

# The Education of Mid-Level Rehabilitation Workers

Recommendations from  
Country Experiences

World Health Organization  
Geneva  
1992

# Contents

	Page
Introduction .....	1
Tasks of the MLRW .....	3
Objectives of the MLRW Training Programme .....	10
Methods for Teaching .....	13
Methods for Evaluating Students .....	15
Planning of the Education Programme .....	16
Evaluation of the Education Programme .....	18
ANNEX I - Participants at the Consultation on Education of Mid-Level Rehabilitation Workers .....	19
ANNEX II - Rehabilitation Programmes, Organizations and Donor Agency Represented at the Consultation .....	25
ANNEX III - Suggested Contents of a Training Course for Mid-Level Rehabilitation Workers .....	33

## Introduction

Mid-level Rehabilitation Workers (MLRW) are a cadre of personnel initiated in developing countries, particularly in areas where community based rehabilitation has been established. This cadre was developed in response to the need for a worker who is a generalist in rehabilitation, that is, one who can provide services for people with different types of disabilities, and one who fills the large gap in services between the community and the rehabilitation services at secondary or tertiary referral levels.

### *Method of Preparing the Recommendations*

The World Health Organization (WHO) held a Consultation on the Training of Mid-Level Rehabilitation Workers in order to develop recommendations for training that will be useful in countries where this cadre of rehabilitation personnel has not yet been developed. The Consultation was held at the WHO South East Asia Regional Office in New Delhi from 16 to 20 September 1991. The participants in this Consultation came from nine countries where a training programme has been established, or has been planned and will be implemented; from two non governmental organizations representing rehabilitation professionals; and from one donor agency that has supported the training of MLRW. Some of the training programmes represented began five to ten years ago, others began recently, and two have planned but not implemented training. (See Annex I for a list of the participants and Annex II for brief descriptions of the nine rehabilitation programmes which have decided to establish MLRWs, the two non governmental organizations and the donor agency.)

In order to prepare these recommendations, an outline of tasks and training for MLRW prepared by Dr Padmani Mendis was used as the basis for discussion. This outline was analyzed and modified during the Consultation so that the information presented in this document reflects a consensus from the experiences of the rehabilitation programmes currently planning or implementing MLRW training programmes. The recommended training is for two years, which was thought to be the maximum needed for this level worker, but it can be decreased depending on the tasks to be carried out by the MLRW and the previous training and experience of the people who will become MLRWs. (Annex III contains a list of suggested course content for a two year, 3000 hour training programme.) The participants recommended that after three to five years another review of training programmes should be held with the intention of preparing more definitive guidelines.

## Community Based Rehabilitation

Community based rehabilitation (CBR) is a strategy for the integration of rehabilitation into primary health care. This strategy was developed by WHO after the 1978 *Alma-Ata Declaration*, which stated that primary health care should include promotive, preventive, curative and rehabilitative care. CBR means that community resources are used for the rehabilitation of people with disabilities. These resources include the disabled themselves, their families, community members and organizations, local schools, work places and recreational centres. The community health worker, or another community volunteer, identifies people with disabilities and provides basic information about self-care, mobility and communication. WHO has prepared a manual which can be used by the community rehabilitation worker, *Training in the Community for People with Disabilities* (WHO 1989). This manual also provides information on what can be done by people with disabilities, a Community Rehabilitation Committee, and school teachers to promote the rehabilitation of children and adults with disabilities. The community worker, and all others active in the rehabilitation programme, require the assistance of referral services for rehabilitation.

The referral system for rehabilitation includes medical, educational, vocational and social services. The MLRW has developed within the medical referral services. The MLRW is more skilled than a community worker in the rehabilitation procedures for people with movement, seeing, hearing and mental disabilities. However, the MLRW refers disabled people to specific sectors of rehabilitation when special advice or services are needed. The MLRW supports the community rehabilitation worker to guide the community, ideally through a Community Rehabilitation Committee, on steps to be taken to help disabled children attend school, disabled adults obtain work, and all people with disabilities participate in community activities. Whenever possible, this is done in collaboration with representatives from education and social services.

The gap in services and supervision between the community rehabilitation workers and the rehabilitation specialists is a technical and a geographical one. Community workers can advise disabled people and their families about basic activities to carry out to improve in daily function, but these workers require the supervision of more knowledgeable rehabilitation workers. It is not realistic to expect that community workers will have the direct supervision of specialists at the second and third referral level. It is also unrealistic to plan rehabilitation services based on a distribution of specialists to the first referral level. The shortage of specialists, in addition to their reluctance to go to work in rural areas, prevents the distribution of rehabilitation services to people outside major urban areas. Hence, the MLRW is needed as a link between the community rehabilitation worker and the various referral services needed by some people with disabilities. The MLRW works closely with community rehabilitation workers to supervise and support their work, and

also relies on them to work closely with disabled people, their families and the community to promote rehabilitation and social integration of people with disabilities.

In localities where CBR has been implemented, it has had a positive impact on the lives of people with disabilities. Nonetheless, it has not expanded to national coverage in any country. Economic constraints have hindered the expansion of rehabilitation services during the past ten years. Countries have also identified the lack of mid-level rehabilitation workers as another constraint to the expansion of CBR.

### ***Terminology***

The term mid-level rehabilitation worker (MLRW) is used as a general term and does not represent the title assigned to rehabilitation workers in any country. Mid-level refers to the level between the community and the specialized rehabilitation services. This means that the MLRW provides services at the first referral level.

The community rehabilitation worker may be the community health worker (CHW), who has been given additional responsibility. However, it may also be a worker from another sector, such as social services, or from a non governmental organization, such as the Red Cross or Red Crescent Society. This report refers to the CHW as the community rehabilitation worker.

The terms impairment, disability and handicap are used as they are defined in the International Classification of Impairments, Disabilities and Handicaps (WHO 1980). Hence, impairment refers to any loss or abnormality of psychological, physiological or anatomical structure or function. Disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being. Handicap is a disadvantage for an individual, resulting from an impairment or disability, that limits or prevents the fulfillment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual.

### **Tasks of the MLRW**

The tasks described represent an ideal situation in which a full-time mid-level rehabilitation worker is trained to work at a first referral level hospital, where rehabilitation services are provided for both in and out-patients, and to supervise the rehabilitation activities at community level. The MLRW is responsible to the Medical Officer in charge of the hospital, but receives periodic technical supervision from rehabilitation staff at the second referral level. The work in the community is done in cooperation with personnel from health and other sector services. This ideal situation assumes the possibility

of establishing a new cadre of personnel within the health services, thus extending rehabilitation services to both the first referral level and the community.

Two aspects of the tasks of the MLRW are essential to the establishment of a system for the delivery of services to extend rehabilitation to as many people as possible—

- ❑ The MLRW makes decisions about the assessment and rehabilitation plan for people with disabilities. The supervision which is provided is periodic, varying from once a week to once during several months.
- ❑ The MLRW is able to provide basic services to people with different types of disabilities, including locomotor, mental, seeing, and hearing.

Some countries are not able to provide a new cadre of personnel. A country which cannot provide workers to do all of the tasks listed here, can identify the tasks which are priorities for its situation and can train workers only for those tasks. For example, in some countries the MLRW will not work in the hospital, so the priority is on the community work. The training would then emphasize programme management.

The tasks of the MLRW are divided into three types of responsibilities—

- ❑ **Technical Management:** Provision of basic rehabilitation services to people with disabilities;
- ❑ **Programme Management:** Management of the mid-level services, including supervision of the community level and coordination of referrals;
- ❑ **Education:** Teaching community workers for their work in CBR, and teaching the community about disability and rehabilitation.

## **Tasks of the MLRW**

### **TECHNICAL MANAGEMENT**

- Identify disability and rehabilitation needs of individuals.
- Provide the mid-level therapeutic interventions and rehabilitation advice, including actions to prevent further disabilities and handicaps, and advice on prevention of impairments.
- Assess and monitor progress of individuals with disabilities.
- Provide the mid-level service for guidance and counselling in disability situations.
- Advise on home and environment adaptations.
- Assist in maintenance and repairs of appliances.
- Refer individuals requiring more specialized advice and interventions to higher levels or other sectors.

### **PROGRAMME MANAGEMENT**

- Assist Community Rehabilitation Committees to plan and set up community-based rehabilitation programmes.
- Discuss with the community and advise on issues related to rehabilitation.
- Support and monitor rehabilitation activities of community health workers.
- Supervise rehabilitation records and reporting system of the community health workers.
- Interact with mid-level personnel of other sectors, associations of people with disability, and other NGOs in order to coordinate support given to communities.
- Facilitate schooling for children with disabilities.
- Facilitate vocational training and work opportunities for people with disabilities.

### **EDUCATION**

- Teach community-based rehabilitation to community rehabilitation workers and other members of the community.
- Select and use appropriate training materials for the community rehabilitation worker.
- Identify gaps in knowledge and skills of community rehabilitation workers and arrange continuing education for them.
- Raise awareness of communities in disability concerns.

## Technical Management

The MLRW must be able to assess both impairments and disabilities. The assessment of impairments includes the methods for evaluating joint movement, hearing, seeing and understanding. The assessment of disability includes evaluation of functional activities, such as self-care, moving around, communicating, and behaving in a manner characteristic of the individual's age, sex and society. In addition, the MLRW assesses handicaps. This includes an evaluation of the possibility for schooling, work, or participation in social activities.

After assessing the impairment, disability and handicap, the MLRW must be able to advise the disabled person on standard procedures for prevention of further impairment or disability, on methods to improve functional ability, or on ways to take part in activities which are normal for others of the same age and sex in the family and community.

If the MLRW is responsible for hospital services as well as community services, he or she will have to work with patients with acute conditions, such as burns, fractures, and post surgical care. If the MLRW has responsibility only for supervision of community services, his or her work can focus on people with permanent disabilities, with some attention to the prevention and treatment of conditions which cause disabilities.

Since the MLRW is within the health services, the technical supervision is from personnel in the medical referral services, e.g., physical, occupational and speech therapists and psychiatric nurses. However, the MLRW must also coordinate the medical rehabilitation activities with educational and social services.

Reassessment of individuals with disabilities uses the same procedures as the initial assessment. The reassessment is done to judge progress and to determine what changes are needed in the rehabilitation process. In order to judge progress, a record of the initial assessment is needed. The MLRW must supervise record keeping by the community workers, and must also keep careful records of each assessment of each disabled person's impairment and disability, as well as the conditions which handicap the person. This is the basis for individual assessment, and also for assessment of the programme.

The WHO manual, *Training in the Community for People with Disabilities*, provides information about basic assessment, training and social integration for people with different types of disabilities. This information refers to functional limitations, or disabilities, and to handicaps. The MLRW should know more about assessment and therapeutic interventions for people with disabilities. In particular, the MLRW should know how to assess, treat, and reassess impairments, or the conditions which cause disabilities. Most texts which provide this information have been prepared for professionals, so the appropriate level of education materials must be prepared for the MLRW by their teachers.



Disabled people and their families may require counselling to help them to accept a disability, or to take action to improve the function of the affected person. Sometimes the community rehabilitation worker can do this. The MLRW may provide supervision, and may sometimes counsel the family directly. On other occasions, the MLRW may identify a community member to talk with the disabled person and the family.

The MLRW advises disabled people and their families how to adapt their homes so that the disabled person can move around and carry out daily activities easily and safely. Examples include adapting pieces of furniture, such as raising the height of a bed or chair, rearranging furniture, widening doorways, or building a ramp. In addition, the MLRW works with the community to promote adaptations or changes which will prevent injuries and also make the environment safe for people with disabilities.

The maintenance and repair of appliances, such as artificial limbs and braces, or equipment, such as wheel chairs, may pose problems to disabled people far from urban centres, where appliances and equipment are usually made and distributed. For this reason, the MLRW should be able to give advice about the maintenance of these items, and should also be able to make simple repairs on appliances and equipment. Examples include tightening bolts or replacing straps. Repairs which require realignment or reconstruction are beyond the capabilities of the MLRW.

Medical rehabilitation services are usually provided at central level, but may also be found in second referral level hospitals at regional or provincial level. Other sectors, such as education and labour, may also provide services for the disabled. Nongovernmental agencies or organizations may also provide medical, educational or vocational rehabilitation services. The MLRW must be familiar with the available services and know which disabled people should be referred to services at other levels or in other sectors. The MLRW also follows up to ensure that recommendations from referral services are implemented.

### ***Programme Management***

The management tasks of the MLRW are what distinguish this worker from the rehabilitation specialists, who are not skilled in community work. Although some of the management tasks of the MLRW are similar to traditional rehabilitation workers, e.g., record keeping and reporting, and making and following up on referrals, a great deal of the MLRW's management responsibility relates to community work.

The MLRW, based at the district or first referral level, may have responsibility for many communities. The MLRW may need to contact community leaders in order to initiate community based rehabilitation. This will involve explaining CBR to community leaders and organizations, assisting them in

organizing a rehabilitation committee and setting priorities for their activities, and in training the community health workers for rehabilitation. After a programme is established, the MLRW will periodically visit the community to review with the community rehabilitation worker the programmes and progress of disabled people, and to consult with the community rehabilitation committee on their activities.

The community health worker will have a supervisor within the health care system who is responsible for the community workers within a specified area. There must be official agreement within the health care system that the MLRW can provide support and technical supervision to the CHW regarding rehabilitation activities. It is very important that the recognized supervisor of the CHW is also supportive of the rehabilitation work, because without the cooperation of that supervisor, the MLRW will not be able to monitor the rehabilitation activities.

The MLRW goes periodically to the community to visit disabled people with the health worker and to review the rehabilitation activities being carried out in the community. This may include, for example, assessment of the rehabilitation programmes being carried out by disabled people and their families, assessment of the integration of disabled children into the local school, or review of the status of disabled people who have started income-generating projects. In addition, the MLRW meets with the community rehabilitation committee to discuss accomplishments or constraints of the programme and reviews the records kept by the community worker.

At the first referral, or district level, the MLRW works with Education, Labour and Welfare officers to coordinate services for people with disabilities. This includes coordination among the various sectors to provide for integrated education for the disabled children who can attend local schools, and for special education services for some children; for vocational training or assistance in establishing income generating activities; and for provision of the available social services when they are needed. A system for referral of individuals with needs for various services should be established. For example, within the community the community health worker or a member of the community rehabilitation committee may refer a disabled child to the local school. At district level the MLRW may refer disabled people to one of the government sectors, or to a non governmental organization which provide services at this referral level. After referrals are made, the MLRW must follow-up to see that the recommendations are carried out by the disabled person, family or community.

Two aspects of the work of the MLRW deserve special explanation: the integration of disabled children into the local schools and disabled adults into local work settings. These are activities which insure a more complete rehabilitation process for people with disabilities.

The integration of disabled children in local schools may initially require the assistance of the MLRW, who can advise the local teachers on how to integrate children with different types of disabilities. If special educators are available within the educational system, they may take this responsibility. Where such services are not available, it will be the responsibility of the MLRW to provide advice to teachers on simple methods to assist children with locomotor, seeing, hearing or mental impairments to gain the maximum benefit from the education process.

The majority of children with disabilities can be integrated into local schools, although some special assistance may be required. The MLRW can assist the rehabilitation committee and the community worker to mobilize volunteers for taking disabled children to and from school if the family cannot do that, and to assist the children for some part of the day in school.

An important aspect of the rehabilitation process is assisting the disabled person to develop abilities for work within the family or outside the home. The MLRW looks for resources within the community for training people with disabilities. This may be local artisans or business people who are willing to train one or two people. It may be an organization who does this work with non-disabled people, and is willing to expand their services to include people with special needs. If a vocational trainer is available at district level that person can provide such advice. If not, the MLRW must provide basic information and identify whatever resources are available.

Another managerial responsibility of the MLRW is the maintenance of a system for record keeping and reporting. This is essential for the assessment of individuals with disabilities, and also for evaluation of the programme. A baseline of information should be kept on each new client who takes part in the CBR programme, along with a record of changes in the person's status. These records should be kept by the community worker, but summaries should be periodically sent to the MLRW, who can make occasional checks to verify that the records are accurate. Records should also be maintained on the referrals to other levels of medical rehabilitation services, and to other sectors of rehabilitation. Follow-up should be noted, including the equipment supplied and the actions taken.

The MLRW must report on the work at the community and the first referral level. This reporting will be done according to the practice within the health care services. However, the data reported to secondary and tertiary levels should also provide information which can be used as a basis for evaluation of the rehabilitation services.

### ***Education***

Many of the tasks of the MLRW require skills in teaching. In particular the MLRW must teach disabled people and their family members how the disabled person can do as many activities as possible with the limitations imposed

by the disability. The MLRW must also teach the community workers in rehabilitation, and the community members who must understand the concept of CBR before they become active in promoting and supporting rehabilitation. A third type of teaching involves health education for the public on issues regarding prevention of conditions which cause disabilities, and on the potential of people with disabilities to fulfil normal roles in their families and communities.

Teaching disabled people and their family members is basic to the work of all rehabilitation personnel. However, training community workers, organizations and leaders is an additional responsibility frequently assigned to the MLRW. This task requires more than skills in teaching. The MLRW must have knowledge about the beliefs and customs of the community, about the social and political structure (formal and informal) of the community, and about community development. The community worker may have other responsibilities in addition to rehabilitation, so the MLRW must understand what those duties are and advise the community worker about how to integrate rehabilitation into other work that needs to be done. General planning for the integration of rehabilitation into the work of the CHW should be done in cooperation with the health services' supervisor of community workers.

The MLRW must assess the activities of the community worker, and periodically plan short training sessions for the community workers to upgrade their knowledge and skills. To do this, the MLRW must have an understanding of teaching-learning methods so that appropriate learning experiences can be planned for the community workers. This includes the selection or preparation of training materials which are appropriate to the level of education of the community workers.

The MLRW should be able to coordinate health education about prevention of disability and rehabilitation with the health services's general public education programme. The MLRW can provide the information to be disseminated, and the staff in charge of health education can devise means for getting the messages to the public. The MLRW is usually not expected to arrange for the production of posters or information leaflets, or for media coverage. However, the MLRW must be aware of what information to give for public education. The MLRW may also be called upon to do some general education about disability prevention or rehabilitation in community meetings.

## Objectives of the MLRW Training Programme

The over-all objective of the training is that at the end of the training programme the MLRW has the knowledge, skills and attitudes to—

- ❑ Provide the middle level interventions for the rehabilitation of people with movement, seeing, hearing or mental disabilities.
- ❑ Provide the middle-level management support for CBR.
- ❑ Provide the necessary training for community workers and community members to support the CBR programme.

Specific learning objectives related to technical management, programme management and education are listed on page 12. The objectives are divided into behaviours which will contribute to the development of the MLRW, and behaviours which will characterize the abilities of the MLRW at the end of the training programme. The contributory objectives indicate the body of knowledge the MLRW must have, while the terminal objectives identify the necessary skills. Overall, the desired outcome for the MLRW is an attitude of dedication to the work and concern for the rights of people with disabilities.

Annex III contains a list of content for a two year training programme leading to the fulfillment of these learning objectives. The content contains a further breakdown of objectives for different subject areas.

The content represents the technical training that is necessary if the MLRW will be responsible for hospital based as well as community based services. The participants at the Consultation noted the emphasis on technical training as a reflection of their own medical input into the training programmes. They emphasized the necessity of involving specialists from education and management in the preparation of a curriculum.

Since an overall objective is to train a new type of rehabilitation worker, the participants also stressed the need to develop a new type of training programme. This should be one that emphasizes the skills for community work as well as for technical work. The training programme should also aim at problem solving. When a specific curriculum is developed within a country, expertise should be sought among local educators who may be able to assist in the development of the problem-solving approach for training MLRW.

## ***Learning Objectives of the MLRW Training Programme***

### **TECHNICAL MANAGEMENT**

#### ***Contributory Objectives***

- To describe basic medical and social science--anatomy, physiology, pathology, ergonomics, psychology, sociology.
- To describe the disabilities caused by motor, visual, hearing, speech and mental impairments.
- To explain the principles of rehabilitation, primary health care and community based rehabilitation.

#### ***Terminal Objectives***

- To competently assess individuals with disabilities.
- To competently apply therapeutic procedures.
- To develop appropriate rehabilitation plans for people with disabilities.

### **PROGRAMME MANAGEMENT**

#### ***Contributory Objectives***

- To describe principles of management.
- To describe the national structure for health, education and social services, including those for people with disabilities.

#### ***Terminal Objectives***

- To assist in planning and implementing community based rehabilitation.
- To supervise the rehabilitation work of the community health worker.
- To communicate effectively with personnel from other government sectors and from non-governmental organizations including groups of people with disabilities.
- To maintain a system of records and reports.

### **EDUCATION**

#### ***Contributory Objective***

- To describe teaching methods appropriate to different situations.

#### ***Terminal Objectives***

- To implement the teaching-learning process with community leaders, and others involved in community based rehabilitation, integrating the principles of rehabilitation in educational activities.
- To monitor and advise the community health worker regarding his or her interventions with disabled people.
- To promote action for the prevention of disabilities and the rehabilitation of disabled people.

## Methods for Teaching

The teaching methods used for the education of the MLRW are the standard methods recommended for use with students who should develop knowledge, attitudes and skills which will be applied in providing a service to people. Within these methods, principles of problem solving can be added. Because problem solving presents complex issues to the students, and demands that they apply their knowledge and experience to situations which will arise in their work, it is an approach that is very useful in the education of the MLRW.

To prepare learning modules based on problem solving education, a teacher must be trained. The preparation of a module requires a team of teachers and planners to develop appropriate problems. However, basic principles of problem solving can be used within standard teaching methods. When this is done the problems presented to students should aim at the integration of the knowledge they have obtained from all of their courses. Problems should also illustrate to the students why they have to acquire specific skills and why positive attitudes promote the work of the MLRW.

A problem presented to students for a solution should meet three criteria—

- It should describe a complex situation.
- It should describe a realistic situation for the MLRW.
- It should call for decisions to be taken.

The problem solving can be done within the context of standard teaching methods, such as discussion, role play or projects. In any method that is used, the teacher must guide the students to a correct solution. The students should be aware not only of the logical solution, but of the process of analyzing the problem and proceeding step by step to that solution.

The standard teaching methods which can be used in the education programme of the MLRW include the following—

- Lecture
- Self-study
- Case studies
- Questions and answers
- Discussion
- Role play
- Demonstration
- Practice
- Projects
- Field experience

Some methods are suitable for teaching knowledge, others are more suitable for developing or changing attitudes, and some are more appropriate for teaching skills. Most of these methods can incorporate principles of problem solving.

Two methods commonly used for presenting information to students are lecture and self-study. When the learning objective refers to knowledge, these methods are useful. However, lectures should be kept to a minimum because they do not allow for the active participation of the students. Lectures can be accompanied by questions and answers, and by demonstrations, which present visual images that clarify what the lecturer describes. For self-study, the students must have access to information, such as training materials or resources available in a library. The teachers of MLRWs must prepare materials for the students, who require information in their own language, and at a level which is easily understood.

Knowledge which the MLRW may obtain through these methods include causes of impairments or disabilities; methods for preventing disability; principles of management; and the structure of the health, education, and social services. This knowledge can later be applied within problem-solving exercises.

Individual and group projects are also methods through which students obtain information about a particular subject. For this type of learning students may need access to library resources and to contacts with rehabilitation personnel and people with disabilities.

The attitude of a student is a key factor in his or her performance, both as a student and as a worker. Education programmes with the aim of preparing students for specific types of work usually incorporate experiences which promote positive attitudes toward the work. The methods commonly used to teach or promote attitudes are discussion, case studies, role play and field experience.

The following examples are a few of the ways in which attitudes appropriate for a MLRW can be promoted. Discussions can be held with disabled people regarding their rights to education and work. Case histories of the rehabilitation process of individuals with disabilities can promote a positive attitude toward the work done by rehabilitation personnel. Role plays can be used, for example, to explore ways to convince a mother with a child who has cerebral palsy to play with her child in order to stimulate normal development. Field experiences provide the student with the opportunity to observe rehabilitation personnel who have positive attitudes, and also to strengthen his or her own positive attitudes through interactions with disabled people and their families, community members and other personnel working with disabled people.

Skill is the performance of a task. Different types of skills are needed by the MLRW, so a variety of teaching methods are also needed. Demonstration is often used to introduce a skill, but supervised practice, role play, projects and field experiences are the methods whereby the student develops the skills.

The MLRW needs communication skills for working with disabled people and their families, community leaders and members of the community, and other



personnel involved in rehabilitation. Although verbal skills are most important, written communication is also a necessary skill. The education of the MLRW should provide time for the development of these skills, as well as for the development of the necessary technical skills for assessment and planning of appropriate rehabilitation programmes. Management skills are also needed in the work of the MLRW, but these skills may not be developed until the MLRW is in the working situation. However, an appreciation for the importance of management should be developed in the education process.

## Methods for Evaluating Students

There are two major reasons for evaluating students. One is to certify that they are qualified to do the tasks that will be required in their work. The second is to give feedback to the students and to the teacher. For both purposes it is necessary to have evaluations throughout the education programme. Students should be aware of what they are doing correctly, and what they must do differently if it is necessary to strengthen weaknesses in their knowledge or skills. Teachers should find out what they need to do differently to help students to learn.

Evaluations should be based on specific standards of performance which the students must achieve. The tasks which the MLRW will perform after completion of the training must be analyzed to determine the component knowledge, attitudes and skills which the MLRW will need. The standards of performance during the education process are determined by these components. For example, the MLRW must be able to assess people with different types of disabilities. One of the types of disabilities is visual. The MLRW must know how to do a basic assessment of a person's vision. The component knowledge, skills and attitudes include the following—

- |                  |   |  |
|------------------|---|--|
| <b>Knowledge</b> | — | Basic parts and function of the eye;   |
|                  | — | Signs and symptoms of conditions which affect vision;  |
|                  | — | Basic procedures for visual examination to be done in the home or the community;             |
|                  | — | Meaning of the findings of the examination.  |
| <b>Skill</b>     | — | Performance of the visual examination, including proper instructions to the disabled person. |
| <b>Attitude</b>  | — | Appreciation of the importance of performing the examination in a precise manner.            |

These components provide standards of performance on which the MLRW can be evaluated. Each of these must be further analyzed for the exact anatomy, physiology, diseases, and procedures which the MLRW must know, perform or appreciate.

Standard methods of evaluation include written, oral and practical examinations. These are commonly used during a term of study to provide feedback to the students, and at the end of the education programme, when students are assessed according to the standard of performance they will be expected to meet when they enter their work settings.

Other methods of evaluation can be combined with the standard examination process. These include assessment of class participation, of individual or group projects, and of practical performance during field experiences. For each evaluation method that is used, the teachers must use specific criteria that are applied to each student. After an examination the teacher should respond by reviewing information or practice, or by modifying teaching methods in areas where the majority of students have not performed well.

Different methods of examination are needed to assess different aspects of the learning process. Knowledge can be assessed in any type of examination. However, the most common method used is the written exam. Communication and technical skills are usually assessed in oral or practical examinations and during field experience. Attitudes should also be assessed, but this is more difficult. For example, a student who is very quiet in the classroom may have very positive attitudes, and may communicate well in the work setting. Another student may express positive attitudes, but exhibit few actions to demonstrate the attitudes. Although their attitudes should be discussed with students, most education programmes do not use assessment of attitudes as a basis for pass/fail.

## **Planning of the Education Programme**

The first step in planning the education programme for the MLRW takes place when an analysis is made of the tasks which this person must perform. When the work that needs to be done is clarified, the next question is whom to train. This question looks ahead to the possibilities for adding more personnel to the health services. Some countries have the possibility of preparing and employing a new cadre of workers. Others may find that it is possible to completely change the role of an existing cadre so that the personnel are all retrained as MLRWs. Countries may also decide to incorporate the tasks that need to be done into the work of one or more cadres that already exist. In this case, an analysis of the possibilities may show that it is necessary to reduce the tasks that have been identified in order to incorporate them into the work of existing personnel.

If a new cadre can be developed, or an existing one changed, it is necessary to place this cadre within the health care structure. If a two year training programme can be provided, the MLRW would have the same status as other health workers with an equivalent amount of training. The career structure

should allow the MLRW, through further education, to become a specialist in rehabilitation, such as a physical, occupational or speech therapist. Also, community workers may seek the opportunity to become MLRW.

Before preparing a detailed plan for training, approval of the training programme and job placement of the graduates should be discussed with the appropriate ministries or agencies involved in the establishment of education programmes and of posts for specific cadres of workers. This is particularly important if the training programme will be implemented by a NGO rather than by the government.

Then decisions must be made regarding the tasks to be done, and who will do them. At this point, the detailed planning of the education programme can begin. As mentioned above, the diversity of tasks to be carried out by the MLRW requires training from several disciplines. Hence a team of teachers from health, education and social service is needed to prepare the curriculum. A team is also needed to participate in the teaching. This team must coordinate not only the content of what they will present to the students, but also their methodologies. Each teacher should make references to the information students obtain from other teachers in order to reinforce the integration of technical, management and education information.

It is also important to stress the relationship between hospital and community based services. Throughout the training the presentation of information should be done with reference to how the disabled person will function in the home and the community. If initial intervention is done at the hospital, the MLRW must teach the disabled person or the family how to carry out the same activities at home. Whether the activities are for prevention of further deformity or loss of function, for strengthening muscles or increasing function, or for adapting activities in order to function with a disability, the MLRW should be aware of how the disabled person and the family can carry out the procedures at home or in the community.

The content list presented in **Annex III** can be used as a guide for the development of a curriculum. However, it reflects the input of people from a variety of training programmes. It is not representative of a curriculum that has been tested. A new education programme must develop its own curriculum appropriate to the local situation, based on the tasks identified and the type of worker to be trained.

The site for the education programme also deserves careful consideration. Since the MLRW will be responsible for first referral level rehabilitation services, as well as for community work, it is not appropriate to train the MLRW in a central rehabilitation facility in a large metropolitan area. If possible, the training centre should be located at the level of first or second referral services. This will allow the students to have contact with the facilities, services and personnel at the level where they will be working.

The learning process must include work in the community. This may also require careful planning. If community rehabilitation has not been established prior to the training of the MLRW, this may be done within the context of the training programme. If CBR does exist in the communities near the training centre, planning of educational experiences in the community must be planned with community members. It is not reasonable to send all students, year after year, to the same community. As community services develop within the country, students must be sent to different areas for exposure to community work.

## **Evaluation of the Education Programme**

The plan for the education programme should include a plan to evaluate the programme itself. This can be done by the teachers in the programme, teachers who observe the programme, the students, the graduates of the programme, and the supervisors of the MLRW trained in the programme.

Three aspects of the education programme can be evaluated: the plan, the process and the product. The plan includes the objectives, the teaching methods, and the system for student evaluation. The process is the way in which the programme was carried out. The product is the graduate MLRW.

Each education programme will be developed within the guidelines set by the education system within a country. Those guidelines will also provide for programme evaluation. Since the programme for training MLRW are all relatively new, each one must evaluate itself regularly in order to insure that the personnel trained are prepared to fulfill the tasks identified for this cadre.

In addition, it is necessary to determine whether the tasks identified are meeting the need for services for people with all types of disabilities. It may also be necessary to revise the tasks of the MLRW.

The establishment of MLRW education programmes, and their evaluation and revision, will provide the basis for further analysis of their tasks and training.



# ANNEX I

## PARTICIPANTS AT THE CONSULTATION ON EDUCATION OF MID-LEVEL REHABILITATION WORKERS

## **ANNEX I**

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## ANNEX II

REHABILITATION PROGRAMMES,  
ORGANIZATIONS AND DONOR AGENCY  
REPRESENTED AT THE CONSULTATION

## ANNEX II

### Rehabilitation Programmes, Organizations and Donor Agency Represented at the Consultation

#### ARGENTINA

Within the country, rehabilitation services are established at national and provincial levels. A CBR programme was initiated in La Rioja Province, where it covers 72% of the population. It is not yet a national programme and has not been initiated in other provinces.

Members of the professional rehabilitation team carry out the tasks of mid-level workers, i.e., act as links between the community and the institution or hospital services. The professionals can fulfill this role because Argentina has the necessary human resources. Professionals are trained for 3 to 4 months for this role. This includes theory and field practice. The first course was conducted in one sanitary zone in 1991. Training will take place in the other zones of La Rioja Province during 1992.

#### CHINA

National training for rehabilitation has begun with the training of doctors, who will teach other levels of rehabilitation personnel, including mid-level workers.

A non-governmental organization from Hong Kong, in cooperation with the Ministry of Public Health, is conducting a one year Certificate Course in Applied Rehabilitation for doctors at Tongji Medical University, Wuhan. The aim of the course is to give the doctors a sound and general understanding of the principles and techniques of rehabilitation, and the skills to plan and implement CBR. It is anticipated that these doctors will become planners and teachers of rehabilitation, including CBR. Two classes have graduated (a total of 91 doctors from 19 provinces). More than half of the graduates are actively involved in CBR in addition to their hospital based rehabilitation duties.

A second curriculum has been designed and will run at Anhui Medical University to train middle-level doctors and therapists for roles similar to that of MLRW. However, their ability to function as MLRW will depend on the inclusion of CBR in their job description by their work units.

## INDIA

At present there is no National programme for rehabilitation in India. The Ministry of Social Welfare initiated the District Rehabilitation Centre Scheme (DRCS) in 1985 as a pilot study to determine its feasibility for extending it throughout the country.

At district level there is a District Rehabilitation Officer and a Mobile Clinic Team responsible for supervising the rehabilitation services, which may have a population of 2.5 million. Multi-Purpose Rehabilitation Therapists (with 6 months training) are placed in the PHC centres at block level, with a population of approximately 100,000. The plan also calls for Multipurpose Rehabilitation Workers for a population of 5,000.

The DRCS was initiated in one district in each of eleven states. In most districts, the scheme has covered a population of 100,000 to 150,000. This scheme was reviewed in 1991, when it was recommended that the tasks of the rehabilitation workers be more integrated within the responsibilities of health care workers. The MLRW should fill the gap between the community and the secondary/tertiary levels of rehabilitation services. This will improve the implementation of CBR as part of Primary Health Care in India.

## LEBANON

The government wishes to implement CBR as part of its health care plan. A plan has been prepared, but not implemented.

Primary health workers will be trained for 45 days to prepare them to identify disabled people, provide basic rehabilitation care and make referrals. Nurses will be the supervisors of these workers for rehabilitation. A nine month training programme is proposed for the nurses.

## MAURITIUS

CBR was initiated as a pilot project in one part of a district. However, CBR is planned to serve as a national programme. It is hoped to be extended throughout the country within 5 or 6 years, when a sufficient number of community rehabilitation workers (CRW) will be trained and posted in the community health centres. They will be responsible for the respective catchment areas.

The CRW follow a training course of one year, which includes a great deal of the curriculum described in this report, with theory, practice and field training. This cadre is selected from a group of Family Planning Workers who have a lot of experience in community work.

All of the teaching is carried out by the CBR team, which includes two doctors of physical medicine, one occupational therapist and one physiotherapist, with the added participation of specific professionals like a speech therapist, a psychiatrist, a psychologist and an orthopaedic technician. The CBR will be integrated into the primary health care system and the CRW will function at that level. The CRWs' work is regularly supervised by the CBR team to whom they are responsible. They are also required to operate within a two-way referral system with central rehabilitation services of the Ministry of Health and to work in collaboration with any service dealing with people with disabilities, namely Education, Social Security, NGOs, etc. The idea is to have a fully integrated approach to rehabilitation.

### MYANMAR

Rehabilitation services at central, regional and district levels are provided by one Hospital for the Disabled, two Departments of Physical Medicine and Rehabilitation in Yangon and Mandalay General Hospitals, and about 40 Physiotherapy units in Specialist and Township Hospitals. The CBR programme covers 90 villages in 15 townships of 9 States and Divisions.

The role of the physiotherapists has been modified so that they not only provide technical services to disabled persons, but also act as trainers, supervisors and managers for CBR. This has required a modification in the training programme for physical therapists.

### THAILAND

Rehabilitation services are provided in central and provincial hospitals. In order to fulfill the policy of health development, and extend all health services to district, subdistrict and community levels, a training course has been planned for Medical Rehabilitation Workers. This cadre will be multi-purpose workers who can provide basic services to people with disabilities and guide the referral system. The training course for Medical Rehabilitation Workers is two years, including theory and practice.

Community based rehabilitation will be implemented within the national programme for rehabilitation during the next five year plan for the health services.

### VIETNAM

The Ministry of Health provides rehabilitation services through rehabilitation departments in central and provincial hospitals. CBR was initiated in 1987. It has now been established in one or more districts in each of nine provinces. When CBR is initiated, a rehabilitation department is established at the district hospital and the staff at the communal health station are trained to carry out rehabilitation activities in the community.

The training of physical therapists has been modified in order to prepare them to work with people with locomotor, seeing, hearing and mental disabilities; and to supervise the CBR programme. The training programme increased from two years to thirty months.

### **ZIMBABWE**

Rehabilitation services are provided at all central and provincial hospitals, and at 49 of 56 district hospitals. Services at central and provincial levels are carried out by physical and occupational therapists. Rehabilitation assistants (RAs) at district level provide hospital-based and out-reach services. The training programme for RAs is two years.

CBR has been initiated in one district in each of the eight provinces. The RAs participate in the work with the community to initiate CBR, and are responsible for supervision of the community-level rehabilitation activities.



### **WORLD CONFEDERATION FOR PHYSICAL THERAPY**

The WCPT was established in 1951 with the purpose of providing information, counsel and assistance in the field of physical therapy; to encourage scientific research and improved standards of physical therapy education and practice; and to organize international congresses.

WCPT is particularly concerned with the lack of manpower and training in physical therapy, especially in developing countries. WCPT recognizes the need for a mid-level rehabilitation worker to deliver rehabilitation services to more people and supports the efforts to develop such a cadre. Physical therapists should be involved in the training of the MLRW.

### **WORLD FEDERATION OF OCCUPATIONAL THERAPY**

The WFOT was established in 1952 with the purpose of acting as the official international organization for the promotion of occupational therapy; to promote international cooperation among occupational therapy associations; to maintain the ethics of the professions; and to promote the exchange of information.

WFOT has supported the WHO work for community based rehabilitation. It also supports the development of a multi-purpose worker for rehabilitation. WFOT encourages occupational therapists to examine ways in which they can contribute to the strengthening and support of CBR and mid-level workers.



### SWEDISH INTERNATIONAL DEVELOPMENT AUTHORITY

The main and overall objective of SIDA is to raise the standard of living of poor people. The more specific objectives are to contribute to—

- economic growth
- economic and social equality
- economic and political independence
- democratic development
- sustainable use of natural resources and protection of the environment in the recipient countries.

During 1990/91, SIDA contributed 6,787 million SEK (1,000 million US\$) to bilateral development assistance. Swedish multilateral assistance for the same period was 3,566 million SEK (500 million US\$). SIDA's contribution to disability programmes is approximately 70 million SEK (12 million US \$) annually.

SIDA was represented at the Consultation because of its general interest in the expansion of rehabilitation services for people with disabilities in developing countries. SIDA also contributes funds to the Rehabilitation Programme at WHO, specifically for the training of manpower for community based rehabilitation.



# ANNEX III

## SUGGESTED CONTENTS OF A TRAINING COURSE FOR MID-LEVEL REHABILITATION WORKERS

## ANNEX III

Suggested Contents of a Training Course  
for Mid-Level Rehabilitation Workers

TOPICS	TIME ALLOTTED*	Page
<b>1 FOUNDATION STUDIES</b>	<b>15%</b>	<b>36</b>
1.1 Principles of Rehabilitation		
1.2 Psychology and Social Sciences		
1.3 Medical Sciences		
<b>2 PEDAGOGICAL PRINCIPLES</b>	<b>10%</b>	<b>40</b>
2.1 Teaching and Learning		
2.2 Basic Counselling Skills		
2.3 Health Education		
2.4 Community Awareness		
<b>3 APPLIED REHABILITATION</b>	<b>32%</b>	<b>41</b>
3.1 Management of Disabling and Handicapping Conditions		
3.2 Management of Disabling and Handicapping Conditions in Special Groups		
3.3 Rehabilitation Training		
3.4 Social Integration		
<b>4 PROGRAMME MANAGEMENT</b>	<b>3%</b>	<b>57</b>
4.1 Functions of Management		
4.2 Communication		
4.3 Organizations in Rehabilitation		
4.4 Setting up CBR Programs		
<b>5 INTEGRATIVE STUDIES</b>	<b>40%</b>	<b>59</b>
5.1 Course Projects		
5.2 Correlated Studies		
5.3 Placements for Practice		

\* Time allotted refers to the percentage of the total course length, which is estimated at 3000 Hours.



# 1 FOUNDATION STUDIES

## 1.1 PRINCIPLES OF REHABILITATION

### OBJECTIVES

At the end of the course the student will be able to:

- ◆ describe the socio-economic situation of people with disability and the factors that affect this situation;
- ◆ explain the role of rehabilitation in changing the situation of people with disability, including goals, aims and required component services, in the context of primary health care;
- ◆ discuss possible rehabilitation strategies, their advantages and disadvantages;
- ◆ describe the philosophy and implementation of CBR;
- ◆ discuss the role of people with disability in rehabilitation programme development.

### CONTENT

#### 1.1.1 *Primary Health Care (PHC)*

- Philosophy;
- Structure: PHC and the health care referral system;
- Personnel, particularly the community health worker.

#### 1.1.2 *The Disability Process*

- Causes and sequela of diseases;
- Definitions - impairment, disability, handicap;
- Simple elements of epidemiology;
- Types and incidence of disease and disability;
- Levels of prevention of disability; factors influencing good health;
- Role of the middle level worker in prevention.

#### 1.1.3 *Situation of People with Disability*

- Objects, components and characteristics of attitudes and prejudice;
- Attitudes to disability and to people with disability; attitudes of people with disability, families, communities and professionals; origin of these attitudes, cultural influences and traditional beliefs; life experiences and obstacles for people with disability through different ages from birth to old age;
- Social and economic situation of people with disability in urban and rural environments, their problems and needs;

- Handicaps and their causes - medical, attitudinal and environmental, implications for rehabilitation;
- Special needs of disadvantaged groups, e.g., youth, women, refugees, ethnic minorities, cultural handicaps.

#### **1.1.4 Philosophy of Rehabilitation**

- Equalization of opportunity and empowerment of people with disability;
- Significance of providing services for disability and handicap;
- Components of comprehensive rehabilitation;
- Available services; health, welfare, education and other services available to people with disability to meet their special needs; distribution and use of, and access to, such services; identification of gaps in available services;
- National Programme for the disabled;
- The World Programme of Action Concerning Disabled Persons;
- Possible approaches to rehabilitation - institutional, outreach and community-based; advantages, disadvantages; relationships.

#### **1.1.5 Community-based Rehabilitation (CBR)**

- Concept and basic philosophy; delivery structure within PHC, technology, personnel roles, management;
- Role of existing institutions and organizations;
- Community resources for rehabilitation development and strengthening;
- The significance of community involvement in CBR; ways of involving the communities in CBR;
- Resources for support and referral.

#### **1.1.6 Role of People with Disability**

- Role of people with disability in rehabilitation programme development and strengthening;
- Involvement in planning, organizing, monitoring and evaluating services;
- Human rights;
- Rights and responsibilities of people with disability;
- Advocacy of rights
- Self-help groups, parents groups, organizations of people with disabilities and other NGOs.

## **1.2 PSYCHOLOGY AND SOCIAL SCIENCES**

### **OBJECTIVES**

At the end of the course the student will be able to:

- ❖ describe the psychological, social, cultural and environmental factors affecting health, illness, disability and rehabilitation.

- ◇ respond to individuals with disability, colleagues and others with adequate concern.
- ◇ analyze the situation of individuals with disability from broad psychological and sociological perspectives.
- ◇ apply the knowledge of basic psychology and sociology to teaching community health workers and others, to assessment of individuals with disability, and to treatment and rehabilitation.

## **CONTENT**

### ***1.2.1 Psychological and Sociocultural Characteristics***

- Psychosocial factors in health, illness and disability.

### ***1.2.2 Human Development, with Emphasis on Early Childhood***

- Intellectual development
- Emotional development
- Social development
- Moral development.

### ***1.2.3 Psychological Functions and their Abnormalities***

- Cognitive function: memory, thinking and reasoning, perception
- Emotion
- Motivation
- Social behaviour and skills.

### ***1.2.4 Theories of Personality***

### ***1.2.5 Characteristics of Groups and Leadership: judgements and impressions of personality***

### ***1.2.6 Basic Social Institutions***

### ***1.2.7 Fundamental Social Processes: disadvantaged groups, implications for socialization of people with disabilities***

### ***1.2.8 Demographic, Environmental, Economic, Cultural and Social Characteristics of a Community***

### ***1.2.9 Traditional Health Practices and Beliefs***

### ***1.2.10 Principles of Therapy: family and community***

## 1.3 MEDICAL SCIENCES

### 1.3.1 *Anatomy and Physiology*

#### OBJECTIVES

At the end of the course, the student will be able to:

- ◇ relate the structure of the parts and systems of the human body listed to their function;
- ◇ explain the production and sequence of normal anatomical movement patterns;
- ◇ explain the general physiological mechanisms of the systems listed;
- ◇ explain the inter-relationship of these systems in the normal functioning of the body;
- ◇ relate the significance of altered anatomical and physiological states to the functioning of the body.

#### CONTENT

- ◇ Basic anatomy and physiology: normal structures and functions and how they are affected in disability situations;
  - Skeletal system: bones, joints, muscles and movements of the trunk, head, neck and extremities;
  - Nervous system;
  - Visual and auditory systems;
  - Speech apparatus: mechanism of speech;
  - Other special organs: nose, skin;
  - Cardiovascular system;
  - Respiratory system;
  - Digestive System;
  - Genitourinary system and endocrine system;

### 1.3.2 *General Pathology and Microbiology*

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ describe the changes in structure and function of organs and body systems due to disease processes and clinical conditions;
- ◇ describe basic elements of sterilization, disinfection, defense mechanisms and chemotherapy.

## CONTENT

- ◇ Reaction of the body to injury and inflammation;
- ◇ Painful conditions;
- ◇ Circulatory disturbances: causes, types, signs and symptoms, consequential effects of haemorrhagia; thrombosis, embolism, ischemic, infarction and oedema;
- ◇ Microbiology: common pathological organisms and the diseases caused by them;
- ◇ Sources of infection; conditions favourable for growth and modes of transmission and entry; cross-infection;
- ◇ Body's defence mechanism against infection and factors affecting this;
- ◇ Immunity: natural and acquired; sterilization and disinfection;
- ◇ Brief outline of chemotherapy.

## 2 PEDAGOGICAL PRINCIPLES

### OBJECTIVES

At the end of the course the student will be able to:

- ◇ implement the teaching-learning process;
- ◇ select appropriate teaching methods and teach effectively community workers and others in CBR;
- ◇ monitor the interventions implemented by community rehabilitation workers;
- ◇ implement methods for raising awareness and promoting development of positive attitudes to get community involvement in disability issues.

### CONTENT

#### 2.1 TEACHING AND LEARNING

- ◇ Teaching-learning concepts and principles, factors affecting learning;
- ◇ Psychology of learning; motivation, attention, concentration, etc.;
- ◇ Task analysis and the use of objectives in teaching;
- ◇ Methods of teaching and learning, their advantages and disadvantages;
- ◇ Group dynamics, patterns of interaction and the establishment of roles, the dynamics of the small group;
- ◇ Selection of methods to teach attitudes, knowledge and skills;
- ◇ Selection of material for teaching;
- ◇ Use and development of teaching materials, audio visual aids;
- ◇ Assessment and evaluation;
- ◇ Teaching and learning with colleagues, people with disability, health workers, communities: formal and informal situations;

- ◇ Planning and implementing workshops for community rehabilitation workers, etc.
- ◇ Teaching practice, including planning, teaching and evaluation.

## 2.2 BASIC COUNSELLING SKILLS

- ◇ Need for counselling and its implication to people with disabilities;
- ◇ Types and methods of counselling.

## 2.3 HEALTH EDUCATION

- ◇ Role of health education in community health:
  - Information;
  - Motivation for changing behaviour;
- ◇ Health education and disability:
  - Prevention of impairments and disabilities;
  - Changing attitudes about disability and people with disabilities;
  - Promoting social integration of people with disabilities;
- ◇ Methods, such as posters, newspapers, radio, television, theatre, traditional methods of public entertainment;
- ◇ Special focal groups, such as people with disabilities, families of disabled people, school children, teachers, community organizations.

## 2.4 COMMUNITY AWARENESS

- ◇ Prevention of disability;
- ◇ Early identification and intervention in disability;
- ◇ Elimination of environmental barriers;
- ◇ Awareness of technical aids and helpful devices.

# 3 APPLIED REHABILITATION

The content for Applied Rehabilitation should be studied through integration of the knowledge and skills needed for assessment and treatment of conditions causing impairments, disabilities and handicaps. The following activities should be carried out by the students to demonstrate their knowledge and skills.

- Assessment to identify impairments, disabilities, handicaps and needs for therapy and rehabilitation (includes special testing procedures, etc).
- Planning programmes, re-assessment and progression of regimes.
- Selection of community level technology and teaching it to community workers (Reference: WHO Manual *Training in the Community for People with Disabilities*).
- Selection of middle level technology and interventions; discussion, practice and demonstration of their application in the context of progressive treatment regimes and rehabilitation programmes.
- Recognition of own limitations to handle complex problems; identifying available resources for their referral; procedures for referral.

## OBJECTIVES

At the end of the course, the student will be able to:

- ◇ assess individuals and plan treatment and rehabilitation programmes for each individual with a disability or handicap;
- ◇ simplify the assessment for use by the community health workers, and teach them to carry out the simplified assessment and programme planning;
- ◇ teach community health workers how to select and carry out community level interventions and/or refer when necessary;
- ◇ carry out the required middle level intervention programmes for each individual and/or refer the individual when necessary.

## CONTENT

### 3.1 MANAGEMENT OF DISABLING AND HANDICAPPING CONDITIONS

#### 3.1.1 *Assessment and Planning*

- ◇ Observation and interview.
- ◇ Relevant personal details.
- ◇ History taking; sources and methods, including complaints, medical, social, economic and vocational history.
- ◇ Examination and relevant areas for discussion:
  - Gross physical examination and functional performance;
  - Special tests for specific impairments and disabilities;
  - Deviations from normal appearance, structure and function;
  - Assessment of activities of daily living including mobility.
- ◇ Specific functional assessments:
  - Assessment of communication ability;
  - Measurement and recording joint range;
  - Measurement and recording muscle strength;
  - Manual dexterity and motor function tests;
  - Endurance testing;
  - Sensory testing;
  - Assessment and recording coordination, balance and protective reactions;
  - Factors related to conclusions; determining abilities and problems related to role of the individual.
- ◇ Components of programme planning:
  - Problem solving processes;
  - Making problem list, identifying needs and determining individual priorities;
  - Establishing short and long term goals;
  - Selecting interventions, making programmes;

- Carrying out interventions and referral when necessary;
- Assessment and evaluation of progress and modifying programmes when called for;
- Discharge planning.
- ◇ Record Keeping
  - Uses and methods.

The study of each of the conditions or group of conditions listed below should include the following aspects:

- Causes and pathological manifestation;
- Possible sequelae in relation to the disability process;
- Methods of prevention;
- Early detection;
- Medical/surgical interventions.

### 3.1.2 Neuromuscular and Skeletal Disorders

Trauma, Diseases and Disorders:

- ◇ Fractures and dislocations of bones: non-union and mal-union
- ◇ Dislocation of shoulder; patella;
- ◇ Hemarthrosis: arthritis degenerative inflammatory septic
- ◇ \*Scoliosis: knock knees; bow-legs; flat foot; club foot;
- ◇ Muscular dystrophy;
- ◇ Acute stiff neck; muscle and tendon tears; sprained ankle; chronic foot pain;
- ◇ Amputations;
- ◇ Head injuries, unconsciousness;
- ◇ Hemiplegia; paraplegia and quadriplegia;
- ◇ Polyneuropathy;
- ◇ Peripheral nerve injuries;
- ◇ Burns.

### 3.1.3 Communication Disorders (Hearing and/or speech disability)

- ◇ Conditions leading to hearing loss:
  - Congenital factors, \*middle ear infections, measles, trauma, ageing process;
- ◇ Expressive Disorders:
  - \*Disorders of speech apparatus, cleft palate and cleft lip;
  - \*Delayed milestones of development;
  - \*Cerebral palsy; \*autism \*\*hemiplegia;
- ◇ Speech and language disorders associated with mental sub-normality.

\* Also listed under paediatric rehabilitation.

\*\*Also listed under neurological conditions.



### **3.1.4 Visual Disorders**

- ◇ Conditions leading to loss of vision:
  - Congenital factors, conjunctivitis, \*nutritional blindness, cataract, glaucoma, trachoma, trauma, refractive defects, strabismus.

### **3.1.5 Mental Retardation**

- ◇ Characteristics: emotional, behavioural, intellectual, functional communication.

### **3.1.6 Mental Illness**

- ◇ Conditions leading to psychiatric disability:
  - Schizophrenia;
  - Depression;
  - Anxiety;
  - Drug and alcohol dependence.

### **3.1.7 Respiratory Disorders**

- ◇ Conditions commonly found, such as:
  - \*Asthma, bronchitis and bronchiectasis, cor pulmonale.

### **3.1.8 Other Disabling Conditions**

- ◇ Diabetes mellitus, malnutrition, tuberculosis, measles;
- ◇ Complications following surgery;
- ◇ Heart disease;
- ◇ AIDS.

## **3.2 MANAGEMENT OF DISABLING AND HANDICAPPING CONDITIONS IN SPECIAL GROUPS**

### **3.2.1 Children**

- ◇ Child development
  - Study and observation of child development and growth 0-15 years;
  - Cultural, social and other influences on child development;
  - Influence of different impairments and disabilities on early child development;
  - Detection of delayed and abnormal development and growth;
  - Assessment of level of development in different areas;
  - Mobility; hand-eye coordination; self-help skills; language and social skills.

\* Also listed elsewhere.  
Psychosocial problems have been listed under social science.

- ◇ Play:
  - Importance in growth, development and rehabilitation;
  - Types and developmental stages of play;
  - Assessing a child's stage of play development;
  - Selecting appropriate play activities for specific problems the cultural context;
  - Appropriate toys and toy-making;
  - Methods of helping a child to learn; use of objectives, task analysis, prompting, forward chaining, backward chaining, rewards, generalization;
  - Safety at play; prevention of child accidents.
  
- ◇ Paediatric conditions:
  - Delayed milestones of development;
  - Down's syndrome;
  - Cretinism;
  - Deformities—torticollis, club foot, scoliosis;
  - Epilepsy;
  - Cerebral palsy, meningitis and encephalitis;
  - Spina bifida and hydrocephalus;
  - Poliomyelitis;
  - \* Middle ear infections, trauma to the ear;
  - \* Disorders of speech apparatus, cleft palate and cleft lip;
  - \* Nutritional blindness;
  - \* Asthma;
  - Disorders of personality and behaviour in childhood;
  - \* Autism;
  - Child abuse and neglect.
  
- ◇ Rehabilitation of the multiply disabled child:
  - Special problems of the severely and multiply disabled child;
  - Assessment of prognosis;
  - Factors that influence choice of training;
  - United Nations Convention on the Rights of the Child.

### 3.2.2 Elderly People

- ◇ Changes that occur with ageing:
  - Physiological, pathological, functional, psychological;
- ◇ Factors that influence good health in elderly persons:
  - Economic, social, environmental, cultural;
- ◇ Special considerations when applying treatment and rehabilitation procedures to meet the needs of elderly persons:
  - Role in family and community; traditional and cultural values; modifications to procedures;

\* Also listed elsewhere.

Psychosocial problems have been listed under social science.

- ◇ Special resources available - family, community, self help groups, non-governmental organizations, day-care centres.

### 3.2.3 Other Special Groups

- ◇ For example, refugees, war or disaster victims, street children.

## 3.3 REHABILITATION TRAINING

### 3.3.1 First Aid

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ recognize emergency situations and take appropriate actions;
- ◇ apply basic nursing procedures as needed in CBR.

#### CONTENT

- ◇ Emergency treatment for shock, burns, hemorrhage, fainting, fits, fractures and soft tissue injuries;
- ◇ Bandaging and resuscitation;
- ◇ Wounds, wound healing and care;
- ◇ Hygiene
- ◇ Temperature, pulse, respiration;
- ◇ Skin care.

### 3.3.2 Movement Therapy and Activities of Daily Living (ADL)

#### OBJECTIVES

At the end of the course the MLRW student will be able to:

- ◇ describe the principles of mechanics which are of value in therapeutic procedures;
- ◇ relate bio-mechanical principles to posture and function;
- ◇ relate the bio-mechanical principles to the assessment and treatment of patients;
- ◇ consider the individual and his or her working environment as a whole, applying anatomy, physiology and psychology to produce health, comfort and greater efficiency;
- ◇ reduce unnecessary effort, fatigue and wear and tear by modifying work and home situations;
- ◇ apply the mechanics studied in kinesiology to treatment procedures involving movement and exercise;

- ◇ carry out the treatment procedures listed;
- ◇ assess activities of daily living, daily problems and suggest solutions.

## CONTENT

- ◇ Principles of basic bio-mechanics applied to: muscle forces, angle of pull, leverage, uses of weights, springs, pulleys, suspension.
- ◇ Practical experience and observation of normal movement, including developmental sequence of movement from infant to adult.
- ◇ Analysis of joint movement and muscle action:
  - Types of movement;
  - Types of joint range;
  - Analysis of joint range in normal activity, such as:
    - Rolling, lying to sitting, sitting to standing;
    - Upper limb: reaching, grasping, carrying a load in the hand, pushing, pulling, throwing and lifting;
    - Lower limb: standing, walking, running, jumping, kicking and standing on one foot.
- ◇ The physiological limitations of Man related to size, shape, strength, energy and reaction.
- ◇ Physical and psychological changes brought on with ageing in relation to work.
- ◇ Design of working methods, apparatus, and environment to fit own and patient's structure, function and abilities.
- ◇ Application of the above to:
  - Own working environment as a whole to produce health, comfort and greater efficiency;
  - Specific therapeutic activities, techniques and procedures so as to reduce unnecessary effort, fatigue, wear and tear;
  - Special needs of each individual with disability; adapting work and home situations to make the maximum use of the patient's abilities e.g., heights of working surfaces, width of doorways etc.
  - Adaptations to equipment, design and fabrication of self-help devices.
- ◇ Prevention of Occupational Hazards:
  - Back discipline: protection from back strain; correct use of body mechanics at home, at school, at work and recreation; particular application to patients, individuals with disability, their family members and for public education;
  - Lifting and handling: methods of rolling individuals; methods of lifting and transfers including shoulder lift, double lift, folded arms lift, transfer of individuals from floor or bed to chair and vice versa, use of mechanical aids.
- ◇ Prevention and reduction of deformity;
  - Use of positioning and splintage to prevent/reduce common deformities of limbs and trunk.

- ◇ Physical education:
  - Background to exercise;
  - General introduction use of weight, space, time and flow in exercise;
  - Movement to music;
  - Teaching small groups;
  - Specific exercise classes for the legs, back; shoulder and hand;
  - Coordination and balance.
- ◇ Relaxation: general and local:
  - Methods of achieving local and general relaxation including support, positioning, movement.
- ◇ Techniques to promote normal muscle function:
  - Methods of initiating and stimulating muscle contraction;
  - Methods of maintaining and restoring range of movement and joint stability;
  - Techniques for reducing spasticity, rigidity, pain and muscle spasm;
  - Methods of strengthening muscles and increasing endurance;
  - Re-education of functional movement, including analysis and assessment of abnormal movement, methods of teaching motor skills, use of relevant methods to produce normal movements and build up correct functional patterns, including functional re-education based on neurodevelopmental approaches, facilitation techniques;
  - Re-education of sensation, posture, balance, coordination;
  - Re-education and improvement of respiratory movements: exercises to mobilize thorax, localized breathing, positioning to facilitate breathing, postural drainage.
- ◇ Activities of Daily Living
  - Training in self-care activities and household activities; Patients with hemiplegia; paraplegia; limited range of motion weak muscles; incoordination; mental disability;
  - Bowel and bladder training for people with spinal cord damage;
  - Adaptations to the home.
- ◇ Gait
  - Observation of normal walking so as to be able to detect abnormalities;
  - Re-education of gait with and without the use of walking aids, orthoses and prostheses;
  - Adaptations to the environment.

### 3.3.3 *Appropriate Aids and Environmental Adaptations*

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ assess individuals, decide whether they would benefit by the use of aids and select the most appropriate aid or type of aid for each individual;

- ◇ make selected aids (requiring community and middle level skills) and explain their use, care/maintenance, possible complications and hazards of misuse;
- ◇ refer and procure for selected individuals the more specialized aids;
- ◇ teach community health workers:
  - the types of aids and their uses in rehabilitation;
  - to assess and select individuals who require technical aids;
  - to harness the resources of the family and community for making appropriate aids whenever possible;
  - to make selected aids so that they can teach individuals with disability and families how to make them;
  - which individuals should be referred for the procurement of appropriate aids.

## CONTENT

- ◇ Role of aids in rehabilitation.
- ◇ Types and uses of aids in mobility disability:  
aids for getting onto and up from the floor and in and out of bed, sitting aids, walking aids, self-care aids, aids for household activities and field work, dressing aids, aids for personal hygiene and writing aids; rest and support splints.
- ◇ Assessment of individuals for choosing appropriate aids.
- ◇ Making aids for people with mobility disability:
  - Aids that can be made at home and community level; available materials and tools;
  - Practice in measurement, making and teaching others how to make them;
  - Instructing in use, care, simple adjustment, repair and complications;
  - Aids that could be made by oneself: dynamic splints, use of Plaster of Paris for splintage and support;
  - Practice in measurement and making;
  - Instructing in use, care, simple adjustment, repair and complications.
  - Technical aids that need more specialized technology;
  - Methods of referral and procurement;
  - Wheelchairs and tricycles; selection according to individuals' needs; instruction in their use, care and maintenance;
  - Prostheses and orthoses; instruction in their use, care and maintenance.
- ◇ Adaptations to the home and environment.
- ◇ Availability of eye glasses, hearing aids and communication aids for people without speech: referral and procurement.

### 3.3.4 Manual and Thermal Procedures

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ assess and appreciate abnormalities of joint movement;
- ◇ achieve the following specific effects:
  - mobilize the skin, scar tissue, connective tissue, muscles, tendons and ligaments;
  - restore gliding surfaces of tendons within a sheath;
  - improve or maintain the range of movement and function;
  - assist the removal of excess tissue fluid;
  - improve peripheral circulation;
  - relieve pain and reduce muscle spasm;
  - stretch soft tissues eg. contractures;
- ◇ describe and explain the physical, physiological and therapeutic effects of superficial heat therapy and cold therapy;
- ◇ demonstrate the application of these therapies safely, accurately and effectively.

#### CONTENT

- ◇ Relaxed passive movements;
- ◇ Stretching contracture;
- ◇ Massage techniques, including traditional techniques;
- ◇ Physical and physiological effects of heat and cold;
- ◇ Application of procedures: hot packs, hot water, cold therapy;
- ◇ Instruction of patients in using these at home.

### 3.3.5 Communication Training

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ use assessment procedures for individuals with communication disorders to determine specific problems in communication;
- ◇ select appropriate procedures to enable individuals to overcome problems;
- ◇ apply the range of therapeutic and training procedures listed.

#### CONTENT

- ◇ Communication and language;
  - Functions of language, language levels;

- ◇ Structure and functions of the speech organs;
  - Mechanism of speech production and factors affecting it;
  - Physical nature of speech sounds;
  - The syllable, vowel and consonant;
  - Significant sound elements in speech - phonemes;
- ◇ Patterns of speech:
  - Development and acquisition of speech and language;
  - Factors affecting speech and language development;
  - Manifestation of communication problems;
- ◇ Importance of early detection and intervention in language disorders;
  - Consequences of deafness in early child development;
  - Language: cognitive, social, psychological;
  - Behavioural problems;
- ◇ Special factors to consider in assessment:
  - Sensorimotor capabilities;
  - Comprehension, expression, articulation, ability to communicate;
  - Degree of hearing; tests; measurement;
  - Examination of organs used for speech production;
- ◇ Aims and priorities in management;
  - Alternative methods of communication, and methods of teaching; problems and constraints;
  - Oral communication;
  - Total communication;
  - Sign language; finger spelling;
  - Lip reading and speech reading;
- ◇ Language training for individuals with functional deafness:
- ◇ Conceptual implications; communication needs; approaches;
- ◇ Perception of sounds, receiving sounds;
  - Auditory training, stages in auditory training, simple guidelines;
  - Types and uses of hearing aids, advantages and problems;
- ◇ Perception of speech:
  - Gestures and mime;
  - Lip Reading and speech reading;
- ◇ Speech production:
  - Identification of obstruction to speech production;
  - Methods of helping speech production;
  - Basic techniques to train vocalization and articulation;
  - Respiratory training;
- ◇ Exercises for the tongue, lips, cheeks, jaws and vocal cords;
- ◇ Control of intonation, rhythm and pitch;
- ◇ Principles and precautions to follow in speech training;
- ◇ Total Communication:
  - Philosophy;
  - Methods listed above;
  - Writing, reading and use of pictures;
- ◇ Training residual hearing;



- ◇ Appropriate interventions for communication problems of
  - children with mental retardation,
  - children with cerebral palsy, and
  - individuals with hemiplegia.

### 3.3.6 *Functional Training for People with Visual Disability*

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ assess individuals to determine the extent of the problems listed;
- ◇ select procedures that could be used to enable each person to overcome individual problems;
- ◇ apply the procedures listed to promote maximum functional independence of each individual.

#### CONTENT

- ◇ Visual testing;
- ◇ Methods of communicating with people who have no sight;
- ◇ Orientation and mobility training: walking with a sighted guide, and walking alone with a stick;
- ◇ Use of other senses and sensitivity to the environment;
- ◇ Training in activities of daily living;
  - Self-care skills, household activities;
  - Money and time identification;
  - Techniques involving use of other senses;
- ◇ Language development, communication and social skills training;
- ◇ Assessment of developmental problems in the infant and young child;
  - Interventions to promote development of the infant and young child;
  - Ways of: normalizing tactile sensation; increasing tolerance to movement; improving proprioception as a means of improving mobility; strengthening understanding of environment to gain increased function, mobility and independence; encouraging independence in daily living skills.

### 3.3.7 *Interventions for Children with Mental Retardation*

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ assess individuals to determine their abilities;
- ◇ select interventions that will promote development;
- ◇ promote the implementation of appropriate interventions;
- ◇ assess the individual's progress and modify interventions as needed.

## CONTENT

- ◇ Assessment of abilities: intellectual, communication, motor;
- ◇ Assessment of behaviour;
- ◇ Early intervention techniques;
- ◇ Home training programme;
- ◇ Management in the school;
- ◇ Pre-vocational and vocational training;
- ◇ Role of family and community.

### 3.3.8 Interventions for People with Mental Illness

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ assess individuals to determine their situation and needs;
- ◇ select interventions that will promote the individuals's ability to function within the family and the community;
- ◇ assess the individual's progress and modify the interventions as necessary.

#### CONTENT

- ◇ Assessment of situation and needs, including the individual and the family;
- ◇ Selection of interventions appropriate to the situation:
  - Psychological and social counselling;
  - Social skills training;
  - Control of expressed emotions;
  - Relaxation techniques;
  - Methods to increase self-esteem;
  - Medications;
- ◇ Vulnerable groups: adolescents, women, poor, displaced persons.

### 3.3.9 Therapeutic Activities

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ select local arts and craft and occupational activities which will be of therapeutic benefit to individuals with impairments or disabilities;
- ◇ advise individuals on how to get access to the activity selected and play a facilitator's role if necessary;
- ◇ advise individuals on how to obtain the maximum benefit from the activity selected.

## CONTENT

- ◇ Types of local craft and occupational activities, classification of activities having therapeutic value;
- ◇ Factors to consider in selecting suitable activities which:
  - stimulate individuals to participate in the recovery process;
  - promote and restore psychological function;
  - promote and restore physical function;
- ◇ Relationship of activities to age, roles, abilities and needs;
- ◇ Activity analysis, types of adaptive skills;
- ◇ Therapeutic value of traditional art and culture-music, art and drama;
- ◇ Use of activities identified above in rehabilitation of individuals with specific disabilities - mobility, vision, hearing speech, intellectual, mental psychiatric and loss of tension;
- ◇ Adapting activities to suit individuals.

## 3.4 SOCIAL INTEGRATION

### 3.4.1 Education for Disabled Children

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ facilitate school entrance for children with disability by advising/motivating parents about the need for schooling and referring them to the appropriate educational authority or officer;
- ◇ teach community health workers about the importance of education for children with disability and how they can facilitate schooling for children in their communities.

#### CONTENT

- ◇ Aims and goals of school education;
- ◇ Concept of special education;
- ◇ Advantages and disadvantages of integrated and segregated education for children with disability;
- ◇ Special educational needs of children with different disabilities: mobility, visual, hearing, speech, and intellectual disability; including:
  - Adaptations to environment, access and freedom of movement;
  - Communication and social interaction strategies in the classroom;
  - Introduction to the use of braille;
  - Use of playground, sports and recreation;
- ◇ National Policy on Education; provisions for education of children with disability;

- ◇ Educational opportunities available for children with disability—special education, system, types of facilities, teachers, teacher training;
- ◇ Role of parents;
- ◇ Role of community.

### 3.4.2 *Recreational, Cultural and Sports Activities*

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ promote the participation of people with disabilities in the recreational, cultural and sport activities within the community;
- ◇ teach the community health workers about the importance of integration of people with disabilities in these activities.

#### CONTENT

- ◇ Social, psychological and physiological effects;
- ◇ Common activities in the community and barriers to the participation of people with disability;
- ◇ Public myths, architectural barriers, transportation, communication, lack of appropriate equipment;
- ◇ Methods of promoting recreation, leisure and sports for people with disability;
- ◇ Adaptations to equipment;
- ◇ Community involvement and public education.

### 3.4.3 *Sexuality and Disability*

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ explain how sexuality may be affected by different types of disabilities;
- ◇ identify resources for sexual counselling for people with disabilities.

#### CONTENT

- ◇ Sexual needs of human beings;
- ◇ Factors affecting normal sexual function;
- ◇ Causes and types of sexual problems which can occur with different types of disability, such as movement, seeing, hearing or mental disabilities;
- ◇ Problem solving - resources available for sex education and counselling and treatment;

### 3.4.4 Vocational Rehabilitation

#### OBJECTIVES

At the end of the course the student will be able to:

- ◆ refer individuals who need vocational rehabilitation to available vocational rehabilitation personnel;
- ◆ in the absence of vocational rehabilitation personnel, advise individuals with disability and their families about suitable income generating/job/employment opportunities, and possibilities of marketing products and obtaining training, finance and materials if necessary;
- ◆ teach community rehabilitation workers how to do the above.

#### CONTENT

- ◆ Role of people with disability in the income generating capacity/economic production of the family;
- ◆ Social and economic effects of unemployment;
- ◆ Role of vocational rehabilitation in equalizing opportunities;
- ◆ Identification of individuals unsuitable for vocational rehabilitation;
- ◆ Support systems available for individuals unsuitable for vocational rehabilitation;
- ◆ Vocational opportunities:
  - Income generating and employment patterns in rural and urban areas;
  - Self employment;
  - Open employment;
  - Use of co-operatives;
  - Sheltered employment; advantages and disadvantages;
  - Available and accessible employment creation, income generating and poverty alleviation programmes;
  - Legislative provision for vocational rehabilitation:
- ◆ Assessment, guidance and preparation:
  - Assessment of individuals; functional, physical, psychological and vocational abilities and aptitudes;
  - Factors to consider in selecting suitable occupations, skills and crafts for particular individuals;
  - Methods of analyzing abilities required for the vocational activity and relating these to the abilities of the individual;
- ◆ Placement:
  - Prejudices and psychological factors affecting resettlement;
  - Preparation of the individual;
  - Preparation of the work-place and working colleagues;
- ◆ Follow-up:
  - Handling problems between individuals with disability, and employers or colleagues.

- ◇ Vocational training:
  - Training and retraining possibilities in rural and urban areas in integrated situations;
  - Factors to consider when selecting training methods;
  - Use of family and community skills as resources for training;
  - Apprenticeship and resources for apprenticeship;
  - Available and accessible skills training programmes and institutions;
  - Special training programmes and other resources available to those individuals who need separate facilities;
  - Special requirements for training and placement of individuals with particular problems;
  - Organization of the work-place.
- ◇ Sources of finance:
  - Family and community resources; cooperatives and banks;
  - Special loans schemes and grants for people with disability;
- ◇ Marketing and obtaining raw materials: methods used by community;
- ◇ Prevention of accidents at work and at home:
  - Protection of wells and fireplaces, use of safety belts etc;
  - Ensuring safety of machines and tools;
  - Protective clothing, gloves and footwear.

## 4 PROGRAMME MANAGEMENT

### OBJECTIVES

At the end of the course the student will be able to:

- ◇ assist and supervise the CBR activities of the community health worker;
- ◇ collate and monitor the reports of the community health worker and report accurately to the CBR Community Committee;
- ◇ communicate effectively with people of other sectors including people with disability, their families and the community members and associations;
- ◇ use knowledge and understanding of disabled people, families and the community to give appropriate advice and coordinate needed support;
- ◇ assist the planning and implementing of a CBR project working with the CBR Community Committee.

### CONTENT

#### 4.1 FUNCTIONS OF MANAGEMENT

##### 4.1.1 Introduction

- ◇ Characteristics of effective management; management by objectives, by crisis, and by exception; learning from experience.

- ◇ Identifying needed changes, initiating changes and development;
- ◇ Reaction to change and handling change;
- ◇ Leadership: theories of leadership; functions of leadership; identifying leaders.

#### **4.1.2 Components of Management**

- ◇ Planning: Look at situation and collect information; select problems; set objectives; review obstacles; write the plan; day to day activities; follow-up of plan.
- ◇ Budgeting and accounting: budgeting allocation; cash handling; keeping an allocation ledger; petty-cash (Imprest) system;
- ◇ Procurement of materials and equipment: available local materials and equipment; costs of local materials and equipment; source of material and equipment; procedures for obtaining material and equipment; storage and handling; issuing, control and maintenance;
- ◇ Manpower: selection of staff; division of labour; staff training and continuing education; motivating staff - needs and devices;
- ◇ Role of achievement motivation.

#### **4.1.3 Data Collection and Interpretation**

- ◇ Community surveys; house to house survey; community analysis; relevance of surveys and statistics;
- ◇ Data collection and recording; methods;
- ◇ Reporting: systematic reporting; significance of reporting; misreporting;
- ◇ Monitoring, interpreting and problem solving; maintaining work standards; assessing work performance; interpreting records and reports; dealing with problems.

#### **4.1.4 Evaluation**

- ◇ Achievement of objectives and work progress: effective use of resources; self evaluation; participation in programme evaluation.

## **4.2 COMMUNICATION**

- ◇ Two way communication; necessity of feedback; method of communication;
- ◇ Group dynamics: characteristics and functions of groups, formal and informal groups, types of roles, resolving group conflicts, team work;
- ◇ Conducting meetings: purpose, subject matter, type of meeting, logistics, characteristics of a good meeting.

## **4.3 ORGANIZATIONS IN REHABILITATION**

- ◇ Health Service: including primary health care, function of health services, statistics;

- ◇ Educational, Social and Vocational Services;
- ◇ Utilizing the referral network: levels of referral, vertical and horizontal referrals, two way referrals.

#### 4.4 SETTING UP CBR PROGRAMMES

- ◇ Social mobilization: community participation, observing, listening and learning; discussing; organizing and participating; identifying a “community development committee” within the community.
- ◇ Steps in implementation of a CBR project:
  - Gaining cooperation of community leaders; forming CBR committees; community preparation; resource mobilization; identifying local community workers; training; identifying disabled people with rehabilitation needs; starting rehabilitation work; recording and reporting; monitoring and community support.
- ◇ Supporting the on-going community-based projects:
  - Identify methods of coordinating support, assist planning of integrated community activities, and encourage formation of self-help groups.

### 5 INTEGRATIVE STUDIES

#### OBJECTIVES

At the end of the course the student will be able to:

- ◇ integrate theoretical and practical learning into work in community and clinical situations.

#### CONTENT

##### 5.1 COURSE PROJECTS

These would take several forms, for example:

- ◇ Community studies: This may involve interviews in the community to learn about disability issues, e.g., the extent of social integration of people with disabilities, or the types of community resources available for disabled people.
- ◇ Health education: Students may be asked to prepare materials for public education about disability issues.
- ◇ Integrated study: This can be included in several of the courses. The students are asked to integrate knowledge they gain from the course with a



practical problem which they will have to resolve in their work. For example, when they study appropriate aids, they can do an analysis of the needs of one disabled person and recommend the aids which that person needs, and arrange for that person to obtain the aids. The study can be presented in a short essay, or in a demonstration/discussion with the other students and the teacher.

## 5.2 CORRELATED STUDIES

This subject will provide opportunity for practice, demonstrations and tutorials in a holistic context.

These are aimed at consolidating, and possibly expanding, basic material taught earlier in the course while at the same time maintaining and improving competence in the skills and procedures learned previously.

- ◇ Correlated studies of areas covered in the educational programme through tutorials, practice, demonstrations and clinically-based patient assessments.

## 5.3 PLACEMENTS FOR PRACTICE

### 5.3.1 *For Observation and Orientation* (During first six months of training)

- ◇ Primary health care and CBR programmes, health centre attachment;
- ◇ Clinical attachments, rotating with MLRW;
- ◇ Family attachment with a child or adult being treated by a MLRW; Home visits for interaction with the family.

### 5.3.2 *For Clinical Teaching and Practice*

As far as possible, academic and practical teaching should be immediately followed up by the relevant field practice including clinical settings.

Practical placements must be in settings like those in which the student will work after completion of the training.



### **Abstract**

These recommendations for the education of Mid-Level Rehabilitation Workers are based on experiences in planning and implementing training programmes in nine countries. This information will be useful in planning for personnel in community based rehabilitation, and in developing a training programme for mid-level workers. This document presents tasks of the workers and content of a training course which must be adapted to the specific needs in each country.