Medicine in the Mountains

High hopes

By Rosalie Hughes

The people of the Himalayas live amid the world's highest peaks but suffer some of its lowest health indicators. Two young women with Dartmouth ties—a graduate of Dartmouth College and a student at Dartmouth Medical School—recently traveled with health-care teams to remote villages there.

Tomorrow, Mandari Buddha will leave her village in the Himalayan foothills for the first time in her life. She will leave behind four small children, an aging buffalo, and a two-room mud house that she helped build. She will walk 10 hours to a town where she will get on the first bus she has ever seen. Over the next two days, she will travel to an urban teaching hospital.

Mandari suffers from uterine prolapse, a condition in which a woman's uterus loses its moorings inside the body and drops, hanging out of the vagina. She is traveling to the city so she can have an operation to remove her uterus. The International Rescue Committee (IRC), a global humanitarian organization, is enabling Mandari and 20 other women from rural villages in western Nepal to take this trip—one they otherwise could not have afforded, much less imagined.

According to some estimates, uterine prolapse afflicts nearly one in three women in rural Nepal.

Hughes, a Dartmouth College '07, worked from June 2008 through May 2009 in Kathmandu, Nepal, for the International Rescue Committee (IRC). Her responsibilities included writing grant proposals and donor reports and supporting the IRC's Nepali field staff—including those involved in the project about which she writes here; her stay in Nepal was partially funded by Dartmouth's Dickey Center for International Understanding. She is now based in Kenya as a caseworker for the Joint Voluntary Agency, where she works with refugees who are eligible to resettle in the U.S. Either she or one of her IRC colleagues took all the photos here.

For a WEB EXTRA photo gallery with many more images of the Himalayas by both authors of this feature, see dartmed.dartmouth.edu/f09/we02.

Mandari Buddha and her son pause for a lunch of chapatis during the 10-hour trek that's the first leg of their journey.

The small group trekked for 10 hours over terrain like this—or steeper—to get to the nearest village accessible by motor vehicle.

Author Rosalie Hughes, left, is pictured with Mandari Buddha before they began the trek.

We meet Mandari outside her village. She is wearing thin canvas shoes and a red wrap skirt. On her back is her son, the size of a sack of potatoes.

Its causes—poor nutrition, multiple and closely spaced childbirths, and years of carrying heavy loads—are facts of life in this country of subsistence farmers.

Women spend their days fetching water and firewood and gathering grass for their animals, often walking for hours with loads that weigh up to 75 percent of their body weight. To help ease the workload, families have an average of five children. When the rain or soil is bad, they eat less.

The onset of uterine prolapse is gradual. If it's caught early, it can usually be prevented by pelvic-floor contractions called Kegel exercises or by the insertion of a vaginal ring. But left untreated, the uterus can eventually drop outside of the body. When this happens, only surgery—a hysterectomy—can fix the problem.

According to the United Nations Population Fund, some 200,000 women in Nepal are in immediate need of this surgery. Until last year, no one in rural Nepal had access to such a procedure. Due to long-term systemic problems, aggravated by a recent decade-long civil war, most of the government clinics in Nepal's hills are nonfunctional.

In the summer of 2008, the IRC received funds from the European Commission's Humanitarian Aid Office to improve health-care access in Jajarkot, one of the poorest of Nepal's 75 districts. In conjunction with local partners, the IRC is now training health workers, delivering medicines, fixing buildings, and improving water and sanitation facilities in 10 rural clinics. The team also runs reproductive clinics, educating and diagnosing women affected by uterine prolapse.

Recently, the program began helping patients with advanced cases of the condition travel to the city for surgery. I am following one of these women, Mandari, from her remote village in Jajarkot to a hospital in the region's largest city, Nepalgunj. The journey to the hospital involves climbing over a mountain (and in this area of the world, no mountain is small), and then riding on a bus with 20 other women. With luck, the trip will take two days. If protestors block the roads, the bus breaks down, or the road is out, it may take longer.

The day before we depart I meet Mandari, a small woman with high cheekbones, two heavy copper nose-rings, and a bright red swath of cloth wrapped around her tiny legs. Mandari tells me her fears as Rajan, a public-health worker from the IRC, translates for us.

"Cars," she says. She sticks out her tongue and makes a raspy "blahhh" noise, mimicking vomiting. A neighbor told her that motor vehicles make you vomit. She's also worried about leaving her buffalo behind. "She's feisty," Mandari says of the animal. "She doesn't let anyone but me milk her." Mandari makes the "blahhh" sound again, this time clasping her bony hands to her neck. "She's afraid she'll die," translates Rajan.

Mandari thinks she is about 35 years old. Orphaned at four, she grew up with seven siblings in a one-room mud house. Ever since she learned to walk, she has fetched water, cooked chapatis, and carried grass to feed the animals. She married at 17 and then gave birth to six children—five of whom survived. Her oldest child, a daughter, is now 10.

Mandari's day starts at 4:00 a.m. She lights a fire, milks the buffalo, then makes tea and chapatis for her family. She leaves by 8:00 for a four-hour hike to the jungle to collect firewood and grass for her animals. By 8:00 p.m. she has cooked dinner, cleaned up, and, exhausted, is ready for bed.

In July of 2008, her routine changed. Something started coming out of her vagina. It became painful to walk, lift heavy loads, and milk her buffalo. She could no longer make love to her husband. And only he knew about her problem. She could not tell anyone else, since weakness in a person's sexual organs is considered a bad omen.

Finally, in October, the pain became unbearable and she sought help. After attending an IRC-sponsored clinic in her village, she learned that the bulge coming from her vagina was her uterus.

If left unattended, she was told, it would become ever more painful. In time, as sensitive tissues that belonged inside her body were exposed, ulcerations would form and fester. Eventually the condition could kill her. The only way to fix it was through surgery.

"You're lucky," she was told. "The IRC will pay for your surgery." But Mandari did not feel very lucky; she was afraid to leave home, afraid the surgery would kill her.

But the pain was so bad. Her husband insisted she go. "Who will take care of our children if you die?" he asked. So she signed up.

She pauses in the telling of her story. Tomorrow she will embark on the most frightening journey of her life, but right now she has to go home and make dinner over a wood fire.

The next morning, Rajan and I meet Mandari at the top of a small hill outside her village. She is wearing thin canvas shoes and the same red wrap skirt she wore yesterday. Strapped to her back is her youngest son, the size of a sack of potatoes.

Above, the village where the trekkers will meet the bus comes into sight. At left, Mandari walks along its dusty main street.

The journey to the hospital involves climbing over a mountain (and in this area of the world no mountain is small), and then riding on a bus with 20 other women. With luck, the trip will take two days.

The trail heads immediately up, and I in my fancy American hiking boots am soon left sweating behind Mandari in her primitive footwear. Several hours, and thousands of uphill steps later, we come upon the only settlement we pass on the way to the bus—20 mud huts spread across a steep hillside. Mandari unwraps a canvas sack full of chapatis, chutney, and leaves stuffed with rice pudding. She offers her food to everyone. The chapatis are fresh,

None of the women who take this bus to the hospital have ever been so far from home. Mandari has never even seen a motor vehicle.

The bus trip takes two days. Outside the bus windows, buffaloes and rice paddies give way to metal road signs and fruit stands selling pyramids of oranges.

made with whole wheat, as thick as the sole of my boot. The chutney spices taste like they were ground that morning, which they were.

After filling our bellies, we continue the climb up and up—past trees and rice paddies and clusters of grazing buffalo. The path is rocky and steep, unrelentingly steep.

Ten hours later, the sun is about to duck down behind the hills, and men carrying sacks of rice hurry past us to reach their homes by dark. We round a corner and see, instead of more trees and mountains, a cluster of mud homes. Mandari, who hasn't spoken in hours, brightens and says something to Rajan in Nepali. "She says she wants to go back to her village," Rajan says. "It's a joke!" he explains, but no one has the energy to laugh.

We enter the town on a wide dirt track. A few dozen shops line the street. Old men sit behind wooden tables, sipping milky tea from glass cups, staring at us.

We pass a truck, and Mandari stops. She peers through its windows, examining a motor vehicle for the first time in her life. She smiles distantly, an expression I see again as she encounters other firsts—a stereo blasting Hindi film music, fake leather jackets, powdered milk.

The next morning we join the other 20 women who have signed up for the surgery. Deep wrinkles line the faces of the older ones. Two gold-colored rings decorate each woman's nose, and heavy beaded necklaces hang from their thin necks. They all wear brilliant wrap skirts and flat canvas shoes. Most of the women have walked for days to get here. None of them have ever traveled this far from home in their lives.

I talk with an older couple sitting apart from the rest of the group. The woman's earring holes are dime-sized, weighted down by thick, gold hoops. The man's hair is storm-cloud gray. He talks. She bites her nails. "Nineteen years," he says. "She's had the problem for 19 years." The woman looks at the ground. For the first 18 years, they had no idea what was wrong. "We thought she was a mutant," he says. Then last fall they attended a reproductive health clinic run by the IRC, the first of its kind in their village. They learned about the condition and about this opportunity to have surgery to fix it.

"And what is it like to be surrounded by other women who have the same condition?" I ask. The husband begins, but the woman interrupts him, speaking for the first time.

"Before this trip, I thought I was the only one in the world who had this problem," she says. "Now I see I'm not alone."

I ask her how she feels about the surgery. Her calloused fingers fiddle with the bead necklace hanging from her neck. Her eyes moisten. "I feel afraid I might die."

Over the next few days, I hear this same fear repeated. Often the women clutch their necks as they tell me this, just as Mandari had a few days ago. I ask why they've come if they think they'll die. The answer is always the same: "If I don't have the surgery, I will die anyway."

The bus trip takes two days, first along the narrow winding roads of Nepal's hills then on the straight roads of the country's flat southern plains. Outside the bus windows, buffaloes and rice paddies give way to metal road signs and fruit stands selling pyramids of oranges. As we near the hospital, rickshaws, motorbikes, and buses crowd the road. The women chatter, point outside, and exchange excited smiles and laughs. A younger woman points to a bike outside the window. "What is that?" she asks. "A cycle," the old woman next to her says. She explains that it's meant for one person, but two or three people can fit, too.

But the bike is forgotten as the young woman sees a more awesome sight ahead—a multistory brick complex bigger than any building she has ever seen before: the hospital.

Inside, the hospital is a maze of long, white hallways. It smells of curry and urine and Lysol. Men in white jackets bustle by, clipboards in hand.

We go to the preoperation ward. White beds line a room the size of a basketball court. Nurses in starched white robes assign a bed and a number to each woman. The women's pink and red wrap skirts, their turquoise scarves, and the colored tassels dangling from their braids stand in stark contrast to the bedsheets.

Over the coming days, the women are checked and rechecked by doctors in white uniforms. They have x-rays taken and their blood tested. They coo over Mandari's son, tickling his tiny feet and commenting on his chubby cheeks. They doze in the sun and braid each other's long, black hair. Mostly they wait.

The second night, I hear a chorus of giggles as I approach the preop ward. I see an old woman dancing in the middle of the room. Her arms wave, her arthritic body spins in stiff jolts. The women in her corner are clapping and cheering. Then the old woman turns to Mandari, who is in the bed right next to hers. She holds a sack of air in her hands and points to Mandari's crotch. Still dancing, she mimes the sac hanging and wobbling between Mandari's legs. Mandari laughs—the first time she's laughed since leaving home. The old woman makes a cutting action with her hands and grunts. The room erupts in laughter—years of suffering in silence released.

It is the afternoon before the operations. I talk with Mandari as we sit on a concrete bench outside the x-ray room. I ask if she's afraid. She clasps

Above is the Kohalpur Teaching Hospital, where the women will have their operations. At left is the hospital's preoperation ward.

The women are checked and rechecked by doctors in white uniforms. They have x-rays taken and their blood tested. They doze in the sun and braid each other's long, black hair. Mostly they wait.

While they wait for the day of their operations, some of the women—including Mandari, second from the left—pass time in the sun with Mandari's son Babu.

On the eve of the operations, I come to wish the women good luck. Most are asleep, but Mandari is grinning broadly. "Malaii kushi laghyo," she says. *I am happy.*

my hand. "Not afraid at all," she says. Her smile is easy. "I feel strong, and ready."

The benefits of this trip are clear: The lumps plaguing these women will be removed. They'll be able to walk without pain, bend over to milk their buffaloes without feeling ill, and make love to their husbands again. But something bigger happened during the journey—the women are now talking, sharing stories, and laughing. They are coming out of what must have been a terrible, isolating situation. They know now that they are not alone.

On the eve of the operations, I come to wish the women good luck. Most are asleep, but I see Mandari grinning broadly. She clasps my hand and points to her nose. Both rings are gone. She whispers that the doctors made her take them off. She looks naked, anonymous without them. She asks me to touch her nose. We giggle.

"Malaii kushi laghyo," Mandari says to me, over and over again. *I am happy.*

Epilogue

I had to return to Kathmandu on the day of the operations. An hour before my plane took off, Mandari had her surgery. From the corner of a sterile operating room, I watched the doctor and his team of six remove her uterus.

A heart monitor beeped. The surgeon sat between Mandari's spread legs—cutting, poking, sewing, pulling, sopping, tying, and squeezing. His thick fingers moved quickly. His eyes squinted behind thick glasses. A green vein on his forehead protruded.

Mandari's face was covered with a clear plastic mask and her body with a thin blue sheet; her bird-like form was barely evident on the operating table. She spoke once, to say that she was cold. Her voice was faint but recognizable, like the rest of her.

Fifty-five minutes after the first incision, the doctor finished the last stitch. On the tray behind him lay Mandari's potato-sized uterus. The sac had carried her tiny son and her five other children. Then it had failed her, had made working and walking and making love at first miserable and eventually impossible.

Her operation was successful, as were all the others. Mandari and her son Babu are now safely home, and she is milking her buffalo—without pain.

Monumental challenges

By Katherine Kosman

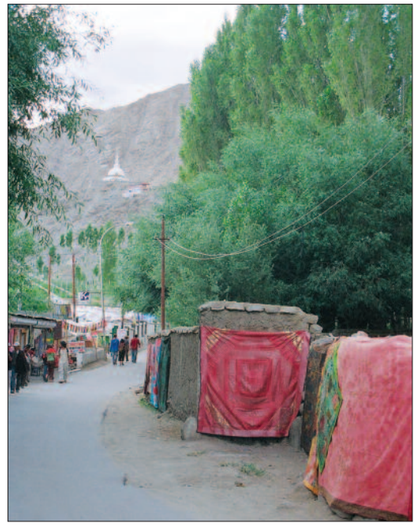
As our plane drops below the clouds, the snowy peaks of the Himalayas come into view, rippling across the horizon. Soon we're landing in the sunlight-splashed valley at their base. The plane's altimeter still reads 10,000 feet, but we have arrived in Leh, India.

In Leh, cows, cars (with their horns blaring), motorcycles, pedestrians, and stray dogs all compete for the right of way on narrow streets with no defined lanes. Peddlers come out of nowhere selling drums. Barefoot young men beckon passersby into tiny shops to sit on a comfortable couch and sip a cup of ginger-honey tea. Hand-stitched cashmere carpets, so beautiful that even the backs are a feast for the eye, line the thoroughfares. Colorful prayer flags flutter in shop doorways and from the eaves of buildings, against the deep blue sky and the temples built into the encircling hills.

But beneath the aural and visual chaos, I discover that Leh has a peacefulness all its own. Just a short hike away is Leh Palace, whose stone corridors exude calm and whose prayer room can only be entered barefoot. Nearby, Shanti Stupa Temple towers above the city in white, shining glory. From the steps leading up to it, I watch my first sunset on the top of the world.

It is the summer of 2008, and I have traveled here to work with the Himalayan Health Exchange. I had read about the spectacular entry into Leh. But nothing could have prepared me for the awe-inspiring panorama of the mountains or for the journey of discovery that still lies ahead of me.

I will return to Leh later, between trips into the mountains, but this initial stay isn't long—just long enough to become acclimated to the altitude. Soon our group departs on a six-hour drive into the mountains to establish temporary, makeshift clinics, mostly housed in tents that we carry with us. The team includes a handful of M.D.'s and numerous medical students from the U.S., the United Kingdom, and Canada, plus a few dental students. We students are assigned variously to rotations in the tents for internal medicine, women's health, ophthalmology, minor surgery and sutures, orthopaedics, or pediatrics, in addition to helping with patient triage and the pharmacy tent.



Above, the city of Leh lies below as the sun sets over the Himalayas in the distance. At left, Shanti Stupa Temple rises above the city streets.

Beneath the aural and visual chaos on the city's streets, I discover that Leh has a peacefulness all its own. From the steps of Shanti Stupa Temple, I watch my first sunset on the top of the world.

We arrive for clinic early each morning, but the patients are there even earlier—sitting along concrete walls, holding small children, clustering around the tents. Every day is chaotic, exhausting, and challenging, but rewarding beyond measure. I quickly come to value the independence I'm given. My fellow medical students and I are thrust into collecting medical histories, conducting physical exams, formulating assessments, and proposing medication plans before we present each case to our attending physician. As I strive to gain patients'

Kosman, a Dartmouth Medical School '11, holds a B.S. in electrical engineering from Washington University in St. Louis and before coming to DMS worked for four years as a risk and opportunity manager at Raytheon. She writes here about her experience serving with a health-care team in India. Kosman also wrote about another international experience—in Vietnam—for the Student Notebook essay section of Dartmouth Medicine's *Winter 2008 issue (see* **dartmed.dartmouth.edu/w08/e01***). Either she or another member of her group took all the photographs here.*

On her first day, author Katherine Kosman, left, helps tend to a boy who has badly injured his heel.

The wound looks bad, but the boy evinces no pain or fear. As I scrub it with antiseptic, I look up at exactly the right moment to see his face widen into a huge grin.

trust, listen to their hearts, draw diagrams to explain pill schedules, I begin to feel like a doctor.

On our first day out, I'm assigned to a catch-all surgery/orthopaedics/pediatrics tent. Being brand new, I'm not sure what to expect—but I learn quickly that in this tent that's the case even for old hands, as here one never knows what the next case will involve. I also learn quickly that I love the pediatric patients. They approach us shyly but warm up fast. I soon feel like I have my own little fan club.

Toward the end of that first day, a small boy enters the tent and shows us where a fall has badly ripped the bottom of his heel, exposing deep layers of skin. Our plan is to remove the epidermal wreckage, clean the wound, and bandage it. It looks bad, but our patient is quiet and stoic, evincing no pain or fear. Still, I worry that the antiseptic might sting badly, so I proceed with care as I clean the wound. Then my attending reaches over to demonstrate that I must scrub the area fiercely to be effective. Continuing as instructed, I look up at exactly the right moment to see the little boy's face widen into a huge grin due to my inadvertent tickling of his foot. A moment later he's giggling so hard that he almost squirms out of the little clinic chair. Then all the other nearby children—who'd been observing his fate with concerned silence—erupt in shared laughter. It's a priceless moment of bonding and friendship. As I send the little boy on his way, it occurs to me that the ability to turn stoicism to joy may be our most powerful medication.

As our travels continue, I encounter many such moments of light-hearted charm, but also many dismaying reminders of the limitations of international medicine.

For example, numerous elderly patients with aching knees come to see us. We can't begin to help them without first finding a translator. Translators are a major limitation in our ability to treat the long lines of patients waiting for care. Conversations are often a three-way, circular affair—from English into Hindi, then Hindi into the local dialect, then back again the other way. And even with a translator, interviews prove frustrating. For patients with knee pain, I start by asking if they have pain anywhere other than their knees. A several-minute conversation proceeds around the circle in various languages. Finally, I get back a one-word answer: "No." What words have been added and subtracted along the way, I will never know.

Then the patients commonly volunteer to peel away their heavy tunics and layers of wool socks to show me multiple scars on their knees. Pink and about the size of a thumbprint, these lesions are an aftereffect of a traditional therapy, in which herbs are pressed onto the skin with a heated rod. Many of our patients believe these treatments help them feel better. But they also got relief with the tiny white pills they obtained at last year's tent clinic, so they have come back for more.

As the days pass, I begin to reflect deeply on my role here, on what it means to introduce Western medicine to a remote region. Two patient encounters crystallize for me this intersection of culture and technology:

One day, a Tibetan monk finally works his way to the head of the line outside the one-room building where my clinic is located that day. Silhouetted by the outdoor sunshine, he enters the room's shadowy interior. His soft sandals whisper against the sandy floor, and his floor-length red tunic swishes softly. As he sits down, I hear a ringing sound and am amazed to see him reach his hand into the folds of his tunic and extract a cell phone. He politely excuses himself to take the call and steps outside. I will never forget the sight of this noble monk, leaning against a rough stone wall and laughing deeply as he speaks into his silver phone, gleaming in the bright sun.

That same day also brings an elderly gentleman to my clinic. He has a long history of tuberculosis (TB) and Pott's disease—a form of TB that affects the spine and causes bone loss. He is frail, weak, and thin because of his inadequate access to medical care. I know that if he lived in the U.S. he'd almost certainly have long ago received therapy to halt the progression of his devastating illness.

In fact, every day we see deep distress that our fragments of modern medicine can only begin to put right. Our group includes an attending ophthalmologist, and we are also armed with vision charts and eyeglasses. But when I work on the ophthalmology service, I listen with a lump in my throat as elderly patients quietly recount the vision they've lost to glaucoma or cataracts.

How, I wonder to myself, can we keep from internalizing our patients' worries about their declining health, their fear of the unknown? How can we keep from being paralyzed by the wish to always do more? On the pediatric service, I see child after child with severe iron deficiency. The parents are worried about their children's tiny size, about their compulsion to gnaw on rocks—a craving caused by the mineral deficit. We can offer medicine to address this condition, but is that sufficient when these families can barely wrench enough to eat from the dusty landscape in which they live?

Yet in this almost mystical setting, I feel honored to connect with these individuals. Their expressions of sheer joy, despite their treacherous treks to reach us, touch me deeply. One after the other, my patients clasp their hands in prayers of gratitude, offering their blessings and thanks for our services. Their appreciation becomes addictive, and I cannot wait to reach out to help another ill person.

Above, Kosman cares for a Tibetan monk who surprises her by pulling a cell phone from his tunic. At left is the makeshift pharmacy tent.

We see deep distress that our fragments of modern medicine can only begin to put right. I listen with a lump in my throat as elderly patients recount the vision they've lost to glaucoma.

Long lines of patients, many of whom have walked for days to get to the clinic, are queued up each morning outside the triage tent.

By the last day, we're debating how to parcel out our remaining supplies to the countless pleading patients, all of whom clearly have a bona fide need for our now-meager offerings.

As I work my way through the endless lines of patients, I continue to ponder these dilemmas and contradictions. On the very last day of clinic, my very last patient tells me that she is 25 and that she has come to see us because she often has headaches. It's a common complaint. Every day, people clamor at the pharmacy for sunglasses, because the sun is much harsher at high altitudes and often causes headaches. By the last day we are running short on supplies, most of them donated, and we've started debating how to parcel out the remaining glasses (and pills) to the countless pleading patients, all of whom clearly have a bona fide need for our now-meager offerings. It has been a rough day, with two older men demanding in an unusually forceful fashion that they be allowed to cut in line to get care for their painful joints.

I am stationed in the smallest clinic space, a room no bigger than my closet back home, interviewing this young woman. Maybe her headaches are caused by the sun, or maybe they are migraines. She has noticed some blurry vision that might also be causing them, so we figure we'll send her to the ophthalmology tent for a vision check. But then our 17-year-old translator mentions that our patient has been slurring her words and not speaking clearly. An attending joins me, and we end up doing a neurological exam—testing her reflexes, her memory, her sensory and motor systems. I watch as our patient struggles with and fails one simple task after another. My heart breaks as my idealism collides with the reality that this 25-year-old woman may well have a brain tumor.

The good news is that a team of surgeons will visit the Himalayas in a few months, so our patient may be able to get diagnostic imaging and surgical treatment. But the surgeons will be in Leh, a six-hour drive away, and cars are rare on these isolated roads. What does it mean to suspect a challenging diagnosis in the middle of nowhere?

We ask our young translator to explain all this to the patient, to tell her the date on which she can find further help in Leh. But our translator doubts that the patient will remember the information, as her memory has already been affected. So the translator says she'll take it upon herself to pass along the information to the patient's family. I am not sure if I should be more troubled that this extremely young-looking 17-year-old girl may not understand the heavy responsibility she has assumed, or that she *does* understand it.

Upon my return to Leh before I fly back to the United States, I take the opportunity to once more climb the steps to Shanti Stupa Temple. This time, my stride feels stronger. Not only am I acclimated to the high altitude, but I'm also fortified by the insights I've gained since my earlier visit up here.

Returning to watch another sunset on top of the world, I reflect on my time in the Himalayas. I have gone barefoot into temples and monasteries. I have seen breathtaking beauty unfold before me—its proportions more majestic than any fairy-tale illustration. I have run barefoot through expansive sand dunes that lead nowhere in all directions. I have watched wild horses gallop through lush meadows. I have journeyed by jeep to the top of the highest drivable road in the world.

And, most memorably, I have encountered endless lines of people who need medical care. The endlessness of this need is mirrored by the landscape we've traversed—with the windows of our jeeps down; the dust swirling through the crisp, thin air; the beat of local pop music pulsing through tattered speakers under the well-worn bench seats upon which we perched.

As I stand there, with Leh spread out in the sun-dappled valley below me, I try to imprint these and so many other memories on my brain so I will never forget them. Several nights when we were up in the mountains, we all slept under the stars. Even after a tiring day in clinic, I would fight to keep my eyes open because every few minutes a shooting star would blaze across the sky. Unlike those split-second flares, I know already that my experience with the Himalayan Health Exchange will not be a brief spark in my education and career. I have been forever changed by the patients for whom I cared, by the attendings and fellow students who served with me, and by my own growth along the way.

Now, more than ever, I look forward to the rest of my journey in medicine.

Epilogue

At one point during our travels high in the Himalayas, we passed a hand-painted concrete road sign that said something like "A life without vision and courage is a blind journey." During my time there, I definitely felt as if I was in unguided territory as I grappled with questions that no one seemed able to answer. Since then, I have continued to try to come to terms with them.

What does it mean to tend to an elderly man who has experienced extremely painful joints for 30 years, if our makeshift clinic can dispense only an arcane word like osteoarthritis and a two-week supply of ibuprofen? Is it useful to merely supply knowledge—such as why someone's vision has grown cloudy, why someone feels chest pain after eating spicy foods, why a child eats sand, why an elderly person's joints hurt? Do our fancy explanations really benefit these people in the middle of nowhere, with little or no access to follow-up care?

If they did not know the word osteoarthritis, would they just continue to think that joints become sore after decades of trekking over cold mountain ridges and long days of working the fields? If they had not experienced two weeks of a magical white pill called ibuprofen, would they just continue with Tibetan traditional medicine? And once they experience the benefits of Western medicine, what happens when their pain returns but the doctors don't? But how do we parcel out lifetime prescriptions from scanty supplies to an endless line of patients? And even if we could, how would we offset the side effects from the daily attack on their stomach linings from the harsh pills?

Each day after clinic, as the dust settled literally and figuratively from the swarms of patients waiting in the hot sun, my thoughts turned inward to questions like these. As students, were we there to improve our clinical skills, to travel abroad, to meet new friends? Or were we there to really take a stab at saving one corner of the world, one person at a time? What level of responsibility do foreign medical groups bear? What responsibilities do their home institutions, cities, and countries bear?

One of the first rules of medicine is to do no harm. Are we achieving that goal? ■

Above is the caravan of jeeps that transported Kosman's team to the clinic sites. For many more photos by the authors of both these sagas, see dartmed.dartmouth.edu/f09/we02.

The endlessness of the medical needs we've encountered is mirrored by the landscape we've traversed—with the windows of our jeeps down and the dust swirling through the crisp, thin air.