Post-Polio Residual Paralysis in Rural Areas—Place of Physical Therapy

Millions of children with paralytic poliomyelitis in India are deprived of proper care for want of adequate number of specialists. Children in the underprivileged communities have limited access to hospital care due to monetary reasons. Of those who have access to the hospital, only a few get appliances, very often without proper training. Incorrect selection of patient for surgery and over prescribing of appliances are also common. However, the single important factor needed for a regular follow-up of these unfortunate children is the family’s motivation and participation in the treatment.

The above observations prompted us to co-ordinate with a voluntary organization, Handicap International to explore methods for rehabilitation of children with Post-polio Residual Paralysis (PRP). The most important aspect was to diffuse the practice of physical therapy to the community level where the cases can be treated locally. This called for the development of low cost orthoses, made of PVC polypropylene calipers and training the technicians.

Twenty seven volunteers from three local organizations were trained at Handicap International, Pondicherry since 1990. These Multipurpose Rehabilitation Technicians (MRT) are the key persons in the community oriented physical therapy program and they are helped by trained local helpers.

MRT training involves one year of continuous intensive training at Pondicherry followed by continuing training for 2 years lasting for 15 days every four months. Volunteers having completed Higher Secondary Schooling, are recruited for training. Once the training is over, MRT evaluates the patient's needs in the field-choosing and making the appliances, preparing the child to walk and above all motivate the parents to participate in treatment and teach them to do exercise at home.

For better understanding by the parents and family members, the most useful exercises are described in sheet with drawings and explained to them in local
language. We found that home-based physiotherapy is valuable in:

(a) Proper positioning of children in bed and show practice of full range of movement. During recovery they are continued but priority is given to active movements.

(b) Preparing and training in the use of walking aids.

(c) Correcting contractures by manual stretching exercises.

(d) Preparing and training in walking with an appliance.

(e) Specific exercises for strengthening the muscles with power more than 3 and for maintaining posture.

However, much resistance has to be overcome before the family and community participation can be obtained. The first step is the need for awareness among communication for such home-based therapy.

While individually responding to the particular needs of our trainers and patients, we are attempting a systematic approach to community based rehabilitation for polio children. Evaluation of the training programme and its outcome are in progress for the 27 MRT trained till 1993.

The need for community based rehabilitation programmes is felt by health care system but a beginning has to be made in our own areas.

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