*Prosthetics and Orthotics International, 1979, 3, 152–154*

# The establishment of prosthetic services in African countries*

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I have now worked for more than 10 years in several African countries and think it is not necessary to cover the problems which Eric Jensen has already pointed out, because mainly the same social problems are encountered in African countries as in South America.

I should like to focus more on the possibilities of doing something positive in those countries, perhaps with a view to setting up orthopaedic training centres, orthopaedic workshops etc.

There is one thing that should be mentioned first, in most African countries the medical and technical services in our field are State Services. These services are being built up and to an ever increasing extent things are being provided by the government of the different states. So in Africa there is perhaps a better situation in the initial phase than Mr. Jensen had in South America.

In 1973 we handed over to a Tunisian director the orthopaedic workshop in Tunis. Five years later I had, for the first time, the occasion to visit this former Technical Co-operation project. Over a three-week period I was able to examine and judge thoroughly the work done by the Centre. There is now a limb fitting and brace centre employing 7 prosthetist/orthotists and about 40 orthopaedic technicians with a relatively high technical level.

The workshop, situated in a really modern building, has a branch facility about 150 km away and is setting up another one in the southern part of Tunisia.

As far as I know no other African country has such an ideal symbiosis between orthopaedic hospital, surgery, physiotherapy and technical service. In principle no difficulty should exist today in providing orthopaedic appliances to any patient in Tunisia—to rehabilitate and reintegrate him into the working process and into society. And yet it was realised based on critical observation, that the achieved results do not correspond one hundred percent to the anticipated ones. It was hoped that the staff—who were professionally very well trained—would create their own ideas, would enlarge and expand the social service and would to a greater degree adapt the technical needs to the conditions of the country.

In fact this has not been the case. It was noticed that provision of orthopaedic appliances was in some cases extremely good, that a fairly large group has been treated regularly and with good results and that the external view of the whole facility was very positive. However, further development has not taken place during the last 5 years. The technical staff has only preserved what was handed over to them by the foreign experts five years ago.

Up to the present, there are only small signs that the received technical knowledge is being adapted to the needs of the country. Earlier methods are still being copied. Today fewer patients from rural areas are being really properly cared for. Putting the purely technical service aside, the social service in this Centre does not meet the expected level. On the contrary, the work has become worse compared to former times. The present social worker is only doing administrative work, no decisions are taken about any social problem cases and no attempts are made to speak to and advise patients, to make home visits and eventually to begin the total rehabilitation process.

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*Based on a paper presented at the ISPO International Course on Above-knee Prosthetics, Rungsted, November, 1978.

This example from a period covering nearly 10 years suggests that we reconsider our attitude with regard to the follow-up care of such projects. It is just impossible to set up something completely new such as an orthopaedic service in a short period and to then leave it alone.

Even so, as far as I am aware Tunisia is the country with the widest-developed orthopaedic care services in Africa. In most African countries there is no normal orthopaedic care service, that means no continued service for manufacturing and repairing prosthetic appliances. By this I do not only mean a more or less sufficiently large facility in the capital of the country, but a service able to serve every district and every population group. In most capitals limb fitting centres etc. can be found. These attempts, as I would like to call them, correspond in no way with the demands of the population, with the technical and medical responsibility and above all with the social duties. In most cases only a few possibilities of providing orthopaedic appliances are considered. Sometimes, only one or two types of prosthesis are available and are given to all patients if possible. The existing professionals, having been trained only to provide those types of prosthesis, abandon the work if a slight deviation is made or if problems crop up. That means that only a small group of patients can be properly cared for.

From the statistical point of view these centres are not bad—because the total number of patients is so high that even though they select only a particular type of patient they are fully employed. But, compared with the population and the different types of orthopaedic patient, they are by no means what they could and should be.

To solve these problems, the demands made on professionals—the prosthetists—in African countries are much higher than perhaps those made on equivalent technical personnel in the developed countries. A technician in a normal European Centre has less problems with the medical part of the work. Very often, the African prosthetist has not only to take care of his own work, but partially to take over the work of the rest of the rehabilitation team.

Another wide field not sufficiently taken into consideration is the social aspect of prosthetic care. In orthopaedic centres I rarely met a functional social work department with social workers caring for the disabled. Even when social workers were present, they only had the functions of a postman, they carried files from one place to another. There was hardly any proper social work, such as giving advice to patients, discussing financial problems, co-ordinating with other departments and so on.

This is a very sad outcome, because nearly every African country has a social ministry.

The orthopaedic technician has very often to take over this work and stands in the place of the social worker to tackle these immense social problems.

Nevertheless, it should be pointed out that the financial problems regarding costs are not the most important, because in the countries concerned it is often possible to overcome those problems.

Taking into consideration all these facts, there must first be assured an all round training of specialists in prosthetics in order to set up a good service. This does not mean a short term or narrow-gauged training that cannot give the desired basis. Only the well and fully trained professional has a chance in Africa to fill the gap and, last but not least, to find an appropriate salary and rank in government administration.

From the above mentioned training requirements it is evident that the planning and operation periods of such technical projects have so far been too short. It has been equally proved that it is not possible to set up a prosthetic service if the foreign expert and adviser cannot stay and work on the spot over a longer period of years, so as to show the lines along which work has to be continued.

There is no use in setting up theories—even well presented—if the African whether he be an official, the patient—or maybe the future expert, is not able to see clearly the technical potentials.

It is known that 90 per cent of the African population live in rural areas, and this must be taken into consideration when planning future services. This requires, besides the technical work, arrangements for effective social services. In the rural areas, more attention is to be paid than in the capital cities to not only the financial problems, the climate and way of life, but also to the level of education and language and the religious customs and transportation problems of these patients.

A good social network is needed over the country which is able to give, together with the technicians, education and advice to handi-

capped people; so that, for example, prostheses could be repaired by local handicraft workers and patients far away from the centre would be in the position to help themselves.

Only continuous care, education and advice covering patients, chiefs, politicians and the whole population, will guarantee the process of orthopaedic care in rural areas.

So far, a very important member of the team, the specialized MD has only been mentioned in passing. That does not mean that this is not a problem in Africa. As already mentioned, the prosthetist has to take over responsibilities in medical areas which exceed the normal level. The problem of the MD in developing countries is far reaching and I think we are very far from solving those problems. When creating a prosthetic service in such countries all the available medical potential should be included to see how further training can be given to them in order to win them over for constructive co-operation.

Permit me finally to portray some ideas regarding the level of orthopaedic care. I have often tried to propose very simple types of prosthesis for patients living in rural areas or mountain regions, to avoid difficulties in maintenance.

With these proposals I had the peg-leg in mind, which I find is sometimes indicated. Not even one patient during my 12 years in Africa has accepted such a leg. Even if he was very poor, he refused to accept this kind of prosthesis as he felt he was being discriminated against. He liked to be treated like every other patient. People in Africa are generally very sensitive if they feel they are being treated as second class individuals. This also applies to the field of orthopaedic treatment. They carefully evaluate the situation, can be convinced by understandable examples but refuse anything that can be considered second rate.

May I give you another example of the difficulties we have to deal with.

In Togo there are a lot of leprosy patients. The mutilated fingers do not permit the use of crutches; these people are no longer full, active members of the community. It was the intention to provide some of those patients with PTB prostheses. They all accepted the idea, but nobody wanted to be the first i.e. to be an experiment. After long discussions one of them was amputated and fitted with his artificial limb. He was very carefully observed by his co-citizens—only after his return to the tribe and after proving that his PTB was usable did the other patients come into the hospital.

Unfortunately, we had to give one of this group a conventional BK prosthesis with a thigh corset. New discussions arose, he wanted to have a leg like all the others. There is no ethnic or religious resistance to be noticed against certain kinds of orthopaedic treatments. It is only the intense desire of African patients to be treated equally and not to be discriminated against. In Africa I have never met groups refusing prostheses for any religious reason. I have drawn this picture to underline that it is not enough to set up an orthopaedic service in a developing country and then leave it alone.

Perhaps I should give you another example.

I recently visited a certain country and had discussions with the Under-Secretary of State. He talked to me about their orthopaedic care services, hospitals and so on. We talked about difficulties, what should and what could be changed by eventual assistance etc. I asked him suddenly if he would send his own children to the orthopaedic workshop for treatment. I had no idea of his family situation and was unaware that he had a child suffering from polio. He was astonished and answered, 'You see, I have to send my child to London. The local services are not good enough to provide the service I want'.

Thus, you see, that is the problem. The level of those centres is not high enough to encourage all sections of the population to go there. Our duty is to treat everybody in the local centres, from the highly educated to the rural population.

*Conclusion*

After having set up orthopaedic care centres in developing countries following the rules pointed out, they should be given the possibility of continuing the process of development by themselves by supporting them with continued follow-up care by means of international professional groups or bilateral agreements.

This is, in my opinion, one of ISPO's duties in the future.