Volunteer Overseas Service: One Dentist's Experiences

Dale C. Whilden, D.M.D.

here is not a nation, or culture, in the world that does not have a need for dental care. Dental caries is one of the most prevalent and widespread diseases on the face of the earth. Although its incidence is decreasing in richer countries, dental disease is significantly on the increase in underdeveloped nations. Despite the growing need for dental treatment, there are still far too few dentists and dental health workers in poor countries. For example, a dentist:population ratio in Honduras, Central America, is 1:12,300, a typical proportion for a Third World Country, in comparison to a United States dentist:population ratio of 1;1,700. The majority of dentists practicing in such countries work only in the cities where they treat mostly those who can afford their services. In many regions, distance, geography and financial limitations present insurmountable barriers to achieving dental health. Another contributing factor to the prevalence of dental disease in Africa, Latin America and parts of Asia is a critical lack of education about dental health. Training in proper oral hygiene is frequently unavailable to the general public, especially those living in small communities and villages. Furthermore, people in thse areas are eating fewer traditional (unrefined) foods and more prepackaged commercial foods, often sweetened with refined sugar. How unfortunate it is that so much of the world's population is dentally uncared for and has no direct access to dental treatment at a time in history when dentistry, as never before, has so much to offer!

Personally, there were a number of factors which stimulated my interest in overseas dentistry and dental volunteer work. My church often had guest speakers come and share stories and pictures of their work in underdeveloped countries. You couldn't help become more aware of the conditions and poverty in so much of the world, and feel genuinely sorry for those experiencing it. As a result of a weekly Bible Study in dental school, a third of our class began to consider how to take the time and make the effort to help "our neighbors." Some of my classmates and I contacted over 100 volunteer agencies and missions. You would be amazed at the number of groups eagerly able to use the skills of a dentist abroad. Numerous types of organizations expressed this need — Christian, Jewish, secular, educational, medical, political, humanitarian and professional associations. Opportunities exist in almost any country you can name, and some you can't. In a very real sense, each group represents thousands of native indigents that have never had access to dental care. People... individuals... like you and me.

"It changed my life"

During my General Practice Residency I came in contact with dentists who had volunteered overseas, none of whom regretted going. In fact, they all shared what a significant impact the experience had had on their lives. One said, "It changed my whole outlook on what is and is not important in life. It really put things in perspective." Following the completion of my residency, I signed up to spend three weeks in Ecuador, South America. That was in 1980. Since then, God's provided the opportunity to participate on dental teams to India, Haiti, South Korea, Bolivia, Honduras and Africa.

Preliminary preparations are similar to those made on any overseas journey. These include obtaining a visa, receiving required inoculations, resourcing the country and its people ahead of time, determining appropriate clothing, and so forth.



Treating patients near Yapacani, Bolivia

Although there are varied cultural and sociological differences amongst the countries in which we've worked, the arrangements involved and basic care providing set-ups are similar. Villages are generally notified in advance of our coming. Upon arriving, the local magistrate or chieftain, in consultation with the dentists, selects the facility in which to conduct the clinic—usually the largest building in the village. If no structure is spacious enough, we simply work outside under the largest tree. Furniture is brought from nearby huts and dwellings to hold supplies, instruments, equipment and people.

Water for scrubbing and washing the instruments is not always easily accessible. Indeed, it always proves interesting to see how and where they obtain it. Some villages have wells. Other times, a parade of people would return from the river no small distance away. The water is inevitably dirty, both grossly and microscopically. At one village, after politely commenting about the sediment and silt in the water, the chief had his son remove his shirt and strain the water through it. Not only is there no running water (except when the carriers hurry), but most remote areas lack electricity as well.

"Appointments" are scheduled on a first comefirst served basis. Long lines of nationals, few if any having ever seen a dentist before, form quickly. Patients sit on unstable, wooden, straight-backed chairs when examined or treated. The hands of friends or family members serve as headrests. Instead of a Pelton & Crane Light Fantastic we used native-held Eveready powered three-volt flashlights. The "dental chairs" are arranged around central disinfecting and instrument holding tables.

My wife, Carol, a registered nurse, coordinates the setup, cleaning and ongoing organization of instruments, supplies and equipment. Her nursing skills have been an asset as many patients have come to us seeking non-dental health care and advice.

B uckets serve as cuspidors and after a day's work in one of my first villages, we took the buckets — full of teeth, gauze, blood, saliva and gloves — to be buried outside of town. Later that evening, we saw a young fellow playing with one of our dirty gloves. "Where'd you get that?" we asked. He pointed down the road. We walked to our dumpsite and found a group of children who had uncovered, and were going through, the contents of the pit in an effort to find gloves to use as balloons.

Exams are performed and the numbers of the teeth needing treatment are written on the patient's arm with a pen. This is an accurate and efficient way of keeping track of which teeth are treatment planned for fillings or extractions. We tried giving the patients pieces of paper

with teeth numbers on them to hold while becoming numb, but they were often lost or illegibly crumpled and sweat-smeared.

Patients are anesthetized and then wait their turn on benches around the perimeter of the room. Privacy? Forget it! Everyone watches, stares, scrutinizingly examining the examiners and examinations. You do everything possible to make sure that first patient doesn't scream.

The majority of patients exhibit appallingly compromised dentitions with multiple teeth in advanced stages of decay. Periodontal disease is widespread. Both acute and chronic situations are prevalent including just about every oral pathology scenario imaginable. Dental problems are frequently further complicated by a general lack of health education. For example, one patient was questioned after I extracted a lower molar and noticed a splinter-like piece of wood protruding from the large occlusal carrious lesion. This young Honduran man explained that he had attempted to kill the worms in the tooth to eliminate the pain. In another incident, a Bolivian woman gave me an old, rust-coated nail she had been diligently using to unsuccessfully elevate the aching remains of a mobile root. Chewing raw sugar cane is common. Its tough, stringy fibers, which easily wedge interproximally, are a primary cause of high caries rates in children.



Multiple carious teeth are present in the majority of patients treated

Many patients come to us after having been seen by herb doctors or traditional village healers. Some have plasters or herb packs covering extra-oral fistulas; others display the remains of teeth broken by wooden chisels in unsuccessful efforts to knock them out. Masticating coca leaves is not uncommon palliative treatment for toothaches. In Haiti, some of the patients insisted on taking their extracted teeth home with them. This eliminated the

possibility of someone using the teeth in a Voodoo ceremony. In Honduras, one elderly man wanted his extracted tooth that had been aching for years. He very seriously and logically explained that he was going to smash it with a hammer, causing the tooth pain to get even with it.



Herb pack applied by village healer in area of extra-oral fistula.

Extractions, of necessity, make up the majority of each day's treatment requirements. However, some very significant and exciting benefits occurred when I started bringing along a portable dental unit. Firstly, valuable time was saved on surgical extractions requiring sectioning or removal of alveolar bone. Happily, more patients could be seen in shorter periods of time. Secondly, it allowed for the placement of restorations in teeth that otherwise would have been extracted or remained untreated. Teenage patients came with "half-moon" decay on their maxillary incisors fully expecting us to pull the teeth. As we'd place Class III and IV composites and then give them a mirror, they couldn't believe their eyes! We were in primitive areas. They'd never seen fillings before. Fights would break out in the waiting lines over who was next. They told us it gave some of the girls a whole new eligibility for marriage.

Interestingly, there were also instances in which we were begged to remove perfectly healthy teeth. In some isolated villages, it was much preferred to have wide spaces in one's mouth rather than crooked or overlapped teeth. Dental symmetry is also esthetically important to many in remote parts of Ecuador, Bolivia and Honduras. For instance, if the patient's right lateral is missing, it's not unusual for him or her to request extraction of the left lateral. Or, if the right central and lateral need to be removed, there may be a plea for the contralateral ones to go as well.

One evening, a young man came to me and asked me to pull two or three of his sound, caries-free front teeth. When I asked why, he hesitated then responded, "They hurt." After examining them further, I told him that there was nothing wrong with them. "I want them pulled," he replied. I said, "Look, you have to tell me why you want them out." Finally, he admitted to me that his friends were "tough" and that they are missing their front teeth because they get into lots of fights. Everyone admires them and he wanted to "look macho" like his friends.

ne of the important aspects of each trip is to provide education in both dental health and basic nutrition to the villagers. Waiting crowds provide good opportunities for teaching oral hygiene. Starting with what people already understand, we try to build on their traditions. For instance, we explain that just as sweeping the hut makes it a clean and healthy place to live, brushing the teeth and gums keeps them clean and healthy. Or, for example, we confirm that a small child can not find his own lice. Mother knows she must help him. In the same way a small child can not see and remove the food on his teeth — he needs help with that also.

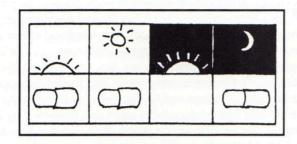
Risky as it may sound, there are non-dentists performing filling and extraction procedures in out-of-the-way places. Occasionally, a village will have someone who has gained a reputation as a dental worker. Sometimes these individuals have acquired rudimentary training from health care workers or dentists serving in the area at one time. Some have taken courses offered by health organizations or the government. Others are self-taught.

Training interested and astute nationals to provide basic dental care is also a rewarding aspect of volunteer work overseas. This can be done in a variety of ways depending on the situation. If this is to be done on a one-to-one basis, I find it's usually best to train someone in the village who is already known for their ability to effect healing. Instead of criticizing or clashing with local tribal healers, much more can be accomplished by taking a posture of sharing ideas and working together.

Several thousand toothbrushes are taken to distribute. We also teach the villagers how they can make their own by fraying one end of a young bamboo shoot (the other end can be sharpened to construct a toothpick) or by removing and twisting the fibers from inside a coconut husk. Charcoal and salt combine to make an adequate dentifrice. Many people have never seen a toothbrush before let alone fluoridated, tartar control, tooth-whitening, breath-freshening, plaque-removing, pleasant tasting, gel or cream toothpaste. People are encouraged to pass along what they have been taught. As we were distributing toothbrushes to the children at Juticalpa, one

grubby little fist thrust a toothbrush back at me. He had been given a reach-style brush but wanted a straight one like his friends. He said he did not want one that was all crooked, bent and broken.

We also bring along a supply of antibiotics and analgesics. They are quite effective as patients have rarely had access to these drugs. We simply have to make certain that our instructions for taking the pills are not based on the exact time of day but rather the position and height of the sun. There aren't a lot of clocks in Bunumbu or Zopilotepe.



A prescription signature (instructions to the patient) looks like this for one capsule three times a day

In Third World countries where a dental school exists, there may be multiple and frequent opportunities to share your knowledge and skills. This is true particularly if you are a specialist or have a certain area of expertise. Schools of dentistry, dental societies, study clubs and associations usually appreciate input from American dentists.

Do I speak foreign languages well? Not really. All one has to do is learn about a handful of key phrases to communicate effectively. The needs are obvious and the people readily point to the teeth that are bothering them. Besides, all people smile in the same language.

Working in my first Spanish-speaking country some years ago, I asked our interpreter to teach me some words and phrases. One of the words I wanted to learn was the Spanish word for "bite," so that they would close on the gauze two-by-two sponges after surgery. This command was generally my last word to them before they were dismissed and it became obvious that they didn't understand me when I used what I thought was the Spanish equivalent of "bite." In fact, they looked at me strangely. Eventually, I questioned the translator, who had been working with other members of the team, about my pronunciation of the word and he asked what I had been saying. "Oh, no!" he grimaced. "You're saying 'muerete' not 'muerde'." Instead of telling them to bite, I was saying "die."

The most frustrating part of each experience is the fact that as the day progresses, the lines of people waiting for dental care become longer instead of shorter. A team of dentists is a real rarity and word spreads amazingly quickly to "nearby" villages, which are five or six hours away on foot. As more and more people come, the tension tends to mount proportionately. How many will be seen? How many turned away? Is it better to limit treatment to only two or three of the worst teeth on each patient in an effort to see more people? Do we care for the ones in the most pain first or see them in the order in which they arrived? How much time should we spend treating and how much time should we spend teaching, knowing another dental team won't be in this village for years — if ever? Should we see the children first? Do the village officials deserve any priority? In areas where culture dictates that the men are given precedence and normally would be seen first, should we maintain American gender mores?

"Have you ever extracted 100 teeth in a day?"

Generally, by later afternoon it becomes apparent, though yet unspoken, that it will be impossible to see all who have come for care. As darkness approaches, however, a decision has to be made to set a cutoff point. The dentists are spent, with arms aching as badly as some of the patient's teeth. Have you ever extracted 100 teeth a day, day after day... after day? Still, no one likes to draw the line. No one wants to say, "No more patients!"

But, someone has to be the last patient. And the person next in line, despite the fact that they have waited all day, and despite the fact that they have walked hours and will have to walk home in the dark (and I mean in the dark), will not be a patient. Nor will the remaining crowd of people be seen, with their multitude of miserable mouths, for lack of time... or dentists.

The riskiness and edibleness of the food and potability of the water is dependent on the country and location in which we work. Meals at the Kwangju Christian Hospital in South Korea or on the mission ship "Doulos" (patterned similarly to the "Good Ship Hope"), for example, were quite safe and well-balanced. However, in the interior jungle region of Ecuador or along the Ganges River in the foothills of the Himalayas, it wouldn't have been wise to eat anything that we couldn't cook or peel, or drink anything that hadn't been filtered and boiled.

However, just because something is edible doesn't mean it's palatable. In Bolivia, we were brought plates

with what appeared to be dinner on them. I made the mistake of asking what it was. "Hochi," they said. Ignorantly, I persisted in finding out exactly what it was. They told me it was a large, tailless South American rodent found in swamp areas. In English, it's called a capybara. It was tough and greasy and difficult to swallow. Experience has taught me not to always question what is placed before me.

A variety of accommodations have been made available to us in different countries. We've slept on air, straw and feather mattresses, foam rubber mats, hammocks, woven "cord" beds, floors and the ground. If netting is unavailable in humid, malarious areas, one has the choice of sleeping either cool and mosquito- or vampire bat-bitten or covered and hot, but protected.

All in all, I've enjoyed fascinating experiences and rewarding opportunities that I never would have known by staying in my little Ocean Grove office. You can't imagine the joys and rewards of volunteer work unless you've done it. The highest fulfillment dentistry can provide comes through meeting the needs of others. Descriptions of the volunteer efforts of many American dentists who have gone abroad could fill many more pages. Each of these dentists who have helped those in need of dental care throughout the world have illustrated the concern of American dentistry for persons less fortunate than those at home. Let me challenge and encourage you to consider investing a small portion of your time in overseas service. and skill changing!



A grateful patient in Boghpur, Uttar Pradesh, India.

For further information on international opportunities contact: Council on International Relations, American Dental Association, 211 East Chicago Avenue, Chicago, IL 60611.