

PROSTHETICS AND ORTHOTICS—TODAY AND TOMORROW

Sidney Fishman, Ph. D.
Coordinator

New York University Post-Graduate Medical School
Prosthetics and Orthotics
317 East 34th Street, New York, N.Y. 10016

... *guest editorial*

As commemorated by the 25th anniversary celebration of the Committee on Prosthetic Research and Development in Washington, D.C., systematic prosthetic-orthotic *research* in the U.S.A. is somewhat over a quarter of a century old, while formal prosthetic-orthotic *education* approaches its 20th birthday. History will verify that just after World War II the United States was the only country with the fiscal and related resources to undertake such programs.

The difficulties that any nation faces in attempting to inaugurate an active program of prosthetic-orthotic research and education are not hard to find. Historically, these fields have had no academic or scholastic tradition and, as a matter of fact, up until relatively recently there was essentially no professional literature to be found pertaining to these fields. In addition to the lack of scholastic tradition there was an equal lack of political sophistication, so that the needs of these fields were poorly represented in those centers of government where funds might be made available for support. Add to this the unavailability of any personnel trained and competent in either prosthetic-orthotic research and education, and one finds more than sufficient reason for a lack of activity. But just to complicate the situation further there are very few programs in the health sciences that are more costly to sustain.

As a result of the economic recovery and growth in Europe and other areas of the globe, and in spite of these very difficult problems, some 10 to 15 countries have established identifiable prosthetic-orthotic research and education programs since 1946. These programs are still limited, of course, to the more industrialized countries with more adequately developed scientific, engineering, and medical resources. One might therefore view the situation today with a sense of gratification and even with some enthusiasm. Although the pace has been slow, the growth of activities in these fields on a worldwide basis has been consistent and progressive.

Throughout this period a small number of individuals, institutions,

and agencies have attempted to aid underdeveloped nations in their prosthetic-orthotic development, and on the forefront of these efforts have been such international organizations as the United Nations, World Health Organization, Pan-American Health Organization, World Rehabilitation Fund, and the International Division of the Social and Rehabilitation Service, HEW. The overall effectiveness of many of these programs has been less than ideal for three major reasons. First, the so-called "developed" countries that were providing the assistance were seriously limited by extremely scarce prosthetic-orthotic resources within their own borders; consequently, any efforts to assist others, although prompted by the best of intentions, were fragmentary and intermittent. A second problem relates to the fact that generally there has been no clear understanding of the necessary distinction between the training and development of *prosthetists-orthotists* who should be essentially clinically oriented health-related personnel, and that of *engineers and production* personnel who should be responsible for the manufacture of the prefabricated prosthetic and orthotic components required. In most instances they have been considered to be a single individual. Until these basic differences in responsibilities between the prosthetist-orthotist and the production-oriented engineer-mechanic are understood and incorporated into international-aid programs, the training efforts in developing countries will leave much to be desired. Efforts to combine these functions in one worker have been singularly unproductive. Third, considerable improvement should be possible with regard to the coordination of these educational efforts among the agencies and institutions concerned. Considering the very limited resources available to the sponsors, a more cooperative and integrated distribution of effort would be helpful.

In view of the growing interest and activity in prosthetics and orthotics, the question of methods of developing truly productive communication and interchange of ideas and programs on an international basis becomes timely. Up until the present, when relatively few people were involved, sporadic informal contacts between the small group of researchers, educators, and clinicians were apparently sufficient. However, this is no longer the case. It now becomes clear that there is an immediate need for a strong, active, international forum through which communication, exchange of ideas, and cooperative planning of projects may be implemented.

In this respect the recently formed International Society for Prosthetics and Orthotics is worthy of the attention and support of everyone interested in these efforts. The problems facing ISPO in becoming a truly viable and productive organization are formidable and not to be underestimated. The Society, however, made an auspicious beginning by virtue of its sponsorship of the first worldwide Conference on Prosthetic-Orthotic Research, Evaluation, and Education, which was held in Cairo,

May 1971, under its auspices. An extensive encyclopedic report is to be published shortly.

The Society has been organized on the basis of democratic representational procedures, and as such is our most immediate and best hope for attacking the problems under discussion. With continued and growing support of national programs by their respective governments and the coordinating contributions of ISPO, we may confidently hope, that on the International scene, the coming 25 years will be at least as productive, if not more so, than the past 25 years on the American scene.