DEVELOPING NATIONS

Bafflingly Simple in Theory, But a Culturally Complex Task

Outside La Paz, the capital city of Bolivia, several Peace Corps Volunteers and Bolivian students engaged in a population census approached an Aymara Indian woman, a baby on her back, squatting in front of her *adobe* home. She answered their questions happily, giving the ages and names of four children. When asked about the baby in the bright shawl on her back, she said, "Oh, don't count him." The census takers told her that they wanted a record of all the children and asked the baby's age. She repeated that the baby should not be counted, and rose and walked away.

The baby carried on her back would not be named until he was two, for until that time he was a child of God, and could be taken at any moment. The child would be named if he survived his first two years.

In Bolivia, 75 percent of the Indian children die before they reach the age of two. They die of pneumonia, diarrhea and malnutrition, as do mil-

lions of children in the developing two-thirds of the world.

With such a high infant death rate, a family in Bolivia—or anywhere else in the developing world—compensates by producing more children. Children are a very precious commodity in the developing world. They inherit and work the land. And they care and provide later for parents whose age or condition prohibits productivity.

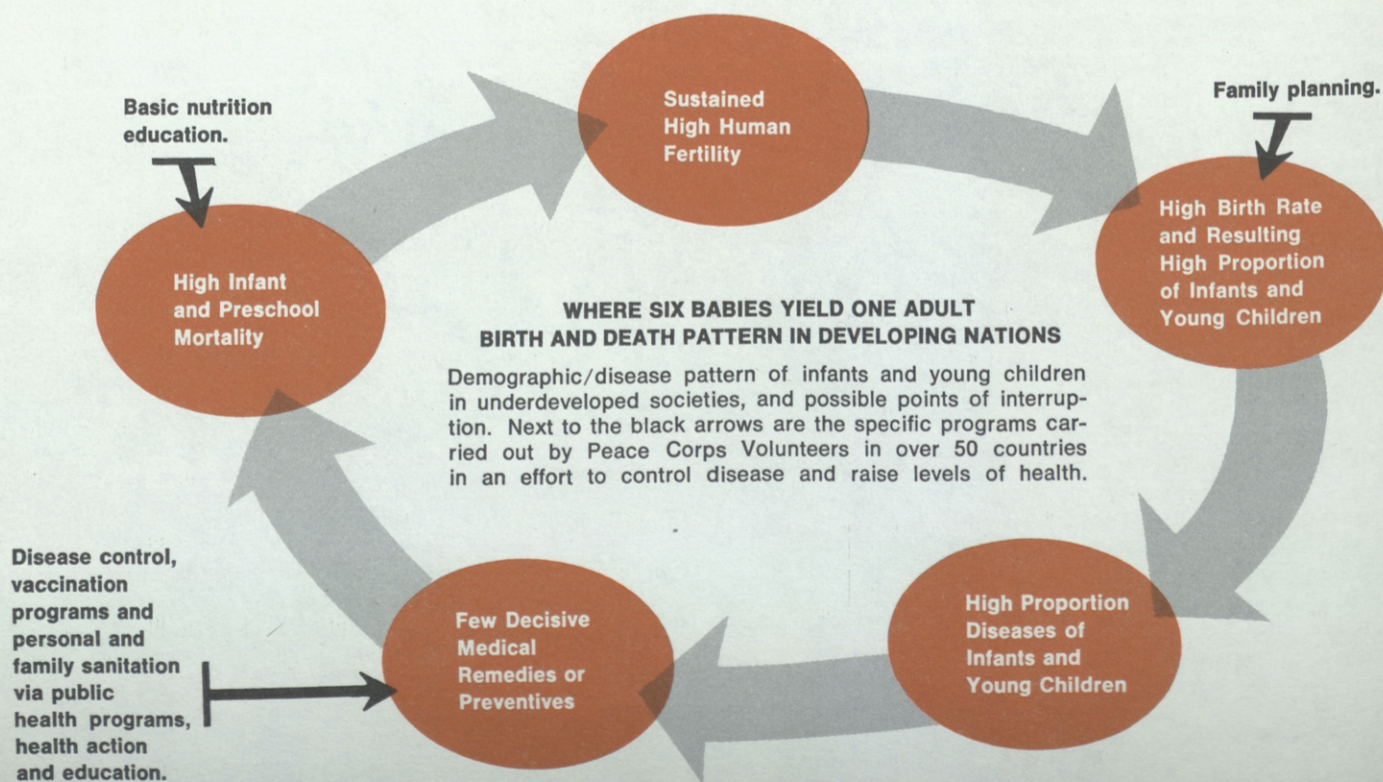
Dr. Walsh McDermott, of the Cornell University Medical College, in studying the disease problems of what he terms "overly-traditional societies" (urban slum dwellers and rural poor) recognizes the disease core that is common to all—what he calls the pneumonia-diarrhea complex of infants and young children.

McDermott claims that high fertility is culturally induced by the arithmetic of high infant mortality and a low expectation of living beyond the age of 35 or 40, that consciously or not it

takes six or seven babies to produce one productive adult. This emphasis on high fertility, he believes, leads to a high birth rate. The high birth rate, because of sanitary conditions and lack of vaccinations leads to rampant childhood diseases which hit the child all at once, causing high infant mortality, a vicious cycle that is a major impediment to social and economic progress. It is precisely this cycle which the Peace Corps is attempting to interrupt.

McDermott's circular biologic system is illustrated below. The arrows indicate possible points of piercing the medical and cultural links which forge this continuing cycle of misery.

"The biomedical goal of international development, or purposeful modernization if you will, is to modify the disease pattern of an overly-traditional society to a disease pattern that will not act as a major drag on a modernization effort. Thus the central focus is on *disease*, a measurable entity, rather than on health which is an



abstraction," Dr. McDermott says.

The Peace Corps is vitally concerned with international health and is playing an important role in more than 50 developing nations.

In Korea, a pilot health education program has just begun. In Thailand, it is participating in a malaria eradication program.

In Bolivia, Malawi and Malaysia, Peace Corps Volunteers are engaged in tuberculosis control. In Brazil they help to control schistosomiasis. In Ethiopia, they are involved in educating nursing personnel and in health education. In India, they work in the all-important area of population planning.

Today's artificial kidney, laser ray and heart-lung machines only point up the difference. Important as they are, they cannot mask the fact that man has not begun to conquer as basic a problem as infant mortality in most of the world. In Northeast Brazil, 60 out of every 100 babies die before they learn to walk. Smallpox still rudely marks children in Africa. And Asian children, instead of learning to read and playing happily, are forced into lethargy from sheer malnutrition.

Advanced communications bring all countries and all peoples closer, physically and emotionally. As international travel has increased, other countries' health problems have also become a threat to the health of Americans. People (and horses) entering the U.S. from Central America sometimes carry encephalitis, the dread "sleeping sickness." And from Viet Nam, servicemen bring home new, drug-resistant strains of malaria.

Until such time as disease is controlled world-wide and people are brought closer to that indefinable state of "good health," man will continue to stand on the lip of a volcano, even those in nations which enjoy a highly sophisticated medical technology.

For the Peace Corps, this war on disease is of utmost importance. It involves Volunteer doctors, nurses and paramedical personnel as well as college graduates with liberal arts backgrounds who have been trained by the Peace Corps in public health.

The Volunteers are not performing appendectomies, but are changing peoples' habits. They are teaching concepts of preventive medicine that are basic and simple. It is the cultural and physical circumstances in which they teach that complicate the effort and which, as some Volunteers have said, provide the "total challenge."



In India, the population increases every year by the size of New York City — and so do the problems.

Nursing in the Andes:

BEE POULTICES and SMALLPOX PREVENTION

Christina Hughes Paniagua had graduated from Barnes Hospital School of Nursing in St. Louis only a few months before she received an invitation to join a Peace Corps program for Bolivia. By her own admission she was an innocent in a world of hunger, disappointment and disease. After three months of Peace Corps training, she arrived in Bolivia.

"Flexibility! Flexibility! Flexibility! That was the word and the message that ran through much of our three months of preparation. After more than two years in Bolivia, all I can say is 'Amen' to that.

"I see now that most of the things were 'little'. Here in the Altiplano, my middle of nowhere, we have no running water except in the hospital itself. I wash all my clothes in the nearby river, hang them up . . . and watch the lines fall down.

"We live mostly on potatoes, rice and a few vegetables, but little or no meat and only an occasional egg. So I decided to start my own flock of chickens imported from Potosi, about 40 kilometers away. They got scrawnier and scrawnier. Only one laid an egg. We killed them and had

stew!

"I planted vegetables and just about the time they were developing, we had to leave for an eight-day trip through the mountains to vaccinate more than 1500 campesinos (rural Indians) against smallpox. It rained hard all the time we were gone. We repaired washed-out roads, slept in the jeep and walked where the jeep couldn't go. When we got back the garden had washed away. We were back to rice and potatoes.

"The latrines we helped build were admired by the people as luxuries, but they went right on using the fields and roads. I can laugh about these things now, but at the time, I remember, my daily resolution was to return to the United States."

Christina had been working in Bolivia a year when the ministry of health asked her if she would work at the new rural hospital high in the Andes mountains. She jumped at the chance. Geographically it is one of the most desolate areas of the world, windy, cold and with little vegetation. But the hospital serves well over 5000 Quechua-speaking Indian families.

The hospital and staff are part of a

pilot program set up by the United Nations and administered by the Bolivian Ministry of Health's community development division. Besides Christina there were two Bolivian nurses, a nutritionist and two Bolivian doctors. Christina says, "We have become members of a massive Indian family which at first regarded me — the only pale, chubby gringo — as a foreign curiosity but by now has taught me far more than I have taught them."

Each week, a doctor and nurse travel to each of the six substations which the hospital serves. Between visits the substations are run by aides who schedule appointments and arrange for the team to vaccinate during its visit.

Christina describes the educational aspects of her work: "Working with the Bolivian nurses, who will remain when I leave next month, we have set up a program to train nursing aides to work in the hospital and substations. These aides have a fourth grade education, so that training begins with basics that we take for granted in the United States. The Bolivians will also carry on the teaching of prenatal and nutrition classes and the informal teaching at the well-baby and TB clinics.

"The people here have known only witch doctors and certainly our cures and methods of preventive medicine were just as strange to them as the poultices of dead bees mixed with dirt were to me. I have learned much about the importance of faith for the cure of a patient, much about what we call psychosomatic medicine. But I have also seen the terrible results that occur from plain ignorance."

Christina Paniagua recently returned from Bolivia to Chicago, where she is the evening supervisor in a newly opened hospital. Her husband, a Bolivian doctor, is studying neurosurgery. They plan to return to Christina's "middle of nowhere" in several years.

Christina Paniagua treats a Quechua Indian in the outpatient clinic of a small hospital high in the Andes mountains. Strong Indian faith in witch doctors has caused problems for the medical staff, but has also taught them the importance of psychosomatic medicine in treating the Indians.



Volunteer nurses Marcia McLaughlin (center) and Maurita Mulligan (right) lavish attention on the children in the pediatric ward of a Brasilia hospital.

Photo by Thomas Grill, PCV



HELP WANTED

For nurses interested in Peace Corps service, here are answers to questions you may have:

Q: Is a degree necessary?

A: No. About 40 percent of the Volunteer nurses have a B.S. degree. The balance have either diplomas or associate degrees. A license to practice in at least one state is required, however. Recent graduates who have taken the licensing exam may begin training while they await the results, but they will not be sent overseas to practice nursing until registration is confirmed.

Q: Are there jobs for specialists?

A: Yes. There are requests for specialists such as psychiatric nurses, midwives, anesthetists etc.

Q: What kind of training is there for overseas service?

A: A three-month training program provides background information on the major health problems of the area, organization of health services, and long-range plans for improvement, plus any special clinical techniques that are needed. In addition, there is the intense study of language and culture.

Q: What kinds of programs are there for registered nurses, and where?

A: These programs illustrate the diversity in area and jobs available today for nurses:

Afghanistan: Teaching courses for auxiliary nursing students and ward supervision.

Lesotho: Instruction of student nurses and technical backstopping of liberal arts graduates working in health education.

Brazil: In-service education of health personnel in metropolitan hospitals.

Thailand: Health education and specific disease control programs, working out of rural health centers.

Honduras: Teaching theoretical and clinical nursing in existent education programs.

El Salvador: Working with professional and auxiliary personnel in key hospitals throughout the country.

Guatemala: Work with rural communities to augment the effect of mobile health units.

India: Family planning work and technical backstopping of liberal arts graduates as well as teaching of health, nutrition and child care.

Ethiopia: Training of "dressers," who constitute the majority of health workers in the country.

Q: What is the role of the licensed practical nurse in the Peace Corps?

A: A few practical nurses are serving as Volunteers, primarily in the areas

of general health education and informal teaching of maternal and child care. Practical nurses with several years of experience are encouraged to apply for such health action programs.

Q: Doesn't a nurse lose many technical skills during two years overseas?

A: Perhaps, to a degree. But they are usually things which she can catch up on quickly when she returns to the U.S. Most nurses feel they learn much more than they lose, particularly in the area of "human skills."

Q: What do nurses do after Peace Corps service?

A: Statistics are still sparse, but many nurses return to school to get BSN's, master's degrees, and even doctorates. Several former Volunteers are working with the Agency for International Development in Viet Nam and other countries. Several have been invited to work on the medical ship HOPE. Some have taken staff jobs with the Peace Corps, both in Washington and overseas. Some have married other Volunteers or Embassy personnel. Fifty nurses have extended their Peace Corps tour of service to complete a school year or finish a project in which they have become involved. Nine re-enrolled for a second two-year tour. The majority have returned to work and live in the United States, bringing back experiences that add immeasurably to their nursing careers and personal lives.



Marion Dutton works with Malaysian nurses at the maternal and child health center in Tampin. The center is responsible for child health and prenatal care in a town of 30,000 people.

IMAGINATION in TEACHING and TLC



Gayle Standing trains student nurses in La Paz, Bolivia. Much of her time, both in the classroom and on the wards, is spent encouraging the students to support patients psychologically as well as physically.



Margaret Gallen is a Volunteer nurse in a small clinic on the outskirts of Tunis, Tunisia's capital. Here she instructs a mother in what she must do to combat a major local health problem: infant dehydration.

Nursing Educator:

A GA BORI, MADAM, A GA BORI

Gail Singer Lyons graduated from Mt. Sinai Hospital School of Nursing in New York City and was a Peace Corps Volunteer in Tanzania and Niger. In Niger, she taught in the country's only school of nursing. Her students were all males, 30 of them older men who will become Niger's

first registered nurses. Thirty others were 17 and 18 year olds, with six years of primary schooling, who spent a year at the school and were then sent up country to run small bush dispensaries. Gail and her husband Judson, also a former Niger Volunteer, now live in Portland, Oregon and plan to return to East Africa next year where he will do research.

It was the students' second week on the wards. The time had come to put into practice some of the techniques they learned during their first month of preliminary training. Off in a corner of the ward was our closet, brimming over with shiny new bath basins, towels, wash cloths, soap and talcum powder. As I gathered the students together, I wondered about the reactions of the people around me. How would the staff feel about us doing procedures that they never have time to do? How would my students, all male, feel about doing personal hygiene? How would the patients react to this type of personal care?

I chose four patients and assigned

two students to each one. They were to do a bed bath and make the bed. I assured them that I would be there to help and to answer any questions they might have. They looked very young and very bewildered. One cast a glance at the nurse giving medications and I felt I could read his thoughts. That was something familiar; what he was about to do was strange and new.

They went to our closet and gathered their material. Then to the utility room for water. "Asino l'eau" (There is no water), they all cried half in French, half in Djerma, the local language. The first obstacle of the day: our ward was on the second floor and when the people on the first floor use their water, ours doesn't run. I quickly dispatched a messenger with a plea to "hold off" on the water for a few minutes. They filled their basins and carried them to the bedsides.

Two minutes later one was back. "My patient said that water makes his leg hurt." I returned with him to the old man and managed with my still broken French to discover that he was

simply afraid of what the student was about to do. A simple explanation solved the problem. I returned to the utility room and pretended to be occupied while my students went about their tasks.

After what seemed like an eternity they began to call me. "Venez voir, Mademoiselle. C'est fait." I went to inspect. In the ward were the four old men, their faces beaming. "A ga bori?" I asked. (Is it good?) "A ga bori, Madam, a ga bori," they responded in unison. The orderlies came to see. "A ga bori" they said and began to laugh. The head nurse came. He began to laugh and so did the staff nurse and the doctor. Then we all laughed.

It was a pretty funny sight. Each of the four old men was covered from head to toe with a thin coat of white talcum powder. The students had, literally, not left anything out. I realized that the next lesson to be taught would have to be one on economy, but it was a beautiful sight to see and most important of all, everybody was pleased.



Gail Singer Lyons instructs a group of Nigerian nursing students, using the familiar Mary Chase doll.

MICROBES, MEDICATION and MASSAGE

Paramedical Personnel in the Peace Corps

The process of eliminating disease and creating a high level of health is dependent on the skills and knowledge of specialists in the medical field. The Peace Corps' main thrust is the education of host country specialists to assume positions now either empty or filled by foreigners. The education can be either formal or informal and can take place in any number of situations with students of varying education and skill.

OCCUPATIONAL THERAPISTS: Shortly after two occupational therapist Volunteers arrived in the Philippines, the director of the university's therapy school told Peace Corps officials that without the two girls hospitals in Manila could not have opened therapy departments and the practical phase of students' training would have been severely hampered in quality. There were simply not enough Philippine occupational therapists to supervise their practice. The director re-

ported that her only regret was that the Peace Corps had not been able to send eight, rather than two, Volunteers.

PHYSICAL THERAPISTS: Betti Smith, a physical therapist in Bolivia, spends part of her time at a crippled children's home. In addition to treatment of the children, she is training a class of six Bolivian women to help with exercise therapy and gait training. She has been asked to teach short courses in the nursing schools and to staff nurses, where she treats patients on the wards in the hospitals, demonstrating care and providing practical experience for the students. Betti is anxious and excited about her work in Bolivia. "After a quick trip to other parts of Bolivia, I uncovered many situations quite ripe for rehabilitation programs. Would love to get another physical therapist down here to share my gold mine."

X-RAY TECHNICIANS: Ann Iodice, an X-ray technician from Watertown, Massachusetts, worked in Brazil without the "luxuries" of tank thermometer, clock, rubber paddles and film cutters. The machine at the 35-bed hospital where she worked is an old, European portable unit. Her Brazilian co-worker became convinced only after much explanation and some cajoling that the portable lead shield was necessary for his health. Ann points up one of the problems in disease control: "The high incidence of worms, respiratory infections, liver ailments, and dysenteries cause symptoms easily confused with those of cancer, tuberculosis and pneumonia. A sure diagnosis must be made."

In Ethiopia, equipment is not such a problem: there are 120 X-ray units. But few Ethiopians know how to operate or repair the machinery. There, Volunteers teach the theory and practice of operational X-ray technology. Since Volunteers arrived in Ethiopia, enrollment at the X-ray technicians training school has doubled. Volunteers, as planned, are working themselves out of a job.



Jerry Patrick works in a mosquito control and research project in Morocco, where he has discovered a rare species of mosquito. Much of Jerry's work is done in rural areas with a makeshift laboratory.



Curiosity and some apprehension are expressed by villagers in Malawi as they watch Mary Jean Grubber, a medical technologist, administer a tuberculin skin test. Malawi's TB rate is 30 times that of the U.S.

MEDICAL TECHNOLOGISTS: In all parts of the world, laboratory technicians and medical technologists are plagued with late request slips and calls from doctors wanting to know the results of tests only half done. But in most of the developing nations there is but minimum equipment for performing diagnostic tests and an acute lack of trained personnel.

In some countries, Volunteer technologists are temporarily staffing laboratories while nationals are trained. Such is the case in Morocco. In the Pacific and East Asia, technologists work with local technicians teaching rudimentary diagnostic procedures that will aid the countries in breaking disease cycles.

Sometimes Volunteers become involved in critical research. Russell Faust, a graduate of Boston University, spent some of his time as a Volunteer working with the Pakistan-SEATO Cholera Research Laboratory in East Pakistan, providing technical assistance at the laboratory in the investigation of *V. cholerae* pathogenicity. After two years as a Volunteer and six months with C.R.L. in Pakistan, he is employed as a research assistant on a public health grant in New York.

"What is most difficult about working in the developing nations is getting used to working with so little equipment. And so little trained personnel. And with the diseases which are so rarely seen in our own laboratories. I guess these same factors, though, are

what make the work so interesting and challenging and why Volunteers with backgrounds in laboratory diagnostic work are so needed," writes a medical technologist from South America.

DENTAL HYGIENISTS: In the Philippines, dental hygienists are helping conduct a survey of the rural population to determine the extent of dental infection and the causes. The survey attempts to relate habits, customs and social practices to the incidence of dental disease. With the information, dental hygienists are teaching people to take better care of their teeth. Other hygienists are training young people in dental assistance and in Brazil are establishing a school for auxiliary dental personnel.

In most of the developing world nutrition is poor, toothbrushes and pure water are rare and toothpaste even rarer. The challenge to dental hygienists is basic . . . but enormous.

PHARMACISTS: There are six hospitals and about 100 dispensaries in the vast Pacific island complex that comprises Micronesia, but only two professional pharmacists. One of the two is a Peace Corps Volunteer. True, each hospital has a locally trained pharmacist, but their training by professional standards is inadequate. The Peace Corps plans to provide at least one professional pharmacist for each of the six district center hospitals. While they will provide badly needed pharmaceutical skills, their primary job will be to upgrade the skills of their Micronesian counterparts.



Photo by Gerard Cullen, PCV

Physical therapist Betti Smith helps a small Bolivian boy walk from a crippled children's home to the gymnasium for exercise therapy. Betti also instructs student nurses and hospital personnel in rehabilitation techniques.

From CHAUCER to CHOLLA NAM DO

The Job for Liberal Arts Graduates in Peace Corps Health Programs

Last August, 60 liberal arts graduates left the United States to work in the province of Cholla Nam Do, Korea, the home of over three million people.

Korea's public health program included maternal and child health, nutrition, environmental health and sanitation and communicable disease control. The one part of the program lacking staff was at the local level, the exact level at which Peace Corps Volunteers could effectively contribute.

Today in Cholla Nam Do, women Volunteers are staffing programs in maternal and child health, including family planning, and nutrition. Men are working in environmental health, sanitation and rodent control. With three months of Peace Corps training, these history, English lit and sociology graduates are activating what might

have long remained a dormant program. They are striking at the roots of disease problems in a developing society and are opening doors that stay open only when disease is controlled: those to education and national development.

Korea is not the only place where liberal arts graduates have made it possible to initiate or activate a health program. In Malawi, they learned the clinical aspects of tuberculosis control, some health education techniques, the Chinyanja and Tumbuka languages and set out on an experimental program to control tuberculosis. It worked.

India asked for Volunteers to work in their own family planning program a year ago. The fifty liberal arts graduates were assigned to districts and city family planning bureaus, where

they now help Indians with the educational and organizational aspects of the program. Their job is to provide basic information and create a favorable climate of opinion for family planning. The success of the program in India has encouraged the Peace Corps to consider requests for similar programs in Latin America and Africa.

The overall success of the liberal arts graduate in health programs has stimulated an increasing number of requests from the developing nations. Smallpox, cholera, leprosy, and the diseases falling within the so-called "diarrhea-pneumonia complex" (see page 2) can all be reduced by planned campaigns of prevention and health education, provided enough people are willing to do the sometimes pedestrian, sometimes esoteric tasks necessary to get the job done.



Judy Hoenack, a philosophy major serving in a public health program, stops to chat with Brazilian children in a Rio favela. Judy's time is spent talking with families about health practices, nutrition and sanitation.

Vicki Soucek, an English major, holds the frail body of a dehydrated baby against her shoulder. In Niger, where almost all infants suffer from malnutrition and diarrhea with resulting dehydration, liberal arts graduates with three months of Peace Corps training can make a dramatic difference.



Dr. Richard P. Rogers and an Afghan medical student make rounds in the hospital in Jalalabad, Afghanistan where Dr. Rogers serves as chief of the department of pediatrics and co-chief of the department of medicine.



SAFARI from **PRIVATE** **PRACTICE**

Physicians and surgeons interested in serving as Peace Corps Volunteers should write to Miss Pat Ebert, Office of Public Affairs, PEACE CORPS, Washington, D.C. 20525. Both general practitioners and specialists are needed for teaching, clinical, and public health work. Unlike other Volunteers, doctors with families may serve. Information on the special policies and individualized programming for doctors can be received by writing to the above address.