Training in the community for people with disabilities

E. Helander, P. Mendis, G. Nelson, and A. Goerdt
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Training in the community for people with disabilities

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- United Nations Centre for Social Development and Humanitarian Affairs (UNCSDHA)
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Introduction
## Contents: Introduction

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Foreword

Improving the quality of life of people with disabilities who live in developing countries is a difficult and challenging task. Many factors militate against such improvement; all too many people and, indeed, most authorities are inclined to believe that disability in the community is a minor problem. Services for people with disabilities are seen as expensive and with little to show for the effort and money expended. Rehabilitation itself tends to be viewed as a luxury that can be left for charitable institutions to handle. Health professionals too are inclined to be negative or even hostile towards changes in an established system of care that over many decades has slipped into a comfortable routine. Nor is there anything very dramatic or eye-catching about action aimed at improving the fate of the estimated 250-300 million people who suffer from disablement.

People with disabilities — often poor, dependent, and vulnerable — speak with a humble voice. They have no influence or power and carry no political weight. WHO estimates that no fewer than 98% of such people in developing countries are totally neglected.

The Member States of the World Health Organization decided more than ten years ago to include rehabilitation as an integral part of primary health care services. This is an indication of a sincere will to seek a solution to the problem of providing the resources needed for all people with disabilities.

This manual is the result of ten years of effort on the part of WHO, other UN agencies, governments and nongovernmental organizations to develop an effective modern technology for the provision of rehabilitation, based on services at the community level. This approach has already been tried out in a large number of countries, where it has been evaluated and adapted to the local situation.

It is my sincere hope that this manual will meet the needs of people with disabilities, and will help to bring services to them now.

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This manual has been prepared by the World Health Organization in cooperation with several other United Nations agencies involved in programmes concerning disabled people: the United Nations Children's Fund; the United Nations Development Programme; the High Commissioner for Refugees; the United Nations Centre for Social Development and Humanitarian Affairs; and the United Nations Educational, Scientific and Cultural Organization. The valuable role played by these organizations and their staff in developing the ideas, participating in the field-testing, reviewing the text of previous experimental versions of the manual, and providing funds is acknowledged with gratitude.

The previous versions, printed in 1979, 1980 and 1983, have been used in about 60 countries and have been partly or entirely translated into about 30 languages. People with disabilities and workers of all categories, including community workers and experts in the field, have given their views and suggestions for improvements. Field-testing and evaluations were done between 1979 and 1987 and those involved provided the authors with invaluable advice. Thanks are due to all the people, too numerous to mention, who provided feedback on the manual.

On the basis of the many comments received, some parts of the manual have been changed extensively. The individuals named below carried out thorough reviews of the rehabilitation technology and illustrations in particular parts of the manual, and deserve special mention.

Seeing difficulties
Dr Lawrence Campbell and staff of Helen Keller International, New York, USA.

Hearing and speech difficulties

Moving difficulties
Ms Sophie Levitt, Bath, England.

Feeling difficulty (leprosy)

Strange behaviour
Dr Timothy Harding and Dr John Orley, Division of Mental Health, WHO, Geneva, Switzerland.
Learning difficulties
Professor Peter Mittler and staff of the Department of Special Education, University of Manchester, Manchester, England.

Play activities
Ms Dorothy Jeffree, Manchester, England.

Guide for schoolteachers
Ms Lena Saleh, UNESCO, Paris, France; Mr T. Jönsson, Lusaka, Zambia.

Guide for people with disabilities
Mr Joshua Malinga, Zimbabwe, and Mr Tambo Camara, Mauritania, Disabled People's International; Ms Joy S. Valdez and members of Negros Occidental Rehabilitation Foundation Inc., Bacolod City, Philippines.

Thanks are also due to Ms Jacqueline Bradshaw-Price for re-drawing most of the 2000 illustrations that she had prepared for the 1983 version of the manual.

The economic contribution made by the Swedish International Development Authority (SIDA) to the development of the manual, its printing and field-testing is acknowledged with special gratitude.

Gunnel Nelson devoted much effort and interest to the manual, preparing the drawings and much of the text for the previous versions. Sadly, she passed away before the present version was completed.
Contents of the manual and how you can use it

This manual has been prepared for people in the community who are planning, implementing or evaluating a community-based rehabilitation (CBR) programme. The manual will be most useful if it is translated into the language of the users. The drawings and the text should be adapted so that they fit the local culture and customs.

The manual consists of 34 modules: 4 guides and 30 training packages. Each module can be used individually and the guides and training packages given to the people for whom they were written.

The four guides are for members of the community who carry out special tasks for the CBR programme. They are:

Guide for Local Supervisors — this is for the community worker who implements the programme;

Guide for the Community Rehabilitation Committee — this is for the community committee that helps to manage the programme;

Guide for People with Disabilities — this describes what people with disabilities can do for themselves and for others in the community;

Guide for Schoolteachers — this will help teachers who have children with disabilities in their classes.

The training packages are for family members of people with different types of disabilities: seeing difficulties, hearing or speaking difficulties, moving difficulties, feeling difficulties, strange behaviour, fits, and learning difficulties. These packages provide information about the disabilities and about rehabilitation procedures that will help people with disabilities to do daily activities, such as eating, dressing, communicating, moving around, playing, going to school, and taking part in work and social activities. Family members can use these packages to train the disabled person to do these activities.

The individual training packages are listed below.

Training packages for family members of people who have difficulty seeing
1. Information about the disability and what you can do about it
2. How to train the person to take care of himself or herself
3. How to train the person to move around
Training packages for family members of people who have difficulty speaking and hearing or speaking and moving
4. Information about the disability and what you can do about it
5. For the child who has difficulty hearing and has not learned to speak — how to train the person to communicate
6. For the adult who has difficulty hearing but can speak — how to train the person to communicate
7. For the child who has difficulty speaking and moving but can hear — how to train the child to communicate

Training packages for family members of people who have difficulty moving
8. Information about the disability and what you can do about it
9. How to prevent deformities of the person's arms and legs
10. How to prevent sores from pressure on the skin
11. How to train the person to turn over and to sit
12. How to train the person to move from sitting to standing
13. How to train the person to move around
14. How to train the person to take care of himself or herself
15. How to train a person who has aches and pains in the back or the joints to do daily activities
16. Exercises for weak, stiff, or painful arms and legs

Training packages for family members of people who have no feeling in the hands or feet
17. Information about the disability and what you can do about it
18. How to prevent injuries and deformities of the hands and feet

Training packages for family members of adults who show strange behaviour
19. Information about the disability and what you can do about it
20. How to train the person to take care of himself or herself

Training package for family members of people who have fits
21. Information about the disability and what you can do about it

Training packages for family members of people who have difficulty learning
22. Information about the disability and what you can do about it
23. How to train a child who has difficulty learning to take care of himself or herself
24. How to train an adult who has difficulty learning to take care of himself or herself

General training packages
25. Breast-feeding a baby who has a disability
26. Play activities for a child who has a disability
27. Schooling
28. Social activities
29. Household activities
30. Job placement
Situation analysis

Incidence and prevalence of disability

A number of large surveys in industrialized countries have indicated a prevalence of disability of about 10% of the population. In developing countries, some 100 studies (surveys, censuses, etc.) have been made. It is difficult to compare the results of the various studies because different methods were used, but it appears reasonable to conclude that 7–10% of the population in developing countries is disabled, less than the estimate for the industrialized countries.

The incidence of some disabilities is higher in the developing countries than in the industrialized ones. However, in developing countries, people with disabilities have a shorter life span. The most important factors contributing to death are infectious diseases and diarrhoea. In some developing countries, most children who are born with a disability, or acquire one in early life, do not survive beyond the age of 20 years. Similarly, elderly people do not live long after they acquire a disability. As a consequence, the prevalence of disability in the developing countries is lower than in the industrialized ones.

As health services in developing countries improve, survival rates will increase. Although the incidence of disability can be expected to decrease, the prevalence will go up. When infant and child mortality rates diminish, and the proportion of elderly people in the population increases, we can expect the prevalence of disability to be around 10%.

Global needs for rehabilitation in developing countries

On the basis of field experience, it is estimated that 100–120 million people with disabilities in developing countries, or 2.5–3% of the population, could benefit from rehabilitation. The number is increasing. By the year 2000 we should expect some 130–150 million people in this group.

Rehabilitation services in the developing countries

Some developing countries have almost no rehabilitation services. In others, institution-based services serve very few people. Larger countries have more developed services which are usually institution-based, perhaps with outreach programmes. There are also examples of "passive services", where people with disabilities live in institutions, but do not have the opportunity to take part in an active rehabilitation programme.

It is estimated that, at present, no more than 2–3% of the people who could benefit from rehabilitation are receiving services, i.e. 2–3.6 million of the 100–120 million people who need services are actually receiving them.
Quality of life of people with disabilities

Mortality and morbidity rates among people with disabilities are much greater than those among the non-disabled. There is often a lack of concern in the society about environmental factors that cause or complicate disabilities.

People with disabilities often do not have the access to community services and opportunities available to other citizens, such as health services, schools and educational institutions, skills training programmes, vocational education programmes, and jobs.

Adults with disabilities generally have lower incomes than non-disabled adults. In some countries adult women with a visible disability may be abandoned by their husband and deprived of their children. The presence of one child with visible or stigmatizing disabilities in a family may have negative consequences for the marriage not only of the child with a disability, but also of the brothers and sisters.

Social segregation of people with disabilities is extremely widespread. It affects not only those with communicable diseases (e.g. leprosy), but also those with visible defects (e.g. persons missing an eye or a limb), and those with mental retardation, psychosis, or epilepsy. In many societies, people with disabilities are segregated because of deep-rooted fears and beliefs stemming from cultural and religious convictions. For example, a disability may be thought of as a divine punishment. Negative attitudes and discriminatory behaviour towards people with disabilities are the rule rather than the exception.

People with disabilities are very often excluded from any position of leadership in their community. They are seldom elected or appointed to any political office, and are in general excluded from planning and decision-making. This almost complete lack of representation in community affairs contributes to the neglect of their needs. Most people with disabilities have no say in their own welfare, and no influence on policies and services aimed at them.

Conclusion

The large gap between the services needed and those provided presents a dilemma. Many years ago it was common to think that if one had just a little patience, one would be able to train rehabilitation professionals, build facilities for rehabilitation centres and “catch up” with the problem using the institution-based approach. It took some time to realize that this is not necessarily an appropriate solution, and in any case is not possible in many areas for the following reasons:

- Developing countries are now, and will for a long time continue to be, short of trained rehabilitation personnel.

- Building, equipping, and maintaining facilities and employing staff are very costly, especially if one uses teams of professionals.
The population in developing countries is growing at a very high rate

When the exceedingly high death rate among children with disabilities is reduced, more children and adults with disabilities will survive, thus increasing the prevalence of disability.

In some countries it would take more than 100 years to "catch up" using the institution-based or outreach service approach.

Moreover, rehabilitation provided in institutions generally does not involve the communities in which the people with disabilities live. For rehabilitation to be successful, communities must recognize and accept that people with disabilities have the same rights as other human beings. This may require a significant change in attitude among the members of the community. It has been found that the most effective way of bringing about such a change in attitude is for members of the community themselves to take on the task of rehabilitation.

It is not possible to meet all needs with services at the community level. However, up to 70% of needs could be dealt with in the community. This would be a major improvement on the 2–3% of needs that are now met in many countries. The remaining needs must be met through referrals to district, provincial, and national levels. There should be adequate professional staff at those levels to deal with the problems that cannot be solved in the community.
Approaches to rehabilitation

To clarify the different approaches used, the following operational terms are proposed.

Institution-based rehabilitation. This term is taken to signify a situation where most or all services for rehabilitation are delivered in an institution or home for disabled people. Institutions may be general, such as a national centre for people with all types of disability, or specialized, such as a home for children with physical disabilities. Institutes may provide outpatient or inpatient services. Some provide long-term boarding.

Outreach services for rehabilitation. This term is used to characterize the situation when either: (a) professionals from an institution advise local authorities regarding environmental, social, vocational, and educational problems that can be dealt with locally in order to reduce handicapping conditions among people with disabilities; or (b) the institution decentralizes some professional services to the district or community level. In this case, services will increasingly, and as far as resources allow, be delivered locally, sometimes in the home of the person with a disability. There are variations of this type of approach. Mobile team services, camps, one-day clinics, etc. have been used in some places. This method of decentralizing professional services is costly. The professional travels to the community to give services, instead of requiring people with disabilities to come to the institution. The professional will be able to give services to fewer people than he or she would see in an institution. Also, the cost of transportation for the professional will have to be covered by the institution.

Community-based rehabilitation (CBR). This term is used for situations where resources for rehabilitation are available in the community. There is a large-scale transfer of knowledge about disabilities and of skills in rehabilitation to the people with disabilities, their families, and members of the community. There is also community involvement in the planning, decision-making, and evaluation of the programme. One might call this a democratization of rehabilitation.

CBR also includes referral services at district, provincial, and national levels. Rehabilitation personnel at these levels provide skilled assessments and rehabilitation plans for disabled people with complicated problems that cannot be solved at community level. These personnel also participate in the training and supervision of the personnel at all levels.

In order to provide the necessary services, CBR requires a coordinated, multisectoral approach. It demands close cooperation between all ministries involved with rehabilitation, and joint planning at regional, district and local levels.
The "technology" of community-based rehabilitation

How this manual was written

The manual was developed in three phases.

Phase 1: Observing and recording "spontaneous technologies"

The first phase started with visits to 16 countries in Africa, Asia, and Latin America to meet people with disabilities. The aim of these field visits was to find out what knowledge people had about their own disabilities and what activities they had learned to do without formal rehabilitation programmes. Visits were made to urban areas, including slums in large cities, and to rural areas, including sites several days' travel away from a major city. In many communities we met people with disabilities, their families, and the local leaders and authorities.

Some findings were not encouraging. For most people with disabilities life appeared to be difficult. Many of the children were malnourished, poorly dressed, and suffered from a variety of diseases. Adolescents and the few disabled adults whom we met were often sitting at home with little or nothing to do. In some cases the initial condition had been complicated by contractures and sores. It was rare to find a person with a disability who had been to school or who was able to earn an income through means other than begging. The level of knowledge about disabilities was generally very low. Disabilities were often seen either as resulting from a medical event, such as immunization or fever, or as having a supernatural origin, such as evil spirits, breaking of taboos, or divine punishment. These findings showed the need for community-based activities to change attitudes and beliefs about disabilities and to promote the social integration of people with disabilities.

Some findings from the field visits were very encouraging. The level of rehabilitation of some people with disabilities was quite high. There were examples of adults with disabilities who had trained themselves, and of children with disabilities who had been trained by members of their family. None of these people had ever had access to rehabilitation specialists, or to commercially available equipment. Technical aids and appliances were made locally.

Following the discovery of many such instances, we recorded the successful "spontaneous technology" these people had used. We analysed what people had done and found common procedures in different countries. For example, a parent teaching a blind child independent mobility in Mexico used essentially the same technique as a parent teaching a blind child in Indonesia, Nigeria, or Sri Lanka.
For each disability a pattern of local, indigenous technologies could be identified —
technologies born in the minds and hearts of ordinary people. Through love and common
sense, people had overcome great odds and found solutions to their problems. In many
cases the technologies were the same as those used in industrialized countries, where
rehabilitation includes the spontaneous technologies of people with disabilities, know-
ledge of anatomy and physiology, and techniques developed by rehabilitation profes-
sionals.

The spontaneous technologies we observed were standardized and put into a system for
delivery of rehabilitation services. Whenever there were gaps in our direct observations,
we described an approach that had been used by people with disabilities in developed
countries, and which would also be appropriate in developing countries.

The first version of this manual (1979) was based primarily on this spontaneous technology.
We thought that if more people with disabilities and their families learned how others like
them had achieved success, they would be able to do the same. This was our attempt to
transfer knowledge and skills. We tried to describe in a simple way what had been done
by others, and to show how many problems might be solved in a practical way. These
descriptions were collected together in "training packages".

**Phase 2: Facing realities in the field**
During the second phase we followed up the results of field-testing in some 20 countries
in Africa, America, and Asia. We listened carefully to disabled people, their family
members, local supervisors, community leaders and the CBR managers. Specific studies
were supported to evaluate the outcome of the CBR programmes. In most countries the
reports indicated success among 70 - 80% of people with disabilities. Most of those
enrolled in the CBR programme were children. Revisions based on field-tests were made
in 1980 and, following a consultation with a larger group of field staff, a revised version was
produced in 1983.

**Phase 3: Developing a "consensus technology"**
In the third phase we continued to follow the field programmes and to use the feedback
from their evaluations. We also asked the advice of a large number of experts, such as
physiotherapists, occupational therapists, speech therapists, special educators, and
vocational trainers. Most of the experts were chosen because they had extensive
experience in rehabilitation programmes in developing countries. The aim of this phase
was to arrive at what we may call "consensus technology", or an approach combining
spontaneous technologies with the technologies accepted by professionals in the field of
rehabilitation.
The language and the drawings

This manual will be most useful if it is translated into the local language of the user. In some countries the people who will use the training packages may not be completely literate. Normally they get help from a child who is attending school, or from a relative or friend who can read. To facilitate the understanding of the text and its translation, great care has been taken to simplify the language. The following rules have been kept to in the English version:

■ The number of different English words has been restricted to about 1800. The same word is always used for one particular meaning. For example, we always use “correct” to mean the opposite of wrong. We only use “right” to mean the opposite of “left”.

■ With a few exceptions, the words used appear in the list of the 2000 “basic” words in English.

■ The sentences have been kept short. The average length of the sentences is 11 words. Fewer than 1% of the sentences are longer than 25 words.

There are approximately 2000 line drawings accompanying the text. The advantage with the type of line drawings used here is that they can easily be changed. Houses, dresses, faces, etc. can be re-drawn to reflect the local setting in which the manual is used. (There is a guide for those who need to undertake this change, available from: Rehabilitation, World Health Organization, 1211 Geneva 27, Switzerland.)

Adapting the manual

In adapting the manual to your local situation, you may also want to use technologies other than those described in the text. This may be because you want to include training for other types of disabilities, or because you want to use a technology with which you are familiar. You should then write your own text and make your own drawings. We suggest that, when you do this, you state for whom your information is meant (the user), indicate your educational objectives, and include an evaluation component, such as the one in the results section of the training packages.
The modules

The manual contains 34 modules, comprising 4 guides and 30 training packages, which are briefly described below.

Guide for local supervisors

We have “invented” the term “local supervisor” (LS) because it describes the role of the community rehabilitation worker, who supervises the people in the rehabilitation programme. This term has not, to our knowledge, been used anywhere else.

The local supervisor should preferably be a local person chosen by the community. He or she should have the confidence of the people and a thorough knowledge of their way of life. In some programmes the LS receives a salary or some compensation for the work; in others he or she is a volunteer. This depends on the policies of the country and the type of compensation given to the other community workers. It is conceivable that the tasks of the LS may be handled by more than one person, but specialization at this level should be avoided.

The guide can be used for the training of local supervisors, who will then use it in their work. The guide explains how to work with the community to develop a CBR programme, how to identify members of the community who have disabilities, how to choose training packages for those who will have training programmes, how to teach and supervise family members as trainers, and how to keep records.

Guide for the community rehabilitation committee

This is a guide for local leaders and community members who are interested in doing something for people with disabilities. The guide explains how a community committee can develop a CBR programme, and what role the committee can play in carrying out and evaluating the programme.

Guide for people with disabilities

This is a new guide which encourages people with disabilities in their efforts to rehabilitate themselves. It also includes a short, simple description of why and how people with disabilities can form an association. Such associations can play an important role in promoting and strengthening activities to prevent disabilities, to provide rehabilitation, and to obtain equal opportunities. People with disabilities should be involved in these activities, and one way to be involved is through an association devoted to their special interests.
However, some people may think that associations of people with disabilities are another form of segregation. It is important that members of associations of people with disabilities bear this in mind. They should avoid the temptation to keep away from others and to stay in the "comfortable company" of other people with disabilities. When there are no more political reasons to keep the associations, they should be dissolved and their members should participate with everybody else in "mainstream" associations, to further the cause of full participation.

Guide for schoolteachers

This guide is meant for teachers who have not received any formal training (in the teachers' college or afterwards) related to the needs of schoolchildren with disabilities. It will help teachers in local schools to integrate children with disabilities into classes with non-disabled children. The guide can be read by the teachers, individually, or be used in a local course for a group of teachers.

The guide should be seen as the first step in providing education for children with disabilities. Other steps should follow, such as the introduction of a course in special education at the teachers' colleges; the provision of specially trained "mobile" or "fixed" resource teachers; and later on, the provision of more specialized teachers for those with seeing, hearing, or learning difficulties.

About 90% of children with disabilities can be successfully integrated into normal schools. Regarding children who were born deaf, it has been shown in some programmes that schooling is only successful if a two-way communication is established. So the class teacher and at least some of the classmates need to learn how to communicate with the deaf child, for example, by sign language. Usually, special schooling facilities are needed only for the few children who have severe mental retardation or multiple disabilities.

The training packages

The training packages are for family members of people with disabilities. There are training packages for seven types of disability: seeing difficulty, hearing and speaking difficulty, moving difficulty, feeling difficulty, strange behaviour, fits, and learning difficulty.

There are three categories of training package:

(1) Information packages are meant to transfer knowledge about the disability to people with the disability and their family members.

(2) Prevention packages are to be used to prevent disabilities from becoming worse.

(3) Packages that describe training procedures are meant to transfer skills for rehabilitation to the family member who trains the person with a disability to do more activities.
Most of the training packages are for one type of disability. Six packages deal with activities relevant to children or adults with any type of disability: breast-feeding, play activities, schooling, social activities, household activities, and finding a job.

For general activities the principle of integration or "mainstreaming" has been followed. We firmly believe that the best outcome is obtained if people with disabilities are integrated with all other people, in the family, in school, at work, in training and educational establishments, in housing, in community affairs, in decision-making, etc. There is a vast literature to show that this is the best approach and it is also recommended by the UN World Programme of Action Concerning Disabled Persons. But there are, naturally, some exceptions. Those with very severe disabilities cannot always be fully integrated.

Some people believe that CBR should include small centres in the community for children with disabilities. We think that integration is a better approach. Too often a centre is a place where the person with a disability is "put away". Segregation in these small centres also leads to other problems. For example, it is well known that the behaviour of mentally retarded children can easily be modified into undesirable patterns if they have contacts only with other mentally retarded children. It is better to create a small day-centre for all children and let the child with a disability be among them.

The package for play activities describes techniques for early stimulation of children with any type of disability. It can also be used for non-disabled children who have developed slowly, perhaps because of illness. The training activities are divided into eight levels of development. Each of these levels is divided into two types of activities: communication and behaviour, and movement and self-care. Children who have difficulty hearing, for example, will progress more rapidly in the movement and self-care activities. Some children who have difficulty moving will progress more rapidly in the communication and behaviour activities.

The activities for the eight levels of development are presented in leaflets representing the following age groups:

Leaflet 1: 3 months  Leaflet 5: 2 years
Leaflet 2: 6 months  Leaflet 6: 2–3 years
Leaflet 3: 9 months  Leaflet 7: 3–4 years
Leaflet 4: 12–18 months  Leaflet 8: 5 years

We have chosen not to put the information about age levels in the leaflets themselves. Many children with delayed development are not identified before the age of 2–3 years. It may be discouraging to family members of such a child to be given a training leaflet which says, for example, "3 months" or "9 months."

Some of the training packages give a method for teaching a person with a disability how to do an activity. We have chosen to describe only the "forward-chaining" technique. Hence, activities are taught in steps, starting with the first step needed to achieve the specific activity. Forward-chaining is the only method presented because there appears to be no proof that backward-chaining, or doing the last step of any activity first, is any more effective for the learning process.

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Service delivery system for CBR

It is not enough simply to formulate technologies. One has to think about who is going to carry out the programme, who will train and supervise personnel, and who will manage the programme. Rehabilitation tasks have to be distributed to different types of personnel at different levels of service. This will require coordinated efforts by ministries, local, district and provincial authorities, and nongovernmental organizations in the different sectors involved in rehabilitation.

A rehabilitation programme based in the community should have its roots there. All the interventions that can be done effectively at the community level should be done there. Additional services should be set up in response to the needs of the community. The referral services at higher levels should have professional inputs, as described below.

We give as an example three levels of referral services: (a) district level, with a population of 50 000 - 100 000; (b) provincial level with a population of 500 000 - 1 000 000; and (c) national level. In each country the plans of the government for developing these or equivalent levels of service will differ. However, the following suggestions could be used as a guide to the services needed at each level.

(a) District level

- Diagnostic services. (It is recommended that, if circumstances allow, each person in the CBR programme is seen by a district physician. The purpose is to confirm the diagnosis and make sure that no medical treatments are neglected.)

- Medical services, such as surgical treatment for contractures, leprosy, and cataract, and medical treatment for epilepsy, chronic mental illness, leprosy, and tuberculosis.

- Educational services for children, such as provision of a resource teacher.

- Vocational services for adults, such as vocational assessment and guidance, skills training programmes, short-term vocational training, and job placement.

- Provision of simple orthopaedic appliances and other adapted equipment.

(b) Provincial level

- Diagnostic services for more complex medical conditions.

- Medical services after referral, e.g. corrective surgery for ear-drum perforations, eye surgery, treatment of complicated fractures, drug treatment of therapy-resistant diseases, etc.
- Complex rehabilitation therapy for those not improved through community or district services.

- Educational services, such as special education.

- Vocational services, such as more complex assessment and guidance, long-term vocational training.

- Provision of standard orthopaedic appliances.

(c) National level

- Referrals for complex medical diagnosis.

- Very specialized and low-frequency medical services.

- Complex rehabilitation therapies.

- Educational services at institutes of higher education, e.g., universities, colleges, for people with disabilities.

- Vocational services to cover low-frequency needs (training in special vocational subjects unavailable at district and provincial level).

In many countries, there has been a tendency to try to start programmes from the top, providing services at the national level as the first stage. It is a very common experience that efforts to proceed to the provincial, district, and community levels fail. National-level services have a tendency to consume much of the available manpower and financial resources, leaving little or nothing for other levels.

Also, such an approach is wrong in principle. It does not result from an analysis of what can and cannot be done effectively at the community level. The services set up “from above” will not meet the referral needs at the community level, but will work from a preconceived idea of what the community needs.

Furthermore, providing the national-level services at the beginning is wasteful. It is easy to see that at national institutes (or similar), well trained professionals are often occupied with simple tasks that could be done by someone with less training. Staff at national institutes can easily become burdened with work that could be undertaken at the community or district level. Instead, the staff should be involved in teaching, supervising, and providing services for those with the most complicated rehabilitation problems. Table 1 shows how personnel can be distributed and what percentage of rehabilitation needs may be met at each level.
Table 1. Distribution of personnel and proportion of needs met at each level of service in a community-based rehabilitation programme

<table>
<thead>
<tr>
<th>Level</th>
<th>Percentage of needs met</th>
<th>Personnel</th>
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<tbody>
<tr>
<td>National</td>
<td>10</td>
<td>Specialist physicians for all disabilities; physical, occupational, and speech therapists; teachers for those with blindness, deafness, mental retardation; teachers for vocational training; orthopaedic technicians.</td>
</tr>
<tr>
<td>Provincial</td>
<td>20</td>
<td>General or specialized physicians; some rehabilitation specialists.</td>
</tr>
<tr>
<td>District</td>
<td></td>
<td>General physicians; intermediate-level supervisors (CBR managers); orthopaedic technicians; resource teachers; vocational trainers.</td>
</tr>
<tr>
<td>Community</td>
<td>70</td>
<td>Local supervisors (community workers); schoolteachers.</td>
</tr>
</tbody>
</table>

Community-based services are not the same as community-level services. A whole system of services is needed, including the district, provincial, and national levels. What is important is to develop the higher levels of services in response to community needs. If such services already exist, they may need to be reoriented.

The role of professionals

It has already been stated that professionals are needed at several levels of service. At district level there is a need for an intermediate-level supervisor or a CBR manager, who can train the local supervisors, guide and supervise their work, manage referrals, maintain communications with all levels of service, and manage the CBR programme at the district level. Such a person may not correspond exactly to any one current type of professional.

At provincial and national levels professionals will be involved in the delivery of complex rehabilitation services as well as the training and supervision of personnel for district, provincial, and national levels. It may be necessary to review the present curricula of various professional groups in order to prepare them better for the additional responsibilities they will have in a CBR programme.

It is certainly necessary to ensure that there are enough rehabilitation professionals to take care of the needs of referral services from the community and to provide appropriate management.
Evaluation

Evaluation of a community-based rehabilitation programme is essential. The purpose of any rehabilitation programme is to help people with disabilities to do what others do in the home and the community and to become socially integrated. Therefore, the evaluation of a CBR programme should determine whether people with disabilities are doing more as a result of the programme. The activities should include self-care, communication, moving around, and participation in play, school, social, and work activities. It should also assess whether the goals of full participation and equal opportunities are met.

This manual includes a system for evaluating the effects of a CBR programme at the community level. The Guide for local supervisors describes a system whereby the LS identifies each disabled person in the community and records which activities the person can and cannot do. A family member is then given training packages that tell about the disability and describe how different activities can be done. Each training package that explains how to do an activity contains one or more questions about the ability of the disabled person to do that activity. After the family member has worked with the person for some time, the local supervisor can help the family member to answer the questions. The responses to the questions show whether the person with a disability can do more activities after the training. The LS should keep a record of the responses for all the disabled people who receive training. Periodically a summary of the records should be sent to the district level, where the programme can be monitored. In yearly or twice-yearly evaluations of the CBR programme this information can be used to determine the strengths and weaknesses of the programme.

The results of an evaluation may show that people with one type of disability are improving more than those who have another type of disability. Or all people with disabilities may be improving in some activities, but not in others. Such findings may indicate, for example, that the local supervisors need more information, training or supervision in order to work with some types of disabilities. Or the results may suggest that more community involvement is needed in order to provide more resources for people with disabilities.

Each country may already have a system for evaluating programmes that provide services, such as health or education. The evaluation system in this manual can be used in conjunction with a country's existing methods for programme evaluation. This will ensure that the effectiveness of the CBR programme is assessed, and that necessary changes are made in order to fulfil the purpose of the CBR programme.
<table>
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<tr>
<th>Selected WHO publications of related interest</th>
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<tr>
<td><strong>Disability prevention and rehabilitation:</strong> report of the WHO Expert Committee on Disability Prevention and Rehabilitation. WHO Technical Report Series, No. 668. 1981 (39 pages)</td>
</tr>
<tr>
<td><strong>The provision of spectacles at low cost.</strong> 1987 (29 pages)</td>
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<tr>
<td><strong>The community health worker: working guide; guidelines for training; guidelines for adaptation.</strong> 1987 (463 pages)</td>
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<tr>
<td><strong>Education for health. A manual on health education in primary health care.</strong> 1988 (xiii + 261 pages)</td>
</tr>
<tr>
<td><strong>Guidelines for training community health workers in nutrition,</strong> 2nd edition. 1986 (vii + 121 pages)</td>
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Further information on these and other World Health Organization publications can be obtained from Distribution and Sales, World Health Organization, 1211 Geneva 27, Switzerland.
Many people with disabilities have been rehabilitated through their own efforts and the help of their families. To a large extent, training techniques, technical aids and appliances have been invented and improved by the people who needed them. Many developed and developing countries are encouraging the active participation of people with disabilities and their families in the rehabilitation process. This means that rehabilitation is accomplished at home and in the community. This approach promotes social integration of people with disabilities, the goal of rehabilitation.

This manual has been developed for use in community-based rehabilitation (CBR) programmes and is written primarily for people with disabilities and for members of their families. It describes how rehabilitation can be carried out at home and in the community. The manual provides disabled people and their families with knowledge about procedures for rehabilitation which in the past was often thought to be the exclusive preserve of professionals.

The manual also provides explanations and guidelines for the organization of rehabilitation activities in the community. The manual will help community workers in rehabilitation; community groups and leaders who take responsibility for the CBR programme and decide on its implementation; teachers in local schools who teach children with disabilities; people who provide jobs, income and opportunities for adults with disabilities; and those who are concerned about how people with disabilities can be socially integrated and enjoy the same rights as everyone else.