

# Medical Aid for Children of Latin America: Reconstructive Plastic Surgery in Developing Countries

By Thomas E. Geraghty, MD, Dana Towle, MD

Published Missouri Medicine, January/February 2003, Vol. 100 No. 1

Since 1985 a Kansas City Charitable, not-for-profit organization, Medical Aid for Children of Latin America (MACLA) has provided free, quality reconstructive plastic surgery and a variety of medical care for the poor of the Dominican Republic and Bolivia. Annually MACLA sends teams of medical personnel and lay of volunteers for intense one to two weeks surgical clinics in the host country.

These surgical teams have operated on over 6,000 patients with cleft lip and palate deformities, burn scar contractures, congenital and traumatic hand deformities, and numerous other surgical conditions. The organization has provided medical care for an additional 20,000 patients with varied medical maladies. The organization's success is the result of the cooperative effort of hundreds of United States and host country medical and lay volunteers.

## **The Patients**

The patients treated by MACLA are among the poorest in Bolivia and the Dominican Republic. They have little or no hope for adequate medical or surgical care. The patients come from cold, lantern-heated sod and cement block homes in the Andes or the hot, tropical cane fields in the costal plains of the Caribbean. They come from the country's capitals of La Paz and Santo Domingo where the barrio homes are clapboard, garbage litters the streets, and sewage flows in open gutters. They come from small villages and remote areas with no electricity or plumbing. Open fires for cooking and heating account for the many burn patients. Each patient has unique history of hardships and suffering. The patients come on foot, on burros, in crowded buses and cabs.

Preoperatively some patients have been screened in a distant clinic and sent for surgery or triage. Most patients however have had very little pre-operative treatment and come directly on their own to MACLA's clinics having heard of the us by word-of-mouth, reputation, television, radio or by their region's political or religious leaders. For every patient accepted, three are turned down; they are too sick or malnourished for surgery; their problems are too complicated to be treated or their surgical problem requires other types of medical or surgical specialists.

A third of the patients have cleft lip/palate and cranio-facial deformities; a third have burn scar contractures or deformities; the rest have hand problems, congenital ear deformities and a myriad of tumors and keloids. Over half of the patients are children and about 20 percent are returning patients for stages procedures.

MACLA provides all immediate post-operative care. After our departure, care is continued by host country physicians or local caseworkers. We arrange

all long-term post-operative care and provide antibiotics, dressings, suture removal kits, casts and wound care items. After MACLA leaves, by phone and email, we provide consultations and recommendations to host country medical personnel on the care of our clinic patients.

### **MACLA: History**

MACLA was established in 1985 and has become a 501 (C) 3 tax-deductible charitable organization since 1987. Volunteers come from over 30 states. They are comprised of hospital personnel and charitable organizations that save and send used supplies and equipment to MACLA's warehouse. Other volunteers pack, store, and sterilize supplies. Surgical and medical firms and pharmaceutical companies donate equipment, instruments, and medicine. Hospitals and surgical centers in the Kansas City area and throughout the United States, have donated anesthesia machines, monitors, and other surgical supplies. Over 1000 individuals donate cash to purchase supplies or equipment that cannot be obtained by donation.

There have been over 300 medical and lay volunteers who have traveled to clinics in the two host countries. They pay for their travel and personal expenses. The host country volunteers are comprised of hundreds of physicians, nurse, and lay volunteers representing six different private foundations in Bolivia and the Dominican Republic.

For 24 years, over 300 Peace Corps volunteers from the Dominican Republic have helped coordinate the clinics and have acted as translators, clinic helpers, and assisted patients in pre- and post-operative care. This is an energetic group of volunteers who are exemplary ambassadors of the United States.

MACLA's administrative overhead is minimal averaging less than five percent per year. Overhead is largely secretarial and postage expenses. It is estimated that MACLA expenses are less than \$500 per surgical patient.

### **Health Care Systems in Developing Countries**

Health care systems in host countries are federally regulated financially broke, overwhelmed, and destitute. Wealthy residents can purchase satisfactory medical care but the impoverished populace has little or no access to quality care. Hospitals and clinics, with a few encouraging exceptions, are poorly equipped and some are horrific. Our current facilities at the Padre Billini Hospital in Santo Domingo and the Hospital Militar in La Paz are vastly better than the facilities of the past.

The physicians and medical personnel in these countries are overworked, underpaid, and generally not respected. Consequently, medicine is not an appealing career for their young people. In spite of these handicaps, the indigenous medical communities are eager to learn new medical and surgical techniques, generous and considerate in their dealings with patients and have come to trust and cooperate with MACLA.

## **Medical Teams**

MACLA medical teams consist of operating room and recovery nurses, anesthesiologists, plastic surgeons, pediatricians and family physicians, physical and occupational therapists, and lay volunteers. After typical frantic travel, multiple connections, obligatory custom searches, the teams stay at inexpensive hotels near the hospitals.

Immediately after arrival surgeons evaluate patients and schedule them for surgery. The rest of the team unpacks and sets up the operating room, schedules the patients, and generally brings order to chaos. The clinics consist of hundreds of patients packed into large auditoriums and many more stand outside queued up for evaluation and care.

The surgical arena usually consists of two stark operating rooms with only tables and illumination. MACLA provides all equipment, supplies and medicines. Two cases per room are done simultaneously. The operating rooms are always crowded and noisy. After a short stay in a small, bare makeshift recovery room the patient returns to crowded wards where family members assist nurses with patient care. Half of the patients are discharged the day of surgery, the rest leave within 48 hours. The surgical teams perform 20 to 30 cases daily.

## **Social Issues and Concerns**

MACLA has occasionally encountered jealousy from host country physicians and/or politicians. Although care to patients is the primary emphasis of the MACLA team, medical and surgical techniques are shared with local physicians, surgeons, nurses and other medical personnel. Each year our liaison with the indigenous medical and political establishment has improved and MACLA is now a trusted and respected agent in health care delivery.

Some serious problems have occurred. MACLA has encountered several dishonest hospital administrators. They have confiscated the medical supplies, equipment, and antibiotics we left and sold them on the black market. One physician hospital administrator delayed improvements in the operating rooms because he wasn't getting enough monetary kickbacks from the developer. Although MACLA has always taken care of the patients for free, on occasion members of the hospital administration have attempted to collect money from patients and their families. Those organizations and individuals have been banished from our services. MACLA, as a result, is now very careful to guide all donations to trusted host sponsors and religious or charitable organizations.

## **Conclusion**

The Challenges of delivering quality plastic surgery in Latin America are considerable and are outlined in this article. There is a unique set of rewards very little paperwork, no likelihood of malpractice or legal actions, no communist-like insurance companies or HMOs. The severity of the trauma and pathology are interesting and challenging to care for. The gratitude of the patients and their families and their joy and elation after a life-altering encounter with a MACLA clinic is indescribable. We urge physicians and other medical professionals to

consider participating in programs bringing medical and surgical care to underdeveloped countries, and this type of medical practice is a heck of a lot of fun!

**References**

Geraghty TE, Thompson FE: Plastic and reconstructive surgery in the Dominican Republic. Missouri Medicine 1991; (88) 2:91-97.