



The pharmacy during a morning clinic held in a school.

Perspective

The Abuela's Knee

A physician rediscovers joy in the field clinics of Honduras.

Text and photo by Therese Zink, M.D., M.P.H.

The new clinic in Pinares, Honduras, is Pepto-Bismol pink with a turquoise door—colors that are not unusual in a country where markets are filled with multihued fruits and vegetables, and the folks tending them dress in orange, red, and royal blue, and white shirts and blouses brighter than anything I can achieve with bleach in my washer at home. The clinic was built by a nonprofit group in the United States that sponsors a nongovernmental organization in Honduras. A local physician staffs the clinic once a week, and a nurse cares for the patients on the other days. At least twice a year, groups from the United States provide more intensive medical care for a couple of weeks.

Several years ago, I served as faculty for one of those groups. We ran a daily clinic in Pinares, held clinics in nearby villages, and visited the homes of patients who could not walk to see us. The mountainous terrain limits agricultural pursuits and transportation, making this one of the more impoverished regions of Honduras. Most people travel by foot; a horse is a luxury.

When we first arrived in Pinares, we met with the clinic's community board, a dozen women and men from the surrounding villages. They explained the assets and challenges of their communities, and we scheduled our field clinics. Midweek, Luis, the mayor of La Esperanza, a village a couple hours into the mountains, guided my team into the countryside. The group included Bret, a fourth-year medical student who planned on specializing in internal medicine; Chris, a nursing student and basketball player whose stamina almost equaled that of Luis, our guide; Jose, our lanky translator, a ninth grader at the English school on the Honduran coast who was making his first trip to this region of his country and who had more in common with members of our group than he did with Luis or the other locals; Linda, a pharmacy student; and

Mary, a first-year resident. This was the first trip to Honduras for everyone in the group except Mary and me. Mary had made a similar trek two years earlier, so she knew what she was in for. At 50 years of age, I was the oldest in the group but was training for a marathon, so I was in good shape.

Wearing hiking boots, sunglasses, and hats, our backpacks stuffed with a change of clothes, sleeping bags, and medical supplies, we were a stark contrast to Luis who travelled light, scaling the mountain in his sandals like a goat. He never broke a sweat and carried no water. Small and thin, like most Honduran men in this region, and in his 40s, he outpaced everyone, following a narrow rocky path up the mountain and scrambling effortlessly down the backside.

The scenery was spectacular. Craggy rocks covered with pines at the higher elevations, where the locals grew coffee, descended to thick green foliage. Creeks cut through the valleys, and birds called from everywhere in the brush. Butterflies fluttered about, and the occasional blooming bush perfumed the air.

Less sure-footed, we picked our way, checking our footing so we wouldn't slip on patches of scree. My back dripped with sweat, soaking my backpack. Although I needed my long-sleeved shirt and hat for sun protection, both grew wet enough to wring out.

We came to a gushing stream where we had two options for crossing: Either balance on a branch about four inches in diameter that served as a foot bridge or take off our boots and wade across, keeping our footing on the slippery rocks in the swiftly flowing water. Once on the other side, we guzzled water, sharing a bottle with Luis, and splashed water from the stream on our faces and necks.

As we descended the mountain, the first village with its tile and corrugated metal roofs appeared in the distance. At the outskirts of town, the landscape leveled out. On the village's main street, we saw elderly folks gathered near the school waiting for us. Many of the women had aprons tied over their colorful dresses, and both the men and women wore ball caps. We were late, but this was Honduran time. Luis entered the classroom announcing our arrival. The teacher led her noisy class of 20 first through sixth graders into the school yard and across the road, directing them to sit on the church steps. Their antics were quickly hushed as they resumed their lessons.

We rearranged the wooden furniture, turning the classroom into a clinic with two "offices." We set up two chairs and a desk in opposite corners, hoping the distance would create some privacy. Chris carried one desk out to the porch for registration and situated one near the door for our pharmacy. Jose and Mary lined up the extra chairs on the porch where waiting locals quickly occupied them.

Because most of the people engaged in physical labor and ate a diet of rice and beans and local fruits and vegetables, few had hypertension or diabetes. The elderly patients came with complaints of arthritis, rashes, varicose veins, and toothaches.

At the end of our session, we repositioned the desks and chairs so the class could resume. Linda videotaped the class during a lesson, and afterward the students circled around her, hooting and

pointing as they watched themselves on the camera's screen. The teacher blushed when she saw herself on the video.

We repacked our supplies, waved our farewells, and followed Luis to the edge of the village, where we ate peanut butter sandwiches, oranges, and cookies in the shade of a smooth-barked *Ceiba* tree.

We made several home visits before our last stop, a wooden shack made of weathered boards with gaps between them. Although the spacing allowed the smoke from the cooking fire to escape, it also let in mosquitoes and flies. Children and chickens ran into the house from the yard. I counted six heads; the youngest, about 2 years old, sat on the dirt floor without a diaper and played with a mangy looking kitten. Stepping over a small pile of chicken poop, we approached the patient, the *abuela* (grandmother) of this house. She lay on a 2-foot-high wooden platform, cushioned with a thin mattress and several blankets. She sat up and greeted us, smoothing her white blouse and print skirt. Shaking hands with each of us, she then pointed to her knees. They were thick with the boney changes you see with arthritis. The mother of the household rattled on in Spanish to Jose. It seemed that the *abuela*'s right knee was more painful than her left.

"She can't walk," Jose interpreted.

"Is there more?" I asked, not believing that Jose had translated everything the mother had said.

"Not really," Jose said. "She was telling me that her knees have bothered her for a long time, and that they painted clay from the creek on her knees to help the pain."

Bret and Mary examined her. When they were finished, I asked what they wanted to do.

"Acetaminophen?" Mary suggested.

"We could inject her knee with steroids," I replied. "We have the supplies." I asked if either had done an injection. Mary had performed several, but Bret had only watched, so we decided to let him do the procedure. Since Bret would begin an internal medicine residency in the summer, this was a good skill for him to learn.

We pulled our supplies out of our backpacks, opened a pair of sterile gloves, and spread the glove paper out on the corner of the bed to create a sterile area. We scrubbed off the dried black clay with water from our canisters, then Bret drew up the mixture of steroid and lidocaine. I showed him how to position the patient with her knee slightly bent and to feel for the opening between the knee cap and the end of the upper leg bone. Bret painted the knee with betadine, pulled on the sterile gloves, carefully fingered the spot, and inserted the needle. I talked Bret through each step; he performed the procedure like an expert.

With the prick of the needle the *abuela* winced, but the medicine flowed in easily. Some of the older children gathered to watch, whispering among themselves. The *abuela* thanked us as we

wiped off the betadine, applied a bandage over the injection site, and wrapped her knee with an elastic wrap. She sat up to inspect her knee and bowed her head toward us.

I congratulated Bret on his success and shooed away the black puppy who'd fallen asleep on his pack during the procedure. We left the family with two bars of soap and toothbrushes. We did not leave toothpaste because we worried that hungry children might eat it. Linda labeled a bag of 20 acetaminophen tablets with the *abuela's* name and the date. The mother of the household untied a plastic bag from a board that ran underneath the roof, tucking the small pill pack inside. This was typical storage for families, a location that was dry and up and away from children and animals.

The town of Estrella was a 20-minute hike down the mountain. We set up quarters for the evening in the one-room adobe brick school. We had about an hour until sunset. Since we were near the equator, there were exactly 12 hours of darkness and 12 hours of daylight.

Luis raced off to get our dinners. Several of us gathered water bottles and filled them with cold water that we pumped from the well and purified with my ultraviolet wand. Chris and Jose played soccer with some of the local boys on the dirt field in front of the school with a soccer ball that Chris had carried and planned to leave with the children. One small daredevil darted in at the last minute to kick the ball away from Chris, causing him to tumble. The boys laughed heartily, jumping up and down and slapping each other on the back. Red-faced, Chris stood up, and they resumed the game, playing until it began to drizzle.

The smell of rain filled the yard. Soon, a late-afternoon cloudburst pelted us and we took shelter under the eave along with the children. Chris removed his shirt and grabbed a bar of soap, lathering under his arms and over his hairy chest. The kids giggled, and a few removed their shirts and mimicked him, so he shared his bar of soap. Bret and Jose joined in, and the women stripped down to their sports bras. Within a few minutes, all of us were lined up at the edge of the porch to catch the water running off the roof. The cold water revitalized me, and the soap cut through the acrid and salty sweat generated by the day.

The drone of the rain on the roof resembled a locomotive coming down the mountain. Suddenly, it was over and we could hear the voices and clatter of neighbors as they prepared their evening meals. We dug towels out of our packs and dried off, taking turns in the school room to pull on dry clothes. Wet capris, khaki pants with zip-off legs, and T-shirts hung on the small wooden chairs and tables.

Drenched, Luis arrived with our dinners and a large watermelon tied to his back. We lined up chairs on the porch and devoured our beans, rice, chicken, and tortillas. The children eyed us hungrily. We split the watermelon with our pocket knives and handed out slices to a sea of hands. The fruit was sugary sweet. Standing on the porch, Chris spit his seeds into the yard. A few of the boys and girls followed his lead, giggling, the juice dribbling down their chins.

When it grew dark, I shooed the children away. Inside the school, we turned on our flashlights and unrolled our sleeping bags and pads on the concrete floor.

I settled my head on my fleece vest. In the distance, I could hear the sounds of the night, so different from home. A bird called with an owl-like sound. Insects chirped. Soft breathing and gentle snores began to surround me.

We rose about 6 a.m., ready for Luis when he arrived with a Thermos of hot coffee and tortillas and scrambled eggs wrapped in tin foil. Our sleeping bags were rolled up, our packs stashed in the corner, and the school room was transformed into a clinic.

On the porch, I breathed in the crisp morning air, clean and fresh after the evening's rain. The school yard was muddy and scattered with watermelon seeds and rinds. A large mango tree, the leaves a brilliant green in the morning sunlight, stood in the far corner. The doctor at the clinic in Pinares had spoken about the increase in broken arms and sprains from kids who climbed the mango trees, scooting far out on the branches to reach the luscious fruits. Luckily, mango season had ended before we arrived. A stream of patients made their way toward the school.

"Bret, come see our first patient," I called from the porch. Cautiously, finding her footing on the path down the mountain was the *abuela* whose knee Bret had injected the day before. Dressed in the same skirt and blouse and with a wide smile on her face, she leaned on a cane fashioned from a tree branch. Bret watched her progress, a look of surprise on his whiskered face. When she arrived at the porch, she hugged him, her head barely reaching the middle of his chest.

A thoughtful and quiet young man, Bret said nothing, but grinned, looking toward me. My chest was so tight with joy I felt like it might burst, much like the juicy watermelon we'd sliced open the evening before. Bret talked with his patient; she was feeling so much better that she wanted us to inject her other knee.

Moments like this are to be savored and remembered, and this is one that I have carried with me and replayed: Seeing Bret gaze at the *abuela* picking her way down the mountain. Observing his face and her face, both with broad smiles. Watching the *abuela* step up onto the porch and hug Bret, the kindness in his eyes.

At home, where material goods are plentiful, I forget to appreciate what I can do for patients. In rural Honduras, the impact of my actions is immediate and real. At home, a knee injection is a knee injection. But here, a grandmother who could not walk yesterday could tromp down the mountain today. **MM**

Therese Zink is a family physician in Zumbrota, Minnesota, and a professor in the department of family and community medicine at the University of Minnesota.



1300 Godward St. NE, Suite 2500, Minneapolis, MN 55413 - Phone: (612) 378-1875 - Fax: (612) 378-3875

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