Prosthetics and orthotics in Latin America*

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Latin America can be divided into four parts. Bordering with the United States is Mexico, next there is Central America then the Northern and Southern parts of South America. Europeans tend to be concentrated in the South where there are many Germans, British, French, Italians and Danes. The further North you travel the more you meet the Indians and their culture and the more you encounter different attitudes.

Throughout Latin America there are three different types of services for the amputee: private shops or laboratories, state supported laboratories and government controlled laboratories. Patients can also be divided into three groups:

1. Patients who are financially independent; these usually obtain services from private prosthetic/orthotic laboratories or travel abroad for treatment.
2. A very large group of middle or working class patients who are covered by insurance or social security as well as receiving support from their families; they are normally sent to a state supported laboratory, such as my institution, for service. This type of assistance is provided by the majority of the Latin American countries. (In some hospitals or rehabilitation centres where social security services are provided, doctors—mostly physiatrists, issue prescriptions for prostheses or orthoses and send their patients to places from a list of private or government laboratories. The final checkout is done in the institution where the prescription is issued, usually without the participation of the prosthetist.)
3. The great majority of patients are in the low income group and they generally use the services of the government prosthetic/orthotic laboratories at the Rehabilitation Centres.

Many of the patients in the third group fail to take good care of their stumps, due to lack of training, following discharge from hospital. When they come to the Rehabilitation Centre their stumps are often in very bad condition with contractions, heavy subcutaneous tissue, neuromas etc. Consequently, many patients have to start protracted pre-prosthetic treatment or undergo revision surgery. However, the indigent patient cannot afford to pay for a long course of treatment as his income is very low and, because there is no birth control, his family may be large. As a result the patient may insist that the prosthesis be finished quickly so that he can return home and resume supporting his family. Many of these patients will return to the clinic due to changes in their stump. They will complain that the prosthesis was improperly fitted, and insist on getting a new prosthesis. This situation is very common in most of the Latin American countries and results in much wasted time and material. It would be very useful if prosthetic clinics could be attached to the orthopaedic hospitals, but this will be difficult to arrange. It would also be very helpful if more of the new amputees could be fitted with rigid dressings. The use of a temporary pylon prosthesis would also greatly benefit the patient and I am very happy to note the work that is being carried out elsewhere on temporary sockets for the primary amputee. We are particularly interested in the lightweight polypropylene prosthesis. Many Latin American countries are producing this material and the new prosthesis may partially answer our problems of low budgets and difficult

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importation of sophisticated materials. At the moment nearly eighty percent of all amputations are carried out at above-knee level and only a very small number are below-knee, we would like to see that changed.

In some cases patients are unable to pay for the prosthesis. Many patients from rural areas have to travel a long way to the specialized services, which are usually located in the capital cities, and do not have enough money to pay for food and accommodation while being treated. When his funds run out, the patient may have to abandon treatment and return home perhaps without his prosthesis.

In order to solve these problems the governments have assigned an annual budget to the Rehabilitation Centres, including the prosthetic/orthotic departments. However, due to scarcity and failure to provide the centres with regular supplies of materials and the fact that the prosthetic/orthotic services do not have an independent renewable budget, it is still difficult for many patients to get a prosthesis made. We are trying to have a separate budget for the prosthetic/orthotic laboratories so that we can get a little closer to a good prosthetic service. Another problem faced by patients is the difficulty of finding a job; it is easier for some amputees to inspire compassion by showing their stumps or crippled limbs and begging for support.

In spite of the incorporation of the prosthetic/orthotic services in the Rehabilitation Centres, technical difficulties arise because these services are managed by physiatrists who are not skilled in amputee care. The surgery itself is carried out by orthopaedic surgeons. Another problem which requires attention is that the prosthetist/orthotists are not recognised as professionals by the medical staff and their opinions with regard to prescription formulation and prosthetic management are not accepted.

In my twenty years experience in training prosthetists in Latin America I have observed that they are highly qualified and have great interest in their profession. Unfortunately the administrative authorities are still reluctant to recognize them as professionals despite the fact that two permanent schools exist for paramedical staff in rehabilitation; both of which are recognized by the Ministry of Health and the Ministry of Education.

The problems of the prosthetists start when they graduate. The Departments of Personnel and Administration usually classify prosthetists as technicians because they work in a workshop. This unhappy situation results because, although the governments spend large sums training prosthetists, they fail to classify them accordingly; in addition, the salaries paid are inadequate. Consequently many prosthetists change their job in favour of a better position and the prosthetic/orthotic services are undermanned. In some Latin American countries only limited training is provided to meet the most urgent needs of the service. In the rural areas and other places with poor access to services use is made of simple devices made in the community from local materials.

It is worth mentioning that despite the difficulties and obstacles good results have been obtained in certain aspects of the service. This progress is related to improvement of the teaching system which began with the training of resident rehabilitation doctors in prosthetics and orthotics and the introduction of simple, inexpensive methods, using local material to avoid expensive importation of materials and components.

New ways of solving the problems outlined are being applied. A prosthetic/orthotic educational programme has been organized through the Pan American Health Organization for doctors dealing with cardiovascular disease, orthopaedics and rehabilitation. The programme is concerned with the importance of preserving articulations, especially the knee joint; the use of immediate rigid dressings, early prosthetic fitting, stump shape, prescription and information on developments related to new materials and designs. The School of Prosthetics/Orthotics of the New York University Post Graduate Medical School has co-operated with PAHO, WHO and the Member Governments in programming and implementing these courses.