

Committee on Prosthetics Education and Information

National Academy of Sciences—National Research Council

A Report

Prosthetics "Grass-Roots" Programs for Physicians

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Committee on Prosthetics Education and Information

In the Committee report appearing in the June issue of this *Journal*, mention was made of the series of national surveys of physicians and therapists conducted by the Committee on Prosthetics Education and Information to obtain information concerning the status of services that are presently available for non-veteran amputees in the United States.* Questionnaires were mailed to physicians, physical therapists and occupational therapists who had taken one or more of the formal prosthetics courses presented by the University of California at Los Angeles, New York University, and Northwestern University. It was believed that there was no better source of information with respect to the problems relating to amputee rehabilitation services than those members of the medical and paramedical disciplines who had evidenced their interest in this field of disability by attending the courses presented by these schools.

The answers to these questionnaires gave abundant evidence that the major obstacle to improving services for the non-veteran amputees is the lack of understanding, on the part of the surgeons and general practitioners who perform amputations, of the modern concepts of amputee care and management that have stemmed from the Artificial Limb Program over the past fifteen years. The following quotations are typical of the comments contained in the survey forms of the physicians who are graduates of the prosthetics schools:

"The standards of prosthetics could be best improved in this area by wider dissemination of present-day knowledge of this problem to those doctors who perform amputations but take little interest in the proper prosthetic fitting and training of the amputee."

"We need a strong advertising campaign (re prosthetics) among members of our own profession."

"I do not think many physicians are aware of the value of organized amputee clinic teams . . . There is a great need to educate the average physician with respect to prosthetic services."

In such fashion did the report of this questionnaire survey emphasize the

* *Editor's Note:* The Surveys of Physicians and Therapists referred to in this article were conducted by CPEI. They are not to be confused with the "Survey of Services Available to Amputees and Other Orthopedically Disabled Persons" R.D. 430 which is being conducted by the American Orthotics and Prosthetics Association under a grant from the Office of Vocational Rehabilitation. The latter is an interview type of survey of Prosthetic and Orthotic facilities.

need to develop a "grass-roots" type of prosthetics informational program that would reach the physicians who have occasion to perform amputations in the conduct of their practices.

The Committee early recognized that their broad objective of achieving a more general application of the fruits of research to the care and management of our amputee population required the development and concurrent implementation of dual programs. Although historically the field of prosthetics has always had a relationship to medicine, it has not been in the past generally identified with the processes of medical education. A need exists, therefore, to introduce into graduate and undergraduate medical education appropriate materials relating to the management of individuals with this form of disability. Such a program is essential to the training of the oncoming generation of physicians. For a more immediate improvement in prosthetics services, a means must be found to indoctrinate the individuals of that discipline who are already out in practice. It is to this latter effort that the term "grass-roots" program has been applied.

In the past two and a half years, CPEI has sponsored a number of prosthetics informational programs for practicing physicians. The initial effort was on January 16, 1959, at a regular meeting of the Washington County Medical Society in Abingdon, Virginia. Although the weather was extremely inclement, the roads being covered with ice and snow, some 55 physicians from a dozen neighboring towns attended. The program was conducted by Dr. Roy M. Hoover, Dr. Frederick E. Vultee, and Mr. Carlton Fillauer, and utilized a variety of amputees. It was evident to all of the observers that the material presented generated a high degree of audience interest. This observation is very important, since there was an element of doubt in this regard on the part of some of the committee members prior to the meeting. The Chairman of the Society's Program Committee, in a letter following the meeting, wrote, "I wish to thank you and your group for coming to Abingdon in such miserable weather to put on one of the best programs our Washington County Medical Society has ever had. Our members found the meeting to be extremely interesting. They were impressed by the degree of rehabilitation that an amputee can achieve who has had the benefit of clinic team management." A similar result was achieved in May 1959, at a county medical society meeting in Norfolk, Virginia. These two efforts demonstrated that prosthetics, when properly presented, is a subject that is of interest to the medical profession. In a well-planned program, the following concepts can be effectively presented in an hour and a half to two hours:

1. The importance of the type of operation, together with the post-operative management, in providing the patient with the opportunity of achieving the maximum functional regain.
2. The need to condition the amputee psychologically with respect to his rehabilitation possibilities since his motivation is all-important in achieving the most satisfactory results. This is possible only if the physician himself properly understands what can now be accomplished through proper management.
3. The value of the multidisciplinary clinic-team approach to the fitting and training of the amputee.
4. Brief mention of the special considerations that apply to the congenital child amputee and the geriatric.

Since a national prosthetics educational program conducted at the level of the county medical society is beyond the personnel and fund resources of the Committee, thought was given to holding state meetings that

would be under the auspices of local medical organizations. On May 1, 1960, a full day's program was presented in San Antonio, Texas, for the University of Texas Post-graduate School of Medicine. Dr. Charles O. Bechtol headed the team for this occasion and was assisted by Dr. Lewis A. Leavitt and Mr. Alvin L. Muilenburg, both of Houston. The following is a typical comment received from a physician located in Blanco, Texas:

"The seminar which was held at the Robert B. Green Hospital on May 1, 1960 concerning modern prosthetics was a very remarkable program and one which I greatly enjoyed. It should be recognized that the subject matter was one which has been shunned more or less and perhaps few of the GP's like myself have ever had any orientation to the field of amputees and prosthetics."

Dr. Bechtol and Dr. Cameron Hall, presented a similar program for the physicians of Oklahoma in October 1960, which was sponsored by the Department of Orthopedic Surgery of the University of Oklahoma Medical School. In April 1960, Dr. Clinton L. Compere, Dr. Frederick E. Vultee, and Mr. Blair Hanger of the Northwestern University Prosthetics School conducted a prosthetics orientation at the regional meeting of the American College of Surgeons in Minneapolis before some 300 surgeons.

From all of these pilot-type programs, there has developed in the minds of the participants certain general principles that the Committee should follow in planning future activities designed to inform the medical profession at large concerning the modern concepts of amputee care and management:

1. A stereotype program should be developed that will effectively present those principles of amputee management with which practicing physicians should be familiar. The material should be adaptable to programs ranging from two to four hours in length. It is essential that the presentation use well-trained amputees and that there be available a display of the standard prostheses. A limited use of audio-visual aids may be permitted.

2. A small group of interested orthopedic surgeons and physiatrists, who are well-distributed geographically, should be recruited for the presentation of programs in their respective areas. Since the technique of the participant in presenting the material is all important in determining the success of the meeting, it would be advisable to assemble this group for a short course on the instructional methods to be used.

3. It is of paramount importance that meetings be sponsored by effective local medical organizations that would be responsible for the necessary publicity and promotion of the program.

4. The effectiveness of the program would be materially enhanced by the availability of a "hand-out" in the form of a well-illustrated brochure that would recapitulate the material covered at these meetings. The Committee now has such a brochure in preparation. It has been decided that no effort would be made to schedule future "grass-roots" meetings until after the publication of this pamphlet.

5. Concurrent with a "grass-roots" program in a state, plans should be made to organize prosthetics clinics that would be available to the local physicians for the referral of their amputee patients.

6. The state's Bureau of Vocational Rehabilitation plays a major role in the determination of standards of prosthetics services. It is essential that close liaison be maintained with these agencies.

It will be noted from the foregoing summary of the physicians' prosthetics informational program that CPEI has been, to a large extent, dependent upon a very few devoted individuals for the conduct of these meetings. No future extended program of this character will be possible

until the base of support in terms of participating orthopedic surgeons and physiatrists can be very materially broadened. Quite a number of physicians have indicated to the Committee that they are available for this purpose.

In this national prosthetics educational program, members of the relevant paramedical disciplines can also play an important part. Many prosthetists are regularly invited to speak to medical students, residents, and the local physicians at their hospital and county medical society meetings. The Subcommittee on Prosthetics in Medical Education is planning to assemble an appropriate set of slides to assist these prosthetists in their presentations. Special sets of slides will also be made available to physical therapists, occupational therapists, and vocational counselors for meetings of the members of their disciplines. CPEI believes it can best serve this national effort by assisting, within the limits of its fund resources, the various interested organizations, groups and individuals in this country that are endeavoring to improve rehabilitation services for our amputee population. The Committee's Chairman, Dr. C. Leslie Mitchell, therefore, invites individuals who are presented with prosthetics educational opportunities to communicate their needs to the Washington Office.

The Director of the Office of Vocational Rehabilitation, Miss Mary E. Switzer, at the September 22, 1959, meeting of CPEI, in addressing the Committee concerning the research and education elements of the Artificial Limb Program, stated that "although through this program there is an ever-growing number of trained individuals with the ability to translate newer prosthetics knowledge into better services at the local level, nevertheless, in the national effort we have just scratched the surface . . . A major mission of the Committee should be to develop and implement plans that will narrow the gap between what is known today in the field of amputee rehabilitation and what is currently practiced." In this endeavor, physicians, physical and occupational therapists, prosthetists, and rehabilitation personnel can make their individual contributions.

In Memoriam

LEO WALLER

Mr. Leo Waller, Vice President of the Hersco Arch Products Corporation, died in New York City on September 18th. He was a member of the *Journal's* Committee on Advertising, and of the American Orthotics and Prosthetics Association. A biographical sketch will appear in the next issue of the *Journal*.