# Rehabilitation of Rehabilitation Medicine

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It is estimated that some 300-400 million people, or about 10% of the world's population is affected by chronic disability. Disability can thus be considered one of the most important health problems in our society, and its magnitude is expected to increase in the future.

In 1976, the Twenty-ninth World Health Assembly adopted a new policy and programme for disability prevention and rehabilitation, suggesting a number of new and quite radical changes in present policies and services for the disabled throughout the world. These consisted of:

(a) Placing emphasis on prevention of disability rather than rehabilitation;
(b) efforts to make services universally accessible to everyone in need;
(c) the promotion of appropriate technology and more effective measures for rehabilitation;
(d) changes in the manpower structure to render rehabilitation less expensive and more accessible.

## OBJECTIVE OF REHABILITATION

The first question we should ask ourselves is: why do we want rehabilitation? What is our main objective? Let us for a few moments look into the background for our decisions on objectives.

During the last few years more and more people have come to an increased awareness that economic growth as such is not a sufficient measure of progress. Equally important is the distribution of the fruits of such growth. Thus, we have seen major efforts in our societies to redistribute wealth through transfer payments from the more affluent to the poor, mainly in the form of social insurance, unemployment benefits, pensions, contributions to children and social welfare payment etc. But there is also an increasing awareness of the fact that just redistribution of resources —or money—is not enough. There must also be a more fair distribution of opportunities.

## THE SITUATION IN AND SOLUTIONS FOR DEVELOPING COUNTRIES

### Present situation

Most developing countries have at least some rehabilitation services. In a typical situation we will find some government services, usually in the form of a rehabilitation institution in the capital and/or in other major cities. There would also be one or several small centres, usually operated by non-governmental organizations, e.g. for the blind, the deaf, the crippled & the mentally retarded etc. In most such countries there are services to cover less than 0.1 per cent of the disabled population. These services are usually expensive—costs amount to US $ 1,000 to 3,000 per child per year in a typical institution. Many disabled stay for a considerable length of time, and the results are often poor. Disabled persons in institutions are separated from their families and villages and they often develop unfavourable psychological attitudes and behaviour. Institutions often contribute to increased dependency rather than creating active independent individuals. Although institutional rehabilitation services have been available for the last 50-100 years, there has been no serious attempt to evaluate their effectiveness.

**Disability Prevention**

Disability prevention thus emerges as priority, especially in the following areas:

(a) *Malnutrition*—more than hundred million children under five years of age are affected by protein-calorie malnutrition, goitre, anaemia and vitamin A deficiency;

(b) 50-100 million persons are disabled by communicable diseases, such as tuberculosis, leprosy, poliomyelitis, trachoma, and so on;

(c) Millions of people each year are disabled by accident—at work, on the roads, at home or in wars or civil unrest;

(d) Frequent complications during delivery and the perinatal period give rise to unnecessary life-long disability in millions of persons each year.

Proper prevention of the above-mentioned causes could reduce the world-wide prevalence by at least one third, may be one half.

Lack of curative care of sufficient quality also leads to disability in a high proportion of patients with fractures, wounds, cardiac failure, epilepsy, schizophrenia and tuberculosis, to give only a few examples. Second level prevention could reduce the disability effects of such diseases.

**Priority concerns**

In order to promote community-based essential rehabilitation, mannuals, training material and packages should be available for use by primary health care workers and family and community members. There is also a need for efforts to promote the appropriate central planning procedure to ensure the final aim of providing the most essential services to the total population.

The type of rehabilitation just described was recently planned for a developing country. In spite of the fact that country has a population of less than one million and is the size of France, it was shown to be possible to implement full population coverage at the cost of only 2% of the health budget. This includes all necessary medical, social, vocational and educational rehabilitation measures. Individual costs calculated showed that 100 children could be given rehabilitation in the community for the same cost as one child in an institute.

## THE SITUATION AND PROBLEM AREAS IN DEVELOPED COUNTRIES

It is difficult to generalize the situation in the developed, industrialized countries. Some countries have health services still, to a great extent, in the private sector, at the other end of the scale we find what is often called "socialized medicine".

There are various degrees of population coverage for the disabled in these countries. There is no doubt that rehabilitation services often achieve good results and that the applied technology has been evaluated. Nevertheless, I would like to take this opportunity to examine and discuss the main problem areas.

**The administrative problem**

Rehabilitation has in most countries been split up in its medical, vocational, educational and social components. Different branches of government are often responsible for their own sector of rehabilitation. This has led to uneven development, poor cooperation and high costs.

**The manpower problem**

Rehabilitation services have become highly dependent on the availability of many different training, and in addition it needs the temporary services of a high number of consultants. It is impossible to provide community or home care at a reasonable price, when rehabilitation is divided up among so many professionals and thus the only service provided is institutional. The fact that rehabilitation utilizes such a complicated manpower, structure

has led to spiralling costs for the services. We can in many parts of the world now find daily average costs in rehabilitation hospitals of US $ 200 to 300 a day.

**The technology problem**

We are facing technology problems in various ways. Prevention does not seem to be effective for a number of disabling conditions: for instance rheumatic arthritis, psychotic and neurotic conditions, chronic alcoholism, drug abuse, etc. In some other areas, e.g. heart disease and cerebro-vascular accident, there are more encouraging developments. More efforts are needed to undertake research to prevent disability caused by these disorders. Rehabilitation technology has developed into a rather unfortu nate situation. To quote Dr. Halfdan-Mahler, Director General of the World Health Organisation: "Health technology can be divided into three different types, namely: one that is truly fundamental to the solution of health problems, another that might be termed placebo technology at the other estreme, and a third intermediate, palliative technology. This classification based on an assessement of health technology according to its results, and these results have to be measured in terms of problem-solving and not in terms of the efforts expanded or the efficiency of performance."

Most of us would agree that this kind of examination and classification of rehabilitation measures is desirable and necessary if we are to make rehabilitation more effective and keep costs reasonable.

A recent Swedish study of the effectiveness of rehabilitation for long term sickness, patients have shown quite interesting results. The follow-up period was five years, and the two hypotheses examined were:

(1) that rehabilitation should contribute to an early return to work;
(2) that rehabilitation should lead to decreased dependency on medical care.

This study used randomised controls for comparison. In the final results there were no difference in working days between the rehabilitated group of patients and the patients in the control group. There were only small differences in the demand for medical care, mainly indicating an increased dependency among rehabilitated patients for such care.

In summarizing the situation in developed countries, we realise that there is a pronounced need for research. We are efficientely delivering rehabilitation that may be totally ineffective. The costs for doing this are very high.

The means to avoid a future crisis are not quite clear to any of us. We must search for better means to screen out and assess persons that are at high risk of being future invalid persons. We must try to prevent early elimination from the labour market of people with a marginal working capacity. We must find means to prevent disabling accidents and chronic diseases. We must find better ways for the delivery of effective rehabilitation to all those in need, and at a cost that is acceptable. We must pay more attention to services that can be delivered in the community and at home, not by whole team of rehabilitation professionals but by multipurpose workers.

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