Making the Move from Residency to Practice ■ The AMA on Nuclear War

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A Medical Report from the Border of El Salvador

Photo: Michael Shadlen

One of the trucks that transported the Salvadorans along the rough roads into Honduras.

Refugees of El Salvador

A Firsthand Account of Their Precarious Health and Safety

MICHAEL SHADLEN

In 1979 a vast number of peasants fled the El Salvadoran provinces of Cabañas and Chalatenango, most under fire, to head for the Honduran border. They crossed where they could, haphazardly, some carrying belongings, most with nothing. The La Virtud border area of Honduras is rugged, mountainous, and, depending on the season, extremely dry or extremely wet. Many refugees found local Hondurans who were willing to take them in and share their homes. Many families were found hiding in the hills, unsheltered, without food or water for days.

The local church began supporting these people, finding them shelter, supplying food and medicine. The Hondurans who shared their huts were in many ways no better off than the refugees. They were unaware that they would be forced to fear their own government as reward for their generosity.

By January, 1981, Catholic Relief Services (CARITAS, which is Latin for love) was providing food and medicine to the local church, which distributed these goods among the country villages (known as *aldeas*). On numerous occasions Honduran volunteers were harrassed by their own military who accused them of supporting Salvadoran guerrillas. By March 1981, more than 20,000 Salvadorans had arrived in Honduras. The United Nations High Commission on Refugees created a camp.

Over the past five months those people have been cleared from the border area of La Virtud. Approximately 7,500 were relocated to the six camps of Mesa Grande, about 50 kilometers from the border of El Salvador. The relocations have been bloodied by harrassment and murder of refugees, reportedly by Honduran and Salvadoran soldiers.

Internationals (mostly Americans and Canadians) visit the camps as "observers" to protect these refugees as best they can. The assumption is that by riding the trucks with the refugees, by living in the camps, they inhibit Salvadoran and Honduran soldiers from harrassing and murdering refugees.

In response to a presentation on the camps at the AMSA national convention in April, and with generous

Michael Shadlen *is a third-year student at Brown University Medical School. His two-week trip to the refugee camps of Honduras in April would not have been possible without the generosity of the Giannini family and the support of fellow students and Brown faculty and administrators.*

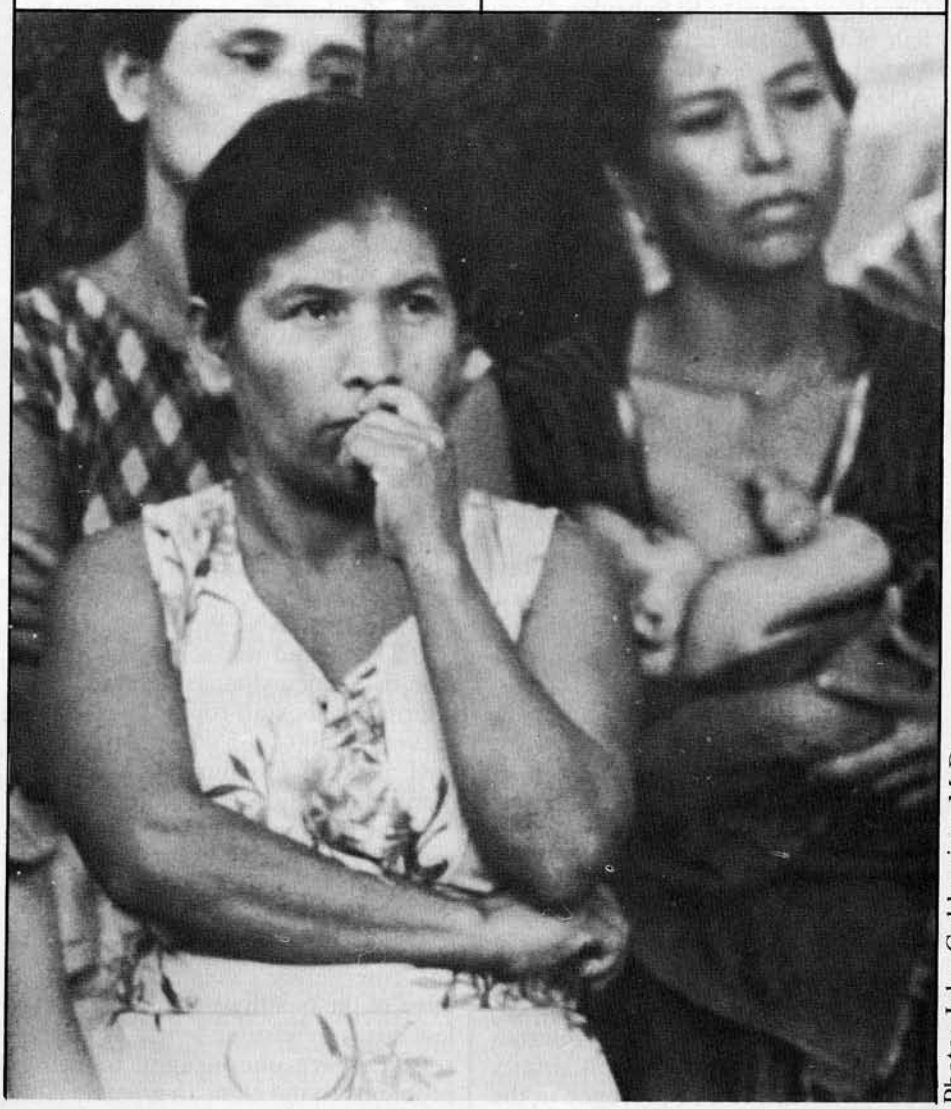
financial and emotional support from many students , I participated as an observer in the relocation of the last 1,000 refugees from La Virtud to Mesa Grande. I spent most of my two weeks in the camps just being with the refugees: eating and sleeping with families, talking, playing soccer, listening to stories. I became involved with the health problems of the camp: decontaminating water, performing a nutrition census, assisting in the clinic. During my stay I became increasingly aware that the horror of El Salvador is not without its corrollaries in Honduras, be they the murders in La Virtud or the conditions in Mesa Grande.

The refugees in the camps tell stories of hiding as their homes in El Salvador were burned and their neighbors were killed and tortured, of children cut to pieces in front of their families, of pregnant women's bellies being ripped open, of oldest sons questioned then tortured then killed then hung on the front of the family hut.

International CARITAS volunteers tell of Salvadoran and Honduran soldiers shooting at them from American helicopters and a group of children as they crossed the Lempa River from El Salvador to Honduras. One volunteer recalled: "They shot at us and all those little kids. We were swimming the river with the kids on our back. . . . We saw two people get killed. One child jumped from a rock with an arc of bullet holes across his back with blood streaming down. . . . A mortar exploded very close to us and the woman closest was killed. Her grandson who she held in her lap was cut with shrapnel, but he survived and is here [Mesa Grande]." Approximately 40 people were killed on that day.

The Honduran government has claimed that the purpose of the recent relocation from the border was to achieve greater security for the refugees and enhance control by the military. Refugees and many relief workers opposed the move. For refugees, it meant permanent separation from friends and relatives yet to cross. It meant being at the mercy of the Honduran military and it was perceived as a loss of the option to return to El Salvador should circumstances permit. However, a series of events served to convince refugees and relief workers that La Virtud was truly unsafe. On November 15, Elpidio Cruz, a Honduran CARITAS worker, was killed in Honduras, allegedly by Salvadoran soldiers. The following day Salvadoran soldiers entered the Honduran command post in La Virtud. One of the refugees remembers that day well. She patiently related to me the following story, which I slowly translated and wrote down. The story tells of the refugees' plight and of the importance of the internationals' presence.

"Salvadoran soldiers were seen in the command post in La Virtud. My mother saw the soldiers enter. Some of the soldiers left to go to Los Hernandes [village]. Later we learned that they killed seven people there. The soldiers came to the camp. They took 35 men and women. One was a 12-year-old girl and another was pregnant. They tied their thumbs behind their backs. They came to our tent and took my husband. I picked up two of my children, one under each arm. I cried to the soldiers, 'Please leave us alone in peace. Please leave my husband.' The soldiers threatened to kill me. I said, 'This is Honduran territory. You cannot kill people here.' They said they would kill me and my children. I followed the soldiers and they kicked me and made me fall. My 6-month-old son in my right arm was hurt when I fell. I said that I would not leave my husband. They said they would kill me. I said you cannot kill us in Honduras. They said we will kill you and the child, and they hit my arm with their gun. The soldiers left the camp with my husband and the others. I followed them staying with my husband. My daughter was crying. One of the



Salvadoran refugees learn in a camp meeting at La Virtud of the details of their forced move to Mesa Grande further within Honduras.

Photo: John Goldenring, M.D.

soldiers yelled to her to stop crying. He pointed his gun at her throat and said he would kill her.

"Diana [an international volunteer] ran after them. Also a car from town came down the road on the way to Cuajiniquil and stopped by the soldiers. The car contained many internationals. The soldiers pointed their guns at the car and told them to move. The car stopped just down the road and the internationals got out and ran along the river to the soldiers and prisoners. They began taking pictures and yelling that they were international press and would tell the world of the actions of the soldiers. At first the soldiers kept walking with my husband and the others. One of the women they had taken was nine months pregnant.

"Finally the soldiers released all the people. We returned to the camp."

Following the November 16 event, the Honduran government issued an ultimatum: either move to Mesa Grande or return to El Salvador. Over half of the 22,000 refugees in the La Virtud area chose the latter option. At least 40 were known to be killed on the way back. Refugees say they sensed that the Honduran government did not offer relocation as protection from danger so much as they provided danger as incentive to relocate.

In late December the first refugees arrived at the new camp in Mesa Grande. There they found no tents, no food, no water, no latrines. The terrain of Mesa Grande is mountainous and the climate typical of the 2,500-foot altitude. Refugees were unprepared for the cold, but they received no extra clothing from UNHCR. They discovered that they could not cultivate the rock-hard earth of the plateau, and refugees back in the La Virtud area began to resist the move.

Still, by the time of my arrival in early April, only 1,000 refugees remained in La Virtud, and they were to be moved from the camp in two shifts of 500. This was accomplished by packing about 40 people and their belongings (including chickens) onto each of the backs of 13 medium-sized trucks. There they spent six hours in the Honduran sun, inhaling road dirt and vomiting from the motion. Almost every truck included an international whose main function simply was to be there. Our presence in the trucks helped to reduce the tremendous anxiety which surrounded the move. These people were acutely aware of the violence that accompanied prior moves. Soldiers carrying large rifles rode in a number of the trucks. While this was undoubtedly upsetting for the refugees, there was no trouble whatsoever.

On April 15 the last refugees from La Virtud arrived at Mesa Grande where they found conditions that did not differ markedly from those experienced by the first group four months earlier.

THE HEALTH

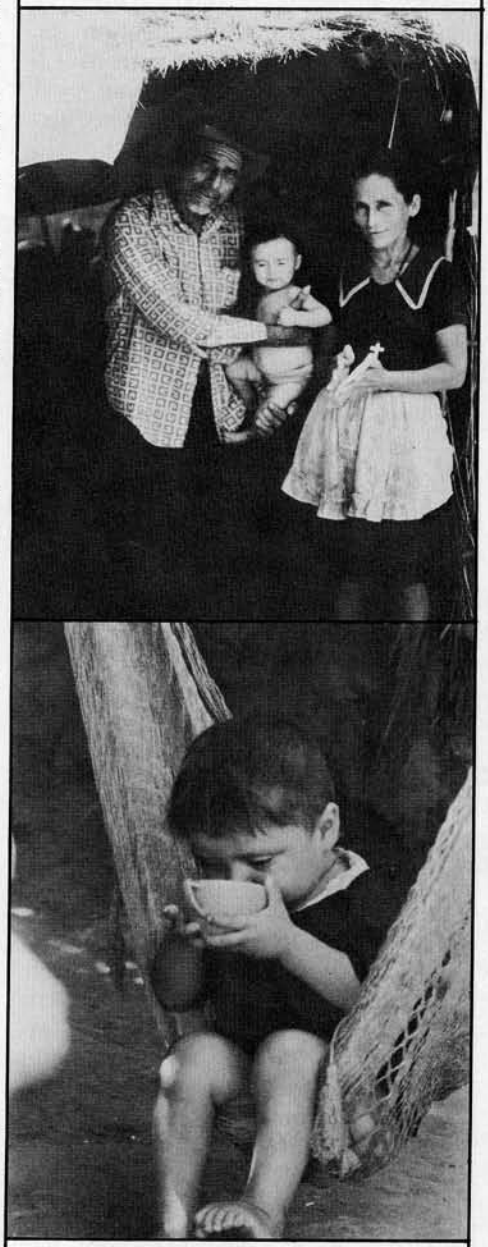
In Mesa Grande the practice of medicine consists of building latrines, designing water systems, decontaminating drinking water, identifying malnourished children, providing nutritious food, educating refugees, and seeing patients. For this last activity one must rely on history, physical, vital signs, and some good guessing. There are no diagnostic tests, no microscopes, no x-rays. I was fascinated by the process, humored by the lack of differentiation and guesswork, amazed at its success, and excited about participating and feeling useful.

Health care for the camp is provided by international doctors and nurses, refugees trained as basic health care providers *("enfermeros")*, refugee midwives *(parteras)*, and refugees acting as "health guardians."

During my stay, the medical team consisted of three nurses, two doctors, two Honduran medical students, and one physician's assistant. These workers were provided and sponsored by Doctors Without Borders, CONCERN, World Medicine, CARITAS, and the school of medicine in Tegucigalpa, Honduras. The internationals staff four clinics, each serving 1,500 to 2,000 refugees as well as local Hondurans who need medical attention.

In the morning 30 to 40 patients are seen in each clinic, first-come, first-served. The doctors see 20 to 25 patients in a three-and-a-half to four hour period. In the afternoons they see emergency cases. In addition, most of the health workers follow select cases by visiting tents. Although refugees are encouraged to bring problems to the clinic, a great deal of care and some quick diagnosis is provided on these tent-to-tent rounds.

Refugees in the camp at La Virtud.



In addition to clinical duties, international health workers spend much time training refugee *enfermeros* in the skills necessary to diagnose and treat common diseases and trauma. The object for internationals according to CONCERN volunteer Rob Boudewijn, is to be expendable. Thus if the internationals have to leave the camp, or when the refugees return to El Salvador, the *enfermeros* will continue to provide care.

Internationals and *enfermeros* work as a team. The book, *Donde No Hay Doctor (Where There Is No Doctor: A Village Health Care Handbook* by David Werner, available from the Hesperian Foundation of Palo Alto,

Photos: John Goldenring, M.D.

A Physician's Analysis

Dr. John Goldenring is a fellow in adolescent medicine at Children's Hospital in Los Angeles. Like Michael Shadlen he traveled to the border camps of Honduras this spring simply to be there as an international observer and to accompany the refugees on their forced move to the Mesa Grande camp inside Honduras.

More than two years ago Dr. Goldenring made a similar trip to the Cambodian refuge camps of Thailand, which he recounted in a vivid cover story in The New Physician *(TNP, March 1980), but there he served a more active medical role than in Honduras. Following is a brief excerpt of Dr. Goldenring's observations and analysis of the Salvadorans' move into Honduras.*

The major cause of death among refugees in the Honduran camps is not diarrhea, nor pneumonia, malnutrition, nor even despair. Rather, it is bullets.

Both Salvadoran security forces and the Honduran military have entered the camps and made arrests. The refugees tell me that they believe that only the presence of international observers has prevented massacres. As it is, six to 12 refugees on an average per month this year have been murdered or have disappeared. The pressure is increasing daily.

The soldiers of the Honduran army, wearing new U.S. battle fatigues and sporting American guns, regularly appear around the camps and often throw rocks down onto the refugees' tents or fire their guns into the air at night just to frighten these people. They succeed. The stress and fear are palpable in the camp, and this is of course by design, because the governments involved want the refugees moved.

Ostensibly, the United Nations High Commissioner for Human Rights wants the refugees moved for their better protection, but the fact is that the refugees could just as well be protected in the border areas as further inland. It is clear that for the Honduran and American governments, concern for refugee safety, though perhaps real, is secondary to the desire to have these people out of the way of military operations. This becomes clearer when one hears that local Hondurans are also being intimidated to force them to leave the area. Two lay religious workers have been murdered since the beginning of the year.

Once the refugee camp is evacuated and international presence decreases, there is no telling what will happen to the Honduran peasants on the Salvadoran border. Talk among the internationals is that either the U.S. and Honduras plan eventually to use the border area for staging raids into the liberated zones of El Salvador (there are 50 U.S. military "advisers" reported to be in Honduras training troops somewhere near the Salvadoran and Nicaraguan borders), or the intention is to establish a free-fire zone where anyone moving will be assumed to be a subversive. Neither case bodes well for the people. As for the refugees, they will be forced to move whether or not they want to and whether or not facilities to receive them have been completed. Most fear "concentration camps" deep within Honduras and also fear that if they depart friends and relatives who have not left El Salvador will not be able to do so.

Even for the internationals the danger and pressure are increasing. I was "arrested" at gunpoint for half an hour while escorting some Salvadoran workers back to the camp. A colleague was detained while walking to the latrine at night. The soldiers thought he might be trying to take pictures of them. Under the relentless pressure, we will be forced to leave as well.

California) serves as both text and protocol for diagnosis and prescription. Thus the medicine practiced by internationals does not differ markedly from what will be practiced by the refugees themselves.

For example, although mebendazole (potent against ascarids and other helminths) is available in one of the clinics, it is used only for extremely severe, unresponsive, or complicated cases of ascarids. Piperazine is the drug of choice in the camp because it is cheap, available, effective, and is suggested in *Donde No Hay Doctor.*

The *enfermeros* I met were effective in differentiating and treating the various diarrheas, differentiating bacterial from viral etiologies among pulmonary diseases, diagnosing weak hearts, and suturing and treating wounds. Of course, all diagnoses are made solely on the basis of history, palpation, and auscultation.

Simple tests and cultures are available when needed (e.g., suspected tuberculosis) in the nearby town of San Marcos (30 minutes by jeep) while more complex procedures such as surgery are performed when necessary in Santa Rosa (one and one-half hours by jeep).

In addition to the *enfermeros*, some refugees are "health guardians." Each guardian is responsible for the hygiene of five to 10 tents in her or his area. The guardians receive short courses on worms, sanitation, and latrines, and pass this information on to other refugees. Most of the refugees have never lived in such close quarters with so many people. Thus basic hygiene, such as use of latrines and covering food, must be stressed. The program has had noticeable impact on hygiene and health awareness in the camp. The hope is that the health guardians may soon serve as first-line diagnosticians, spotting problems and referring people to the clinics.

The most significant health problems in the camp are related to living conditions: diarrhea from contaminated water, poor nutrition, worms (ascarids and pinworm), lacerations and infections, as well as joint pains among *ancianos* (age 55 and over). Emotional problems are prevalent. Many have seen loved ones tortured and killed. Many are permanently separated from family and friends. Most are unaccustomed to community living. The lack of autonomy, space, and mobility is a new repression for these people. *Ancianos* feel they do not hold the same position they did previously in the small *aldea* communities.

Such psychological torment is difficult to deal with in a second language. A number of volunteers, however, are beginning to crack the culture barrier. Ed Scholl, a public health student at the University of California-Los Angeles (a CONCERN volunteer), has begun a support group for *ancianos*. Health

workers in the camp have begun to read some of the diffuse abdominal complaints as symptoms of severe internal strife. "Many times all it takes is to ask 'Is something bothering you?' " relates CONCERN's Boudewijn. "People will cry and tell a story of their child that died or a friend that was tortured or that they will never see their family again."

WATER

The low quantity and quality of water pose the greatest health threat to the refugees at Mesa Grande. Because Mesa Grande sits at an elevation of about 2,500 feet, adequate sources are few. The three 8,000-gallon tanks that supply the camp receive water from two tiny mountain streams via a 1.5 inch plastic pipe, which runs for miles. There is not enough water and pressure to provide continuous access to all parts of the camp.

This lack of quantity contributes to the poor hygiene of the camp. There is barely enough water to cook and drink let alone to wash and bathe. Plus this water is severely contaminated, probably accounting for up to 80 percent of the diarrhea in the camp. There is no filter system. When I left, plans were under way for construction of a modest dam-filter system.

I spent much time helping Tim Jewell, family therapy student at University of Michigan and local water "expert," in his attempt to chlorinate the water. Chlorine acts by oxidizing organic matter. We attempted to achieve and maintain a free chlorine concentration of 1.3 to 1.5 ppm. It is impossible to maintain such activity for more than a few hours through simple chemical addition. The flux through the tanks and quantity of organic matter demand continuous chlorination. Diffusion bags would maintain a proper concentration of free chlorine. However, the Honduran relief organization, CEDEN, refuses to provide these bags until supplies of chemical chlorine are consumed, still not accomplished by the time I left.

Despite chlorination, without a filter system amoeba and other parasites persist. Even with complete decontamination, problems of quantity are beyond the control of the most devoted volunteers.

NUTRITION

While still alarming in an absolute sense, nutritional status of the refugees has improved remarkably over the past nine months. This is due to the hard work of international volunteers and refugees who have committed themselves to a comprehensive program to identify and aid those in need.

Each family receives weekly rations of corn, beans, rice, coffee, sugar, oil, and salt. Fruits and vegetables are distributed when there is money or when they are donated by CARITAS or other charitable organizations. For many refugees both quantity and variety fall short of their basic nutritional needs. In July, 1981, Carol Clark of CONCERN brought a nutrition project to the camp at La Virtud. At that time two to five children were dying each day from preventable diseases.

Then refugees and CONCERN instituted two supplemental nutrition programs. Refugees organized *lactarios* (communal kitchens) to provide milk and vegetable soup for all children under seven, *ancianos*, and pregnant and lactating women.

After six months of this program nutritional status of the camp improved markedly. By the end of January less than 25 percent of the children of La Virtud were moderately or severely malnourished compared to 50 percent only six months previously.

The nutrition program of Mesa Grande does not differ markedly from La Virtud. In a limited sense, Mesa Grande inherited the final nutritional status of La Virtud. However, most of the refugees at Mesa Grande did not come from the camp at La Virtud, but from the *aldeas* where nutrition programs were absent.

MEDICINE

I spent a number of days in the clinic of camp III observing and participating in consultations. I discovered that two years of medical school had provided skills that could actually be used to help people. There were times when my insight into pathophysiological principles was of benefit, but it was rather humbling to see *enfermeros*, with only a few months of training, make sophisticated clinical decisions on little information and make them well. I was intrigued by the form of medical problem solving, by which distinctions were made and which were ignored.

A rough breakdown of diagnoses for the three month period January to March 1982 is provided in Table 1. At the time Mesa Grande consisted of four camps with a total of 4,673 refugees.

Diarrhea is the most significant disease affecting children in the camp. In the three month period, two of seven deaths were attributed to diarrhea. Diarrheas are diagnosed and treated as three types. Common diarrhea, without blood or fever, is treated with bland diet and *suero* (one liter of boiled water with four teaspoons sugar and one half teaspoon salt). Common type comprised 80 percent of the diarrheas. Diarrhea with fever, with or without blood, is diagnosed as bacterial (shigella or salmonella, most likely) and is treated with ampicillin, sulfamethizole, or tetracycline. The third type of diarrhea, blood but no fever, is considered amoebic (Escherichia or Giardia) and is treated with metronidazole. Bacterial and amoebic types each comprise about 10 percent of the diarrheas.

Such diagnosis is performed without the aid of a lab or microscope. Occasionally, cultures are sent to a nearby town for special cases. The diagnostic and therapeutic schemes, based on *Donde No Hay Doctor*, are simple. The approach is, why differentiate among diseases that will be treated identically? The *enfermeros* acquire confidence rapidly to deal effectively with diarrhea, the number one killer in the third world.

Pulmonary diseases include bronchitis, asthma, bronchiolitis, pneumonia, and tuberculosis. On the basis of history, auscultation, and temperature, camp health workers attempt to distinguish viral from bacterial etiologies and then guess antibiotic sensitivity. Again, the scheme seems to work both therapeutically and pedagogically.

Because of the crowded conditions of the camp, the Doctors Without Borders group conducted a tent-to-tent screening to identify cases of TB based solely on history of chronic cough and night sweats. Only one

case was identified and later confirmed by culture. In addition, the death of a 67-year-old man was attributed to probable TB. One case of lymphatic TB was diagnosed and confirmed by biopsy.

Although statistics are not available, it is clear that the largest proportion of pulmonary disease among adult refugees and a surprisingly large proportion among children is of pneumococcal origin, or, more accurately, is ampicillin sensitive.

In Mesa Grande the bloated bellies on children are not due to kwashiorkor (protein malnutrition), but to worms. Almost every child in the camp has worms, ascarids and/or pinworms. Thus Table 1 includes only those cases with some complication such as severe impaction or cramps.

Every child under 14 years is treated once every three months with piperazine. This is intended only to partially control the worms and buy time. Those who lose their worms get them back. Ascarids and pinworms will be integral members of Mesa Grande until sanitary conditions in the camp change drastically.

More latrines are needed. The World Health Organization (WHO) suggests a minimum of 40 to 50 latrines per 1,000 people. In camp II, 40 latrines serve 1,600 refugees, and the other camps are worse. In camp VI, where I stayed with the last 1,500 arrivals from La Virtud, there was not a single latrine.

Pit latrines are difficult to dig in the rocky earth of Mesa Grande. They tend to fill faster than they are built. Self-composting units are out of the question at this point. More often than not there is no paper available, so people improvise with weeds, rocks, and sticks, all of which tend to decrease the useful life of latrines.

For hygiene to be substantially improved, cement must be layed and a drainage system constructed in the areas where water is drawn. These areas are presently mud baths where children play, usually without clothing and often among pigs and other animals.

Malnutrition, as it appears in Table 1, represents only those patients whose presenting symptoms were attributable to malnutrition and/or dehydration alone. In the three-month period, one child died of kwashiorkor.

Caries, gingivitis, and abscesses are common. A group of American dentists visited the camp one weekend and spent all their time pulling teeth. They taught the physicians and nurses how to do it, but procaine and equipment are scarce. Thus many refugees suffer from intense toothaches.

For the period from January through March there was a total of seven deaths: two due to diarrhea, one suspected TB (age 67), one typhus (age 65), one cerebral tumor (age 10), one from unknown causes in a psychotic young woman, and one kwashiorkor (around two to three years).

TABLE 1 Diagnoses in Mesa Grande Camps January to March, 1982

Disease Type	Number of Cases	Percent Total Consults
URI	611	26.2
Diarrhea	386	16.5
Pulmonary	215	9.2
Dermatitis	164	7.0
Worms	166	7.1
Osteoarthritis	118	5.1
Fever of Unknown Origin	83	3.6
Malaria	25	1.1
Functional Disorders	59	2.5
Gynecological	63	2.7
Trauma	30	1.3
Anemia	20	0.9
Malnutrition	47	2.0
Psychiatric	16	0.7
Others	332	14.2
	2335	

Source: Doctors Without Borders and CEDEN

In that same period, in camps I and II, 70 babies were born. Of these, two were delivered by Caesarean section in Santa Rosa, one because the mother stopped contractions, the other because of a shoulder presentation. In addition, one baby, two months premature, did not survive.

For the Salvadorans the birthing process is steeped in tradition and mysticism. Perhaps more than anything else, this has been disrupted by refugee life. Most births are performed by *parteras* (midwives) informally trained in El Salvador. Only when there are problems do the internationals intervene. However, most births currently take place in the clinics rather than in the family tent.

Many traditions are lost in the process. For example, it is customary to bury the placenta under the birthing bed in the family hut. This cannot occur with births in the clinic. It is also traditional for women to eat only cheese and chocolate for 15 days postpartum. Neither of these foods is available in the camp.

One tradition that has survived the camp is apparent on the wrist of infants younger than about six months. Just after birth a red bracelet with a stone is placed around the infant's wrist in order to ward off *"mal de ojo"* (evil eye). When the bracelet breaks or when the stone becomes shiny there is no more threat and the child is safe. Otherwise the bracelet remains in place to do its work.

Bracelet or not, every child is vaccinated against some of the common evils of community living: DPT, polio, measles, and TB (BCG).

As drawn as I was to basic problems such as water and health, what I value most was the job I went to do: be there. I cherish the conversations (even the sad ones), playing "crazy gringo" with the children, football with the young men, struggling to find a nonoffensive way of refusing to eat half of a family's food for my dinner. These people were amazingly generous and loving. They welcomed me into their conversations (and accomodated my Spanish), into their tiny tents to eat and sleep, into their families to share laughs and warmth, and into their pasts to share sadness. The degree of cooperation and support was uplifting, these people's courage awe inspiring. Still the reality of their lives always was apparent: pasts of horror, futures of homelessness and uncertainty. ●