

If You Don't Have a Dog, Hunt with a Cat: Reflections on Practicing Audiology in a Third World Setting¹

Mardi J. Mauney
Campinas, Brazil

The frustration and joys of working as an audiologist in a developing country are discussed. Topics addressed include funding, technology, delivery of services, health care personnel, public education, and the importance of cooperation among professionals.

Can an audiologist trained in a first-world setting bring anything of value to the hearing-impaired people of a developing country? Is the distance between the two worlds too great to be bridged? Will the audiologist be perceived as one more paternalistic, out-of-touch foreigner come to "fix" things or can s/he make lasting contributions to the development of hearing health care programs? I believe there are exciting opportunities for work in audiology in third-world settings, especially for a professional who is sensitive to local strengths and shortcomings and flexible enough to work within them.

I have the good fortune to live and work in Campinas, Brazil and watch some of my efforts on behalf of hearing-impaired people take root and flourish. Campinas, a city of about half a million people, located in the heavily industrialized state of São Paulo, is a very wealthy city by Brazilian standards. Nevertheless, the operating budget of the state-supported rehabilitation center where I work is less than \$15.00 per month (beyond salaries and maintenance expenses). And we count ourselves among the very fortunate as we have a fine staff, a fairly adequate collection of teaching materials, and reasonable physical surroundings. While our center might look marginal by American standards, by local standards it is very good indeed.

A lack of funds for health care is a problem common to most developing countries. It is impossible to go forward with ambitious development pro-

Mardi J. Mauney is an audiologist in a state-supported rehabilitation center in Campinas, Brazil.

¹"If you don't have a dog, hunt with a cat" (Brazilian saying).

grams, keep up the payments on the foreign debt (Brazil's foreign debt is expected to reach seventy billion dollars by the end of 1982), *and* provide complete health services. That is the reality under which we work here; health services on the scale which we take for granted in the United States and Europe are only a dream for the distant future. The lack of public and private funds for health care affects, directly and indirectly, all aspects of hearing health care: (a) equipment is expensive and/or often unavailable; (b) delivery of health services is difficult or impossible, (c) rehabilitation of a deaf youngster becomes perhaps unjustifiably or unbearably expensive, (d) professional training is often inadequate or non-existent, and (e) public education about the causes and prevention of deafness seems an insurmountable problem.

It is difficult to transport first world technology to third world environments. Virtually all sophisticated equipment (audiometers, hearing aids, ENG equipment, etc.) is imported; i.e., heavily taxed and costing two, three, or more times what it would in the United States, or simply not available at all. But, having made the capital outlay for equipment, your troubles have only just begun. Who is going to calibrate your equipment? How? To what standards? Who is going to repair your machinery? Where are you going to find the carpenter and the materials to construct a testing room? What effect does a fluctuating electrical energy supply have on your equipment? These and other problems can be solved, but they tend to contribute to a less-than-rigorous testing situation. An audiologist trained by American standards will want to pepper a routine audiometric report with a number of footnotes and disclaimers. This is not to say that there are not skilled audiometricians at work in Brazil and other developing countries, but it does point out the adversities under which many of them struggle.

The delivery of health care services is further complicated by the sheer size of Brazil which is larger than the continental United States and has a poorly developed transportation system. Building roads is expensive, and, with gasoline currently at nearly four dollars a gallon, overland transportation is not lightly undertaken. Even if the federal government could be persuaded tomorrow to allocate funds to eradicate German measles, for instance, the topography, distances and price of gasoline would probably defeat the program. For handicapped individuals who live far from cities, receiving even minimal services is difficult. A conscientious parent may need to travel 50-100 miles (or more) by bus to reach a testing facility that provides the services necessary to confirm the hearing status of a child with suspected hearing loss. This parent *may* consider a second lengthy trip for a hearing aid fitting. But after these initial steps, who is going to provide therapy for the child, who is going to service the hearing aid, and what are the child's chances for productive rehabilitation? The odds are heavily in favor of the child's eventual relegation to the "village idiot" class, probably never able to communicate

except through gestures developed within her/his family, with little chance for meaningful employment when s/he reaches adulthood.

The shortage of trained personnel makes a comprehensive hearing health care program in Brazil no more than a hope for the future. Brazil is a young country: half of its population is under nineteen years of age. In a country with millions of children, early identification of hearing loss is a clear priority. An infant screening program should be set up in hospitals, but what would one recommend to the parents of infants in whom deafness is suspected or confirmed? Where would they seek follow-up evaluations? Who would provide therapy for those identified as being hearing-impaired? Is one forced to conclude that, without the available follow-up personnel and facilities, it may be irresponsible to undertake an infant screening program? These are difficult questions to answer.

The low priority of hearing health care in Brazil is also evident in the too often inadequate training of professionals. It is my understanding that there are few, if any, graduate programs of audiology in Brazil. What is more generally available is an undergraduate program combining speech pathology and audiology. Financial difficulties at the only local university offering speech pathology and audiology training have resulted in a reduction of practicum hours and postponed repairs of the clinic audiometer. While the instruction offered may be of high calibre, much of the material must be covered superficially to even touch bases with all aspects of the two disciplines of speech pathology and audiology. There is another burden that further complicates the lives of Brazilian students: that of language. There are few materials available in Portuguese, thus requiring that much information be obtained through laborious translation from French and English texts. I recently helped a distraught student through a chapter on stuttering behaviors in a book by Van Riper. What was to me a lively and vivid series of illustrative case histories was to the student a hopeless morass of idiomatic expressions and unfamiliar verb tenses. I'm sure that even after a couple of hours of working together, she has only a sketchy idea of the points Van Riper was making. Those of us who have always done our studying in English have no idea what a gift it is to have a treasury of information readily available.

One of the most difficult issues to face on a day-to-day basis is the fact that most of the children I work with have two major handicaps, deafness and poverty, of which poverty is probably the greater one. The purchase of a hearing aid becomes a major struggle, requiring months or even years of installment payments. I hate to tell parents that the average life of a hearing aid is about five years; some of them will hardly have paid off the aid before it wears out. The exorbitant cost of hearing aids makes unrealistic expectations about them almost inevitable. The struggle to acquire the aid is such a major one that it is difficult for parents to accept the aid's limitations — anything so expensive should be nothing less than miraculous. A local hearing

aid dispenser commented to me that she does not dare tell recipients of donated hearing aids how much the instrument actually costs for fear that the patient or her/his parents will sell the aid and use the money to buy food, pay the rent, or make a down payment on a television set. When your annual income is \$2,000, a \$600 hearing aid is quite unimaginable. Of course, the original outlay for the hearing aid is only the beginning of the parents' financial woes where their handicapped child is concerned. Everything connected with hearing aids is expensive. One mother told me recently that she is so tired of fighting with her husband over the weekly \$1.50 for hearing aid batteries for their son that she is seriously considering withdrawing him from the rehabilitation center. Even when the therapy is free, as it is at our center, just maintaining the hearing aid is too great a burden for many families. Without training, this woman's son will grow up one more of the millions of needy children in Brazil. Ironically, a handicapped child, while no less of a personal and individual tragedy, is only one of the innumerable disasters that may befall a poor person in a lifetime, and is therefore often accepted with an equanimity and fatalism quite foreign to American or European activism.

Public ignorance about the causes and prevention of deafness is a continuing tragedy here, as in most developing countries. We encounter too many cases of deafness which could have been prevented with a little public education. Maternal rubella, for instance, continues to be a major cause of congenital deafness. Many kinds of powerful medication, some of them ototoxic, are readily available over the counter despite legislation requiring prescription. Although the drug manufacturers may be aware of the medication's ototoxic properties and include this information on the label, such a warning is useless to someone who cannot read. Quinine continues to be a favorite abortifacient, though one that is not 100% effective. One wonders what the role of maternal malnutrition, relatively unscrutinized tropical diseases, and other local factors may be in cases of congenital deafness of unknown etiology. Case histories of two clients I work with illustrate the tragedy. When 17-year-old Marisa discovered that she was pregnant, she consumed every locally recommended abortifacient, afraid that she would lose her job as a maid if her employer discovered her condition. She is now unemployed and the mother of a profoundly deaf daughter. Rogério's mother had no pre-natal care and had no idea that the rubella she had in her second month of pregnancy would result in a son with profound deafness, a heart defect and congenital cataracts. These kinds of stories are repeated many times over in this country.

Given so many problems, I am always surprised by the number of positive aspects I find doing audiology in this setting. One rediscovers the great values of human compassion and determination, two important bases for effective rehabilitation. I have admiration for my Brazilian colleagues who work under difficult conditions, yet continue to believe that their work is ter-

ribly important and worth fighting for. Their dedication is impressive.

Because of the common difficulties endured, there is a degree of professional cooperation here that I have found remarkable. I have been welcomed into the offices of doctors, hearing aid dealers, and phonoaudiologists. When I asked a local otologist recently if I would be able to administer speech audiometry in English for an American youngster, he allowed me to use his testing suite for the afternoon, free of charge.

I think that the aspect of my work that I most enjoy is the sense of being a pioneer. There are endless possibilities here for energetic and imaginative health care professionals. One vignette will illustrate this fact. When I first began work at the Campinas state-supported rehabilitation center, there was no battery tester to check the hearing aids. When I asked staff members if a battery tester would be useful they agreed that it would, but that such a gadget costs too much money. I took this as a challenge to find an affordable way to check batteries. A visit to my neighborhood electronics shop produced a light bulb with two wires attached to it. For seventy-five cents I had an inelegant but adequate battery tester. It was a small triumph but one from which I derived considerable satisfaction. It is rewarding to work in an area where there is so much to be done, and where even minor improvements can contribute significantly to improved health care.

Having an opportunity to compare working conditions in a developing country with those we take for granted in first world countries helps one appreciate anew the human values that are so fundamental to rehabilitation work of any kind. It also allows one to see the tremendous strides that have been made in the United States in terms of professional standards, education, and delivery of hearing health services. We have much to be proud of and thankful for — it is difficult to realize how much until we survey the scene from a distance.

In summary, working in a developing country is rewarding, frustrating, important, difficult, full of unexpected surprises, exciting, discouraging, unique, eye-opening, wonderful, unforgettable. Should any readers have an opportunity to work abroad, go prepared to teach and to learn. Your experiences will be rewarding in countless ways.

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