NEWSLETTER FROM THE SIERRA MADRE #5

OCTOBER, 1970

Concerning Project Piaxtla, a personal endeavor providing medical and related aid to villagers in the mountainous reaches of Sinaloa, México.

Our back-woods clinic in Ajoya is still a far cry from the emergency room of a modern America hospital. You can still write your name in the dust of the sterilizing tray after a wind storm in the dry season. Mud still trickles down the white-washed walls from recalcitrant leaks in the tile roof during the monsoon season. Hens still sneak into the dispensary and try to roost in the medicine cabinets, and at night rats still scamper and skirmish up in the roof beams. We are, in short, still very much a part of the village. Yet for all that, in the past months the scope and quality of our medical services have grown significantly. This is largely due to an increasing number of highly capable persons who learn about Project Piaxtla and contribute their services. Because the project is run by a completely volunteer staff, most of our professional help is necessarily limited to short term visits. Since January, however, we have had 26 persons with some form of medical training come mostly from the USA to assist at our clinics. This includes 5 medical doctors, 5 dentists, 4 dental students, 3 oral hygienists, 1 veterinarian, 3 lab technicians, 1 medical student, 2 pre-med students with special training, 1 medical librarian, and 4 "self-made" medics.

Dr. Join McKean, a radiologist from Mills Memorial Hospital in San Mateo, has recruited many of these doctors and dentists, and has flown three groups down in a private plane. Although these "flying doctors" can usually stay only 'a few days, they accomplish a surprising amount.

The installation of an X-ray unit which Dr. McKean arranged to have donated, has been a major advance. On Dr. McKean's first visit, we simply hung the X-ray head by block and tackle from the roof, sat the patient in a chair six feet away, and shot the exposure. Our power source is a somewhat reluctant gasoline generator, which we revved up extra fast to provide sufficient output. We constructed a small darkroom, and the night before Dr. McKean's departure developed the first plates. To our delight, they turned out well.

Since Dr. McKean can only remain in Ajoya for brief periods, regular use of the X-ray unit depends on training other personnel. To this end, Dr. McKean first taught Bob Steiner* and myself the technical procedures. He also provided us with books on interpretation, and when I was back in California, went through X-ray teaching files at Mills Hospital with me. As with many aspects of our underdeveloped clinic, our X-ray department of necessity adopts the principle of "See one ...do one...teach one." Bob Steiner taught the X-ray procedures to Annette Thorn. ** and this summer I taught Bill Gonda and Phil Mease, pre-medical students at Stanford. We have also begun to train a village boy as a technician. On Dr. McKean's return visits we "work out the bugs", and we reviews the X-rays we have taken.

^{*} Bob Steiner. semi-retired electrical engineer and self-made medic, and his wife, Dorothy, have been coming to help us for the last three years.

^{**} Annette Thorn, a Stanford graduate student, helped in Ajoya for three months.

Our X-ray facility is a great aid in diagnosis and follow-up of tubercular patients. The incidence of tuberculosis in our area is still frighteningly high, 2nd is complicated by the fact that many patients regard the disease as incurable and fear it so much they conceal diagnostic information (e .g, coughing of blood). Fortunately, enough of our patients have shown dramatic response to treatment, that, with renewed hope, more and more tubercular patients come in for treatment. Word spreads; patients now come from 60 or more miles back into the mountains, often on foot, which for a T.B. patient is a fair effort. With an ever-increasing number of tubercular patients, our biggest problem at present is keeping stocked with sufficient medication for the prolonged therapy... sometimes up to three years or more.

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Of the doctors that flew down with Dr. McKean, we were delighted that Dr. Roberta Course, a young General Practitioner from Palo Alto, returned in July to take charge of the Ajoya clinic for the summer. As this coincided with my own absence from the clinic, her assistance was especially appreciated.

Last spring, we had a visit from Dr. Julia Baker, an American-born pediatrician from Mexico City. Dr. Baker has been donating three months of each year as a volunteer medic in the Orient. This year she is committed, but next year we hope she will come to the Ajoya clinic. To entice her, we have even promised to build an outhouse, which will be an innovation not only for the clinic but for the village.

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In our dental program this year we have made large strides due to several visits by dentists and dental students, as well as donations of much needed equipment. A completely portable battery-operated dental unit, which can be transported on mule back from village to village, was obtained by Dr. Pieter Dahler, who himself raised most of its cost. Recently, we have also had a donation of \$7500.00 worth of dental equipment from Dr. Philip Rasori of Palo Alto.

As most visits by the dental profession have been short term, many dentists have felt their biggest contribution is to further train the two village boys who already extract teeth and who learned the rudiments of drilling and filling from Dr. Dahler last summer. Dr. Charles Woesner, first dentist to fly down with Dr. McKean, worked beautifully with 17-year-old Miguel Mánjarrez, taught him many techniques, and filled him with such confidence and enthusiasm that it gave the boy just the push he needed to convince him to apprentice for village dentist. This encouragement was further extended

by the 7-man team of dentists, dental students and oral hygienists from the U.S.C. Mobile Dental Clinic. By the time the team left, Miguel Mánjarrez with 15 year-old Miguel Alvarez assisting him, had developed enough skill and confidence to perform the entire job of drilling and filling. Since then they have sometimes worked alone doubtless they have made mistakes - but a few mistakes can be afforded when filling teeth which would otherwise be pulled (by they same boys, of course).

This summer, while two dental students recruited from the U.C. Dental School in San Francisco took over the Ajoya dental clinic, Miguel Mánjarrez went to Cincinnati, Ohio, where he learned to take dental impressions with Dr. William McLaughlin and make dentures at the greater Cincinnati Dental Lab. Sa far, none of the visiting dentists have offered these services, needed by many a toothless

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^{*} Shortly after writing this, we were given \$2500.00 worth of T. B. medicine by Henry Grillo of Andover, Mass.

client. With his new training, and a little on-the-job practice, Miguel should be able to provide a patient with a full good-quality denture for as little as 100 pesos (\$8 U.S.) ... and still make a modest salary for himself.*

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Of our other youthful assistants whom Project Piaxtla is helping to educate and train, Martín Reyes returned to visit and learn from Dr. Carlo Besio, veterinarian in Portola Valley, California.

Meanwhile, I took Miguel Alvarez to visit my father in New Hampshire to learn some English before entering 8th grade in Palo this fall. Although Miguel -- who comes from an isolated rancho an hour's walk from Ajoya – is a brilliant student, he will be unable to receive credit for his year of study in the U~S.A., for the Mexican educational system, and tight federal control, has no provision for accepting foreign students (except for children of diplomats). Yet Miguel is very eager to study in the States, and the experience could prove beneficial in many ways. English will, of course, be a big asset when working in our clinic with American doctors. More important, I believe, is that Miguel will be living with George and Sally Dueker, long-time coordinators for Project Piaxtla. The Duekers are among the most generous and dedicated people I know. The experience for Miguel of living with persons who know the joy (and sometimes exhaustion) of giving of themselves for no other reward than personal satisfaction may prove the most valuable factor in encouraging him to continue serving his village after he grows up.

Such emphasis is very important, for the Golden Rule is little taught In the Mexican educational system. The value system, particularly at the professional level tends to indicate that one's personal worth is proportionate to the size of the city he ends up in, and how much he can successfully charge for his services. Thus one finds 40% of Mexican doctors in Mexico City, where competition is fierce, while 50 of the "municipios" (counties) have not a single doctor or nurse.

On reading this, there may be those who remark that we have the same problem in the United States. To some extent, this is true. Still and all, the Judeo-Christian ethic of "selfless help" with sole reward of personal satisfaction (and-some neighborly approval) is indisputably more developed in the United States than in Latin America -- or anywhere else on earth.

It is hard to imagine, for example, an American mother threatening to disown her son because he joined the Peace Corp. Yet just this happened with our private "peace corps." in México.** Marcos, a young economics student from Culiacán, became very excited abut our project in the barrancas and volunteered his help. He spent several weeks with us, soaking up knowledge of first aid and emergency care. His next summer vacation, he went into the mountains about 70 miles north of us and volunteered his service to the isolated villages. At this his mother was so furious, she threatened to disown him. The last time I saw Marcos, he was so enthusiastic abut his mountain experience he was considering becoming a doctor. I hope he retains his ideals, and if he gets his M.D. that he returns to the mountain villages.

Mexico - as many points elsewhere - is in desperate need not so much of political revolution as

^{*} Services and medicines at our clinics are free, but for on peso (8 cents) "contributions" which go into a fund help cover emergency aid outside the area. However it is only reasonable that the village youth, when they finish apprenticing and provide services by themselves should earn enough to live.

^{**} The Mexican Government has never permitted the American Peace Corps.

ethical evolution in the schools, in the home, and in the individual heart..

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Concern and common sense can make up for much lack in equipment and training, and in the last analysis are probably more important. Our village clinics are not really equipped to perform delicate surgery or manage patients requiring intensive care, and our volunteer staff frequently lacks adequate training. For all that we have had so many unhappy experiences as result of taking patients out to city hospitals or health centers that we often feel obliged to tackle ourselves medical problems which ordinarily we would much more happily - and wisely - refer. Examples of such unfortunate experiences include:

- Ramon, a six year old with a broken thighbone, whom we took to the Hospital Civil in Mazatlán. Because the boy squirmed loose in traction and no one bothered to fix it, his bones knitted crossed and twisted.
- Pastora, a pregnant girl with a severe kidney infection, whom we sent to the Centro de Salud in Mazatlán. No examination or tests were made. She was prescribed aspirin.
- A little girl (whose name I forget), who got tetanus from a pierced ear. On entry to the Hospital Civil in Mazatlán, the head nurse asked, "Why did you bother to bring her? She will die anyway." The child was left in a filthy basement room across from the morgue, without lights and with excrement in the corner. No doctor saw her until the next day. Fortunately, she died quickly.
- Jose, a young man with a tubercular abscess of the throat, who I took to the same hospital. He received no food, drink, or medication from Friday afternoon when he was admitted until the doctors arrived Monday, at which point he was moribund. His wife begged me to take him back to Ajoya, and he died on the way, in my jeep.
- Juan, a. villager who went to the coast and was hit by a car. He spent two weeks in the Hospital Civil in Culiacán with a broken leg, unattended until he sent me an S.O.S, for funds to pay for setting and casting his leg.
- Joel, a youth who was shot through the thigh in a gunfight and suffered a major arterio-veinus fistula. We carried him 15 miles on a stretcher, then 150 miles in my Jeep to the Hospital Civil in Culiacán. The Director promised to operate immediately, yet when I returned two weeks later, no surgery had been performed. The leg now rank with necrosis, had to be amputated, a needless tragedy. Before taking Joel to the hospital, I had debated with myself as to whether to attempt the vascular repair. I still kick myself for not having done it.
- Juanito, an old man with a broken hip, who I left at the Hospital Civil in Mazatlán, together with x-rays of the fracture. Due to some mix up, his hip remained untreated and a steel pin was put in his knee! He will never walk again.

These cases are of course extremes. In all fairness, it must be pointed out that many patients we refer receive satisfactory treatment, especially considering that these public hospitals are grossly understaffed and underfinanced. Moreover, things are improving a little. I have made friends with some of the hospital's staff, and at times have given them, medicines items among our surplus among our own donated supplies. Furthermore, Dr. Laub has had the head nurse and two others from

Culiacán up to Palo Alto to visit him All this has helped gain preferential treatment for patients we refer. Still and all, treatment is often so far from ideal that, we now refer patients only as a last alternative, and do ourselves as much medically as we dare. Nearly all fractures we set and cast ourselves. Appendicitis we usually treat conservatively, with antibiotics (as in Britain). I have performed skin grafts and tendon repair as best as I can because I know that if sent out the patients lesions will be superficially dressed and that's all. Tetanus cases we now handle in our own clinic (where at present we have a 50% survival rate, as compared to 20% in the Hospital Civil in Mazatlán, according to a nurse there).

If patient management in the city public hospitals is poor, in the rural Centros de Salud, it is often worse. They are usually staffed by "pasantes", doctors fresh out of med school who are required to serve for a year in a rural health center before they can practice on their own. In San Ignacio the Centro de Salad nearest us, the doctor fails to take his post seriously. The Centro is usually empty, partly because the doctor is so rarely in, and partly because the villagers (2000 in San Ignacio) have so little faith in him. Many would rather take the 17 mile journey over Jeep track to our Ajoya Clinic for treatment. Even town officials and State police bring us their sick children, and at times the Municipal President has sent us indigent patients for treatment.

On one such patient we ended up performing brain surgery in a desperate effort to save his life. The patient's scalp had been lacerated and skull fractured in an auto accident near San Ignacio; he had been taken to the Centro de Salud, where the wound was sutured and the patient released. The lesion subsequently became infected and when the Health Center declined further treatment, the patient sought aid from the Municipal President. The "Presidente" sent him with covering letter to our clinic. Fortunately, he arrived the same day that Dr. John McKean flew down with a team of doctors, so that Dr. Arthur Roswoll, a general surgeon. We re-opened the badly infected wound and removed gravel, paint chips and hair which had been sewn up inside the wound. A piece of skull bone: 4" long had sunk deep against the brain. Dr. Boswell and Dr. James Guye, an endodontist, skillfully sectioned away the offending skull fragment. The lesion was irrigated, a drain placed and the wound partially closed. It was a heroic effort, and after surgery the patient sat up and ate. On the fourth day he went into convulsions and died.

I don't .rant to give the impression that there are no good doctors or medical services available in the cities of Sinaloa. There are. The "Seguro Social" program has superlative medical facilities, but is available only to persons employed where payment can be withheld from the payroll. In other words, only those who could afford medical care elsewhere are entitled to Social Security. The poor village farmer doesn't. qualify. Apart from the Seguro Social, another excellent medical program, ISSTE provides free health care to all government employees.

Privately, here are also many well equipped, exclusive, inpatient clinics in both major cities. But for the most part their charges are astronomically beyond the financial possibilities of either the villagers or Project Piaxtla. At these clinics, however, we have found two fine doctors – an eye surgeon and a thoracic surgeon – who have taken an interest in our project and have done surgery for us at very reduced rates. Nevertheless, the rates at the clinics make it prohibitive for us to provide for many patients in this way.

For indigent patients, the Mexican Federal Government provides urban and rural health centers or "Centros de Salud"; the State Government provides the urban Hospitales Civiles. Both provide services at very reduced rates, but are so short on funds, personnel, and often scruples that the care provided is seriously deficient.

For our patients in need of specialized surgery, we have been fortunate to have cooperation of several doctors at the Stanford Medical Center. In a previous newsletter I described how Drs. Sissman and Shumway provided open-heart surgery for a ten year old with a congenital heart defect. More recently we have brought 7 more patients to Palo Alto for surgery. Five children, from 5 months to 13 years, all with cleft lips and/or palates, I drove up in my Jeep, together with two parents. Apart from doing the surgery, Dr. Donald Laub and his team at the Department of Plastic and Reconstructive Surgery also raised the hospital expenses and located private homes for the patients and their parents. We owe special thanks to the surgeons, to the foster families who gave the children so much love and attention, and to the Mexican Club of San Francisco, who helped meet expenses. The surgery, which was successful, will make a great difference in these children's lives.

In June, a five year old named Sergio flew up with Dr. McKean for surgery at Stanford. Sergio had burn deformities adhering his right arm to his chest and his chin to his collarbone. Myra Polinger, who has donated -secretarial help to Project Piaxtla for six years, fell in love with Sergio on the flight home, and offered to be his foster mother. Sergio's surgical repair has proven lengthy and difficult, with many set-backs. To keep hospital costs down, Myra has provided post-surgical care herself in her own home, a monumental task. Yet she has managed nobly. To date Sergio is still in California, and it may be months before his repair is complete and he can return to Mexico.

In July Martin Reyes brought with him to Palo Alto a terrified Patient with breast cancer. Dr. McKean, who examined her in Ajoya, considered the carcinoma so advanced that surgery alone would not control it. Back in San Mateo, he arranged with his X-Lay Department, to give her radiation therapy: Surgery was performed by Dr. Holderness at Stanford, and biopsy indicated the bisection was complete and X-ray therapy therefore unnecessary. Agustina is now home again with a new lease on life.

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The paperwork and red tape in arranging passports and visas is by far the biggest difficulty in bringing patients to the U.S. Documents one needs are endless. To make it harder, one must go to Culiacán for the passport, then 150 miles south to Mazatlán for the visa. At best, the procedures are involved and time consuming, but inevitably there are special difficulties. One six-year old cleft lip patient had never had his birth registered, which caused many problems, including paying a fine. Another child was in the same boat except that his mother gave us the birth certificate of an older brother who had died; this sufficed. The biggest problem of all we had with Agustina, who turned out to be "Utiquía" according to her birth certificate and "Eustaquia" according to her baptisimal records. We began to arrange her papers as Utiquía, only to find that termites had destroyed the public registry and we had to use her baptismal records, and get any new records for her as Eustaquia. At Stanford Hospital, however, she remains Agustina, for I had already sent in that name. But most important is not who she is, and – thanks to the surgery, she's fine.

Not only have Dr. Donald Laub and his department at Stanford cooperated splendidly in performing surgery for Project, Piaxtla, but along with the Clinical Laboratory and Emergency Room Staff have been of enormous help in arranging special training for project volunteers. In the early days of Project Piaxtla, Don arranged that I observe and "apprentice" at the Stanford Emergency Room. Four years ago, Chris Walker apprenticed in the Stanford Labs and then set up our basic laboratory, in Ajoya. Later, Bob Steiner spent months apprenticing at the Stanford Lab and picking the brains of the staff, so that when he came to Ajoya he was able to expand our make-shift lab considerably.

Recently, two pre-medical. students at Stanford, Bill Gonda. anal Phil

Mease, have committed themselves to spending the better part of a year in our clinics. In preparation, they spent the spring quarter at Stanford receiving special training. Don Laub pulled strings to get them into special courses in the Medical School, including a course in Emergency Trauma taught by himself. He also made arrangements for the boys to observe in the Emergency Room at San Francisco General, where emergencies tend to be more frequent, more messy, and hence more educational than at Stanford. Phil and Bill also apprenticed at the Stanford Clinical Lab, where they learned to perform and interpret a wide range of tests and procedures. The boys arrived in Ajoya at the beginning of summer and in my opinion have been doing a superlative job. In our primitive clinical situation, Phil and Bill, with only one quarter of specific paramedical training are in some ways more capable than some of the fourth-year medical students who have helped us. The boys' training has been specific, limited, and to the point. They are not bogged by a maze of not always appropriate theory. They rely less on complicated equipment, esoteric lab reports, scrub nurses, medical superiors, and a pre-sterilized field, but are able to improvise their own simple tests and make the most of the limited resources and knowledge available. They are, in short, more adaptable and more self-reliant. By contrast, medical students, suffering perhaps from academic overexposure, too often approach a patient as if they were taking rather than making an examination. Their nervousness is picked up by the patient, who, if a villager, looks more to his medical man's bearing than his background, in which case the student loses half the battle before he starts. Still and all, medical students who have worked with us have contributed a great deal.

Soon medical students may be helping us on a regular basis. Dr. Larry Schneiderman of the Department of Community Medicine, U.C. at La Jolla, has visited our clinics and is eager to send us students, as a service project as well as exposure and a learning experience for the students.

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Dr. Kent Benedict, a young Stanford Pediatrician, who spent the summer of '70 with us is planning - if he gets his draft status as a conscientious objector -to volunteer a full year at our clinics, beginning in November. This will be a tremendous boon for the project. Backed by medical students and lab techs we should be able to provide more complete consistent medical care than ever before. Kent is trying to raise funds independently for his own expenses, as well as to solicit medical supplies. He has already obtained promise of 6000 tetanus vaccines, which will allow us to vaccinate far more extensively than before.

In June we opened a third clinic in the village of Chilár, half way between the other two. Allison Akana – a former student of mine who has spent more than a year with us and has become a very proficient medic -- is in charge. She hopes to train young villagers in first aid and basic clinical techniques.

The new clinic is on the far side of an arroyo from the main village. Last March, I took to the Sierra Madre with a group of six high school students from the Athenian School in Danville, California. They helped make a suspension bridge across the arroyo. Now it can be safely passed when the stream is dangerously flooded in the rainy season.

I have just received a letter from one of the girls who came down with the Athenian School group last spring. She writes that she has decided to go into pre-medicine, with the goal of becoming a doctor, as a result of her experience with us in México. She finishes her letter; "...so I'll be seeing you down there in about nine years." I can't say how good this makes me feel. For six years I have taken high school students for a month at a time to México to participate in our project. At

least four of these students have decided to go into medical fields as direct result of their experience with us, and hope in time to come back to help us.

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At the invitation of Charles Vickery, leader of the Unitarian Fellowship of Mexico City, last winter I visited the Capital City and made many valuable contacts. Kirk Raab of Beecham Laboratories, México, is now donating valuable medicines, notably Ampicillin. We also affiliated our birth control program with the "Fundación para los Estudios de Población" as México's fourth pilot project in rural family planning. Charles Vickery and his friends have made two trips to our clinics with loads of clothing and medical supplies, which have been greatly appreciated.

Our experimental plantings with high-lysine corn were only partially successful this last year, due to the fact that the husks opened as the ears matured, allowing rain to enter and rot the kernels. This year, with help from Charles Vickery, we obtained a variety of the high lysine corn developed in México, and hopefully better suited to monsoon climate. Results of this season's plantings will be available soon.

The pleasure of working at our clinic in E1 Zopilote, which we designed and built from scratch, has made us all the more aware of the shortcomings of our physical plant in Ajoya, an old adobe house falling apart at the seams. We hope to build a new clinic next to the new water tank on the hill overlooking the village. In June, George Dueker flew down with Dr. McKean, surveyed the site and gathered data in order to make the architectural plans for us. The villagers are ready to help. If we can raise the funds for it and work out the political snags, work on the new-clinic will begin soon.

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I would like to thank all those who have driven supplies down to our clinics from the United States, especially Dr. Carl Monser, who, with the help of friends, brought down two microbuses packed to the gills, and Kingsley Douthwaite, who brought a whole trailer load of goods.

Getting supplies from California to Sinaloa is one of our major problems. They cannot be sent by post.

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Project Piaxtla provides virtually the only medical and dental care within a 400 square mile sector of the Sierra Madre. This past year our clinics had more than 5000 patient visits. The project is active in introducing more nutritious food crops, starting corn banks and food cooperatives, sponsoring further education for gifted youngsters, and training village youth in medical and dental skills, we manage to accomplish on an annual budget of about \$8,000 the equivalent of what other medical aid projects and up to \$80,000 to do. To do this we tap numerous resources for donations of medicines, equipment, and volunteer assistance. We learn to live and operate on a shoestring – and in so doing we feel more in harmony with the villagers with whom we work.