An eye on Nepal: We have much to teach, and much to learn

Martin Spencer, MD, FRCSC

Martin Spencer photos

My family and I arrived in Kathmandu early in 1987 after I had offered to do 5 weeks of volunteer work for Seva, a charitable organization engaged in treating eye disease in Nepal. After that experience, my patients are not the only ones who now see things differently.

The main focus of Seva's work in Nepal is Bhairahawa, a town in the Terai (plain) region. Elliott Marseille, the program coordinator, informed us on our arrival that we would be spending most of our time there.

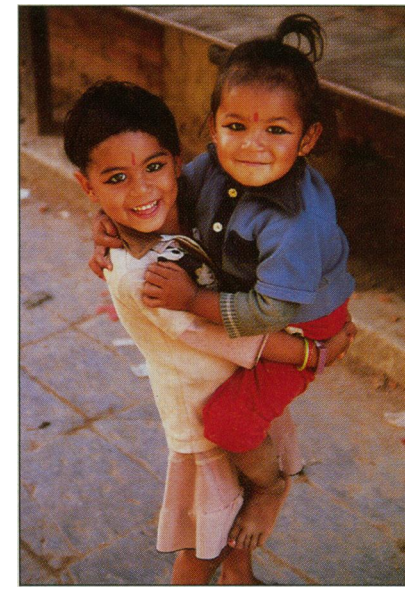
We spent the next 5 days building up blood levels of chloroquine. While struggling with the reluctance of my two young daughters to swallow the extremely bitter tablets I reflected that a month at a decadent Caribbean resort would probably have cost less than our air fares to Nepal. A resort, though, could not provide the memories I have of filthy and fascinating Kathmandu, of ancient wooden pagodas beside heaps of garbage, of streets teeming with the astounding ethnic mixture that is Nepal.

Seva, which is the Sanskrit word for service, was founded by a group of health care workers who had been key members of the World Health Organization team responsible for the eradication of smallpox in the mid-1970s. In Nepal it manages the government's blindness program in the Lumbini zone — one of 15 in the country — where it employs three Nepalese ophthalmologists and numerous assistants and support personnel, and provides the necessary equipment and supplies. It also offers assignments to North American ophthalmologists willing to undertake volunteer work.

A short flight took us from the cool mountain air of Kathmandu to the hot and dusty Terai. The rickshaw that carried us to Bhairahawa travelled through a sea of dust on roads choked with cows, goats and people. The town is only 5 km from the Indian border, and 80% of the residents are of Indian origin.

Our hotel — "The Only Star Hotel in Town" — made the one in Kathmandu seem like the Ritz. Hot water came in the morning, by appointment and by bucket — two buckets available on special request. Meals in the hotel restaurant were not infrequently punctuated by the terminal squawks of that day's entrée.

Cars were rare in Bhairahawa, taxis nonexistent. We travelled by foot or on the ubiquitous pedal rickshaws, which carried everything from people to pigs and construction supplies. We were pedalled to the local hospital, a one-storey brick and plaster building that looked like something from a Graham Greene novel, and there I met Dr. Pant, the Nepalese ophthalmologist overseeing Seva's program in the Lumbini zone. A gentle manner and beatific smile belied his enormous energy and dedication. The operating room he showed me was far from advanced by western standards, but it did boast an adequate operating microscope which had been donated by Japan.



Street children play in Kathmandu

I was soon put to work in the outpatient clinic, a small, dark room furnished with two crude wooden tables and a slit lamp. Lined up outside my door — perhaps milling would be a more accurate description — were some 50 patients. I sat at one of the tables and, with the aid of an assistant-interpreter, took brief histories and completed examinations. Problems were treated with a small supply of drugs, mainly antibiotics and ste-

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Cataract patient, after surgery

roids. Candidates for surgery were admitted for operations that would take place the next day.

Work continued until all patients had been seen, so the length of my workday at the hospital varied considerably. On market days 200 patients might visit the clinic, while a slow day might bring only 80.

Generally, the pathology was similar to that seen in North America, except that the disease was usually more advanced. Patients with glaucoma commonly presented with one eye already lost and the other severely diseased. There were also the inevitable cases of trachoma and xerophthalmia (dryness of the conjunctiva and cornea due to vitamin A deficiency — night blindness is one of the first signs), although these were not as common as in many developing countries. However, cataract is by far the most common cause of blindness in the country.

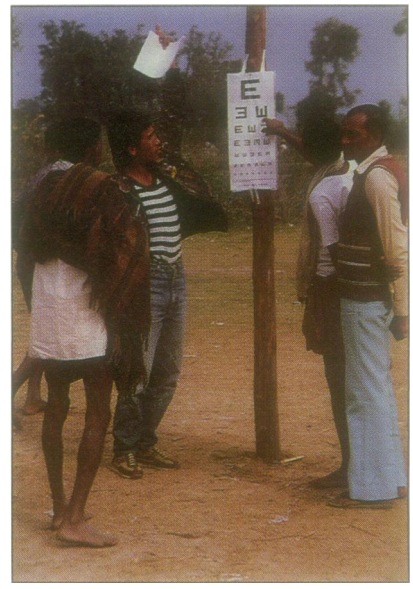
It is unfortunate that there are as yet no facilities for corneal transplantation in Nepal, for I saw many small children with bilateral severely scarred corneas. This condition often appears when a malnourished baby suffers a dehydrating illness. The combination of poor nutrition, corneal exposure and even mild keratitis results in severe scarring and the child is left blind upon recovery from what would be considered a minor illness in our country.

On my second day I received a more practical introduction to the operating room. After changing into rather worn OR greens and rubber thongs, I briefly examined that day's patients by flashlight and made decisions about the appropriate surgical procedures. I washed with a bar of soap and cold water in the small scrub room, and followed that with a rinse in hot water taken from a large teapot. My search for gloves proved fruitless.

My first patient staggered in under the weight of 5 mg of Valium, a considerable dose in a country where the average woman weighs 40 kg, the average man 45 kg, and everyone is unaccustomed to medication. My assistant had applied the local anesthetic and, employing a mix of local instruments and my own, I began my first intracapsular cataract extraction in 5 years. The cataract turned out to be hypermature and emerged quivering like a small water balloon. The operation was completed uneventfully, but I knew that I could not handle many such cases without rupturing a lens capsule.

When I announced that the next cataract would be removed by extracapsular extraction, there was a buzz of excitement — a few had been done here, but the procedure was still considered a novelty. By the third case, I was feeling quite comfortable. I was no longer surprised to have alcohol poured over my hands in lieu of scrubbing, and to see instrument tips wiped with gauze in preparation for the next procedure.

The third cataract operation was difficult because the local anesthetic was ineffective. As I opened the eye it was apparent that there was considerable vitreous pressure and I remarked that the case would be a difficult one. As if in response, the lights went out. The OR staff said nothing — two flashlights materialized and were pointed at the patient. I was used to performing this surgery with fibre-optic coaxial illumination, so this seemed more than a little daunting. I forged ahead, sweating profusely, and tried to hide my surprise when the case was completed successfully.



Testing vision at eye camp

The next two procedures were carried out in the same conditions, and when the lights finally came back on no one so much as looked up. Clearly, blackouts were commonplace.

Even though vegetables are readily available in Nepal, particulary squashes rich in vitamin A, there is a significant incidence of xerophthalmia and Seva is conducting a public education program that encourages children to eat appropriate foods. My wife Trish is a professional cartoonist and immediately began producing cartoon posters for the night-blindness program.

The three Nepalese ophthalmologists employed by Seva are all based in Bhairahawa and at any given time at least one of them will be conducting weekly clinics in the neighbouring towns or at a "cataract camp" in a more remote village. Not long after our arrival we took part in one of these. The 130-km trip took more than 9 hours, partly because of the terrible road conditions and partly because we picked up a passenger, one Dr. Bisi.

Bisi was a Nepalese general practitioner who had decided to enter politics, and he worked only enough to support himself

while he campaigned for election to Parliament. He appeared to give free consultations in lieu of kissing babies, and we stopped at every hamlet while the doctor gave a whistle-stop address to anyone who would listen.

Samdhi Kharka, the site of our camp, is a village of about 500 residents nestled in a river valley. The accommodation here made our hotel in Bhairahawa seem palatial. Our room featured a mud floor, one wooden chair and the usual microbeds. There was no hot water, no electricity. The "restaurant", a house in which the dining room was open to the public, served the two meals eaten by most Nepalese: *dal-bhatt* (rice and lentils) for breakfast, *dal-bhatt* for supper.

Being wealthy tourists, we could afford to have the goat or chicken that was available on occasion. The evening meal was usually seen tied near the restaurant in the morning — our children eventually figured this out and confronted us with the piles of hair (or feathers) that appeared mysteriously each evening. All meats were prepared by dicing the animal into bite-size pieces, without regard to anatomy, and the boiled fragments we ate were often difficult to identify as to species.

Our clinic was held in the community hall, where a small vestibule served as an outpatient clinic for the screening of patients. Some were from the village, but most had walked for up to 5 days to get there. Those who were blind were sometimes carried. On our first day I shared outpatient duties with Dr. Dhital, the Nepalese ophthalmologist who had accompanied us.

Once again I had a Nepalese interpreter. I advised him that I needed to know the chief complaint of each patient. My first patient was led in, and promptly stumbled over the examination chair. After an exchange that lasted several minutes my interpreter turned and said earnestly: "Can't see. Since 2 years."

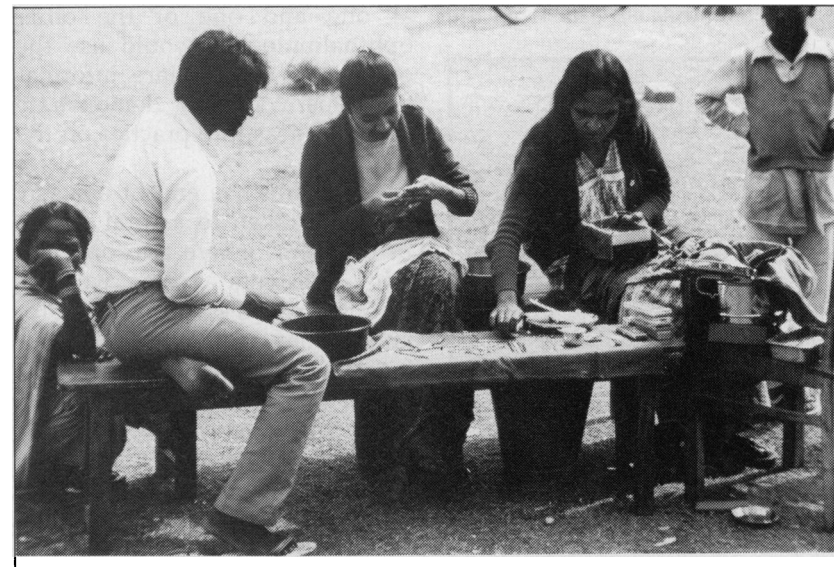
Beginning the second day, Dhital manned the clinic while I operated. I scrubbed outside, drawing an audience of about 25 wide-eyed children. Dressed in a green scrub suit and wearing magnifying loupes over my glasses, I was an object of some curiosity. I then entered the operating theatre, a tiny room that was pitch dark save for the light from a propane lantern. A narrow wooden table held supplies, while the other served as the operating table.

I had already recovered from the shock of operating by flashlight, but now had to take the plunge of operating with the loupes. Without the luxury of the microscope, however, certain parts of the operations consisted of going through the motions, as there was minimal visual or tactile feedback. However, over the following week I handled several complicated cases as well as innumerable routine cataract operations.

Doing these operations without a microscope was hair-raising at first, but in the end I found my work in Nepal less stressful than surgery back home, even though there was more of it. In the West everything is expected to proceed like clockwork; when it doesn't, blood pressure rises. In Nepal, smooth operations are the exception, not the rule. The result is a flexible approach, a more relaxed atmosphere.

After their surgery patients were placed on straw in the meeting hall's main chamber and covered with the blanket each had brought. They stayed there for 5 days, during which rounds were conducted every morning — patients were lined up by the assistants and inspected by flashlight. Their dressings were held in place by a single piece of tape that was raised for inspection and the placement of drops and then stuck down again. Orders were also written on the dressings, which were seldom changed. Despite the primitive conditions I did not see as much as one case of post-surgical endophthalmitis.

While I worked, Trish and our daughters, 7-year-old Nicole



Ophthalmologists' assistants prepare instruments at eye camp

"Children are left blind upon recovery from what would be considered a minor illness in our country."

and 5-year-old Laura, made short treks into the surrounding hills or spent hours drawing. The youngsters attracted considerable attention everywhere we went in Nepal, but here they felt like royalty. White children had probably not been seen here before, and they were often mobbed.

With no evening entertainment and little light, we spent hours talking with Dhital, a warm and well-educated man who was cheerfully cynical about Nepal and life in general. He took great delight in needling the unfortunate Dr. Bisi, insisting that he would soon lose his idealism and become as venal as most other politicians. We learned much about the country's customs, religion and politics, all of which engender, by turns, despair and hope.

The Nepalese feel much the same about India as Canadians do about the United States — India is the omnipotent big brother who does everything well, while all things Nepalese are considered inferior. In a material sense, that isn't far from the truth. Nepal's main export is labour, followed by hydroelectric power — its road system is so poor that it would have great difficulty exporting anything else.

Spiritually, however, we have much to learn from the Nepalese. They are uniformly friendly, open and stoic, the latter not in any passive sense. They are an inordinately happy people even though they possess so little, and do not appear to resent the possessions of others, even though they still want to achieve more for themselves and, especially, their families.

Our stay in the village was fascinating, but it did make us appreciate the "luxury" of our hotel when we returned to Bhairahawa. By now I realized that quite modern surgery was possible in the camps, where the largest volume was carried out, and I set about teaching the Seva ophthalmologists newer techniques in the operating room and through lectures. Since there were two operating tables in the operating room, I would operate at one and one of the other ophthalmologists would use the other. We could share information this way and demonstrate and put ideas into practice on the spot.

Towards the end of our stay we were taken to a rural village in the Terai where two ophthalmic assistants were working through Seva's outreach program. They would travel to villages and screen for eye disease, bringing patients back to the town for surgery. Though many of these villages were no more than 30 km from Bhairahawa, their inhabitants seldom travelled there and usually didn't know that blindness could be treated. Even when they learned that it could be, it was often a battle to persuade them to make the "huge" journey, even though Seva covered all costs.

The village we visited had changed little for hundreds of years. The inhabitants were self-sufficient save for the need to buy kerosene and salt, and money was not used in the village. Animals usually occupied at least one room in the mud and bamboo houses. Canadians would probably call this squalor, yet the overall impression I received was one of cleanliness and contentment.

When we arrived one of the assistants was engaged in a spirited exchange with an elderly couple — both husband and wife had been blinded by cataracts. That morning they had agreed to travel to town for operations, but then had changed their minds. They were surrounded by half of the village's inhabitants, who kibitzed and encouraged the couple to go. Ultimately, they did.

When we finally returned to Kathmandu there were still cows and filth in the streets, but it seemed like New York. We were even faintly resentful of the tourists. We had grown accustomed to seeing few of them and it was something of a shock to see so many and to suffer once again the constant solicitations: "Buy hashish?"; "One rupee?"; "Buy carpet?" The exception seemed to be the Tibetan merchants, who set fixed prices, do not solicit, and seem to have preserved their charm and dignity. Otherwise, Kathmandu was a pretty poor advertisement for western progress.

Our reverse culture shock was complete by the time we stopped over in Hong Kong on our way home. It resembled an enormous department store and exemplified for us the disparity between Nepal and the developed world.

By then, though, we were hooked on Nepal. I couldn't imagine failing to return there, just as I couldn't imagine stopping my work with Seva. Aid organizations often enter developing countries with good intentions, but even though many of their programs do a moderate amount of immediate good, they leave the locals no better able to cope with their problems. It was most satisfying for me to feel that I had left behind knowledge that would be used to continue Seva's work, and to know that the program would eventually be self-sufficient.■

Your help is needed

After every cataract operation performed in North America large quantities of disposable materials that could be used for cataract surgery in a developing country are discarded. Anyone having access to such materials, such as unused ends of double-armed 8-0, 9-0 or 10-0 silk or nylon sutures, Weck sponges, or disposable microscalpels, is encouraged to write to: Seva Service Society, PO Box 33807, Stn. D, Vancouver, BC V6J 4L6.

You will be sent a container in which to collect these much needed items. You will also be sent information regarding Seva's activities, which include reforestation projects and work with Guatemalan refugees.