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# **DISABILITY PREVENTION AND REHABILITATION**

## **A GUIDE FOR STRENGTHENING THE BASIC NURSING CURRICULUM**



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## 1. Introduction

Primary Health Care (PHC), as defined in the Alma-Ata Declaration, includes promotive, preventive, curative and rehabilitative care. Because these four components include primary, secondary and tertiary prevention, they address the issues relevant to disability prevention and rehabilitation. The goal of tertiary prevention and rehabilitation is to improve the abilities of people with disabilities to facilitate their participation in activities in the wider community.

Nurses have a vital role in PHC, and therefore should be prepared to deliver all types of care, including measures for disability prevention and rehabilitation.

In all countries, people with disabilities frequently have difficulty obtaining preventive and curative services because nurses and physicians in general practice do not know how to assess the health status of people who cannot see, hear, move or behave in an expected manner.

In developed countries, most people with disabilities have the opportunity to receive rehabilitation services from specialists who are knowledgeable about disabilities and know how to assess an individual with a disability.

In developing countries, very few people with disabilities have access to specialists or to rehabilitation services. It is estimated that in urban areas of developing countries 15% of the disabled people who need rehabilitation services receive them, while in rural areas only 2% of the need is met.

Hence, in all countries, there is a need for improved services for people with disabilities in the general health care system. In developing countries, there is also a need to strengthen services for the special needs of people with disabilities, both within PHC and within the referral services.

Existing community/PHC-oriented curricula for nurses' training include topics related to all components of PHC. Both academic training and clinical practice emphasize promotive, preventive and curative care. However, the skills needed for the delivery of basic health services to people with disabilities are not well-developed. Rehabilitative care is usually a small part of the academic training, and is inadequately reinforced in clinical practice.

The proposed additions to the nurses' curriculum address these shortcomings in existing training programmes and in the health services provided to people with disabilities. The proposed additions focus on disability prevention, particularly early detection of disabilities, basic interventions for limiting the impact of disabilities, and education and motivation of communities to promote social integration of disabled people. It is recommended that training for the delivery of primary and secondary preventive measures to disabled people be strengthened, particularly through community practice.

The changes proposed in this document correspond to approximately 10 hours of theory and 20 hours of practical experience. The number of hours will vary according to the curriculum

content for the two-, three-, or four-year existing basic training programme. To prevent the curriculum from being overloaded, one suggestion is to integrate the proposed content into each topic throughout the training. The proposed content could also be used for organizing existing continuing education programmes for nurses already in service.

This document contains the following information:

- Definitions of terms and descriptions of strategies for rehabilitation;
- Examples which illustrate the need for strengthening tertiary prevention measures, particularly in developing countries;
- Description of the role of the nurse in disability prevention and rehabilitation, particularly with reference to tertiary prevention;
- Topics which can be added to standard curricula to strengthen the nurses' role in disability prevention and rehabilitation;
- Topics which are relevant to disability prevention and rehabilitation and already exist in standard curricula for the basic training of nurses (Annex I).

## 2. Definition of Terms and Strategies

The terms defined below are meant to clarify the relationship between impairments, disabilities and handicaps; and primary, secondary and tertiary prevention. Strategies for rehabilitation, which is part of tertiary prevention, are also described.

### **Impairment, Disability and Handicap**

The definition of disability varies widely from country to country, and even within countries. In an effort to standardize terms relevant to disability issues, and to improve the comparability of data, WHO developed the International Classification of Impairments, Disabilities and Handicaps (WHO, 1980). This classification has been translated into 13 languages and is used widely within developed countries. Its usefulness is beginning to be recognized in developing countries. The terms are defined as follows:

- Impairment:** in the context of health experience, is any loss or abnormality of psychological, physiological or anatomical structure or function. Impairment refers to organs of the body.
- Disability:** in the context of health experience, is any restriction or lack of ability (resulting from an impairment) to perform an activity in the manner or within the range considered normal for a human being. Disability refers to the person.
- Handicap:** in the context of health experience, is a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal (depending on age, sex, social and cultural factors) for that

individual. Handicap refers to the limitations experienced by people with disabilities in their interactions with their societies.

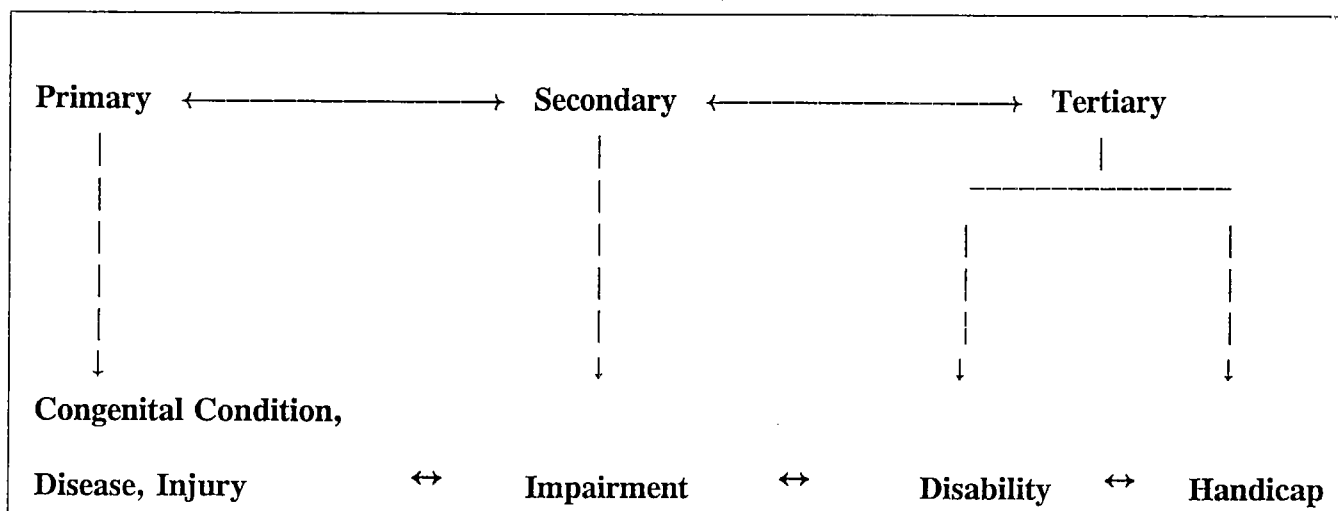
**Examples of Impairments, Disabilities and Handicaps:**

- (1) Impairment: - Deformed inner ear.  
 Disability: - Inability to hear or understand verbal communication.  
 Handicap: - Unable to attend school because the teachers do not know how to work with children who are deaf.
  
- (2) Impairment: - Paralysed muscles (after head injury).  
 Disability: - Difficulty walking, inability to use one hand.  
 Handicap: - Unable to obtain employment because there is not adequate public transport and because potential employers do not wish to hire someone with a disability.
  
- (3) Impairment: - Mild mental retardation.  
 Disability: - Difficulty learning.  
 Handicap: - Unable to attend school because the teachers do not know how to work with children who have mental retardation.

**Primary, Secondary and Tertiary Prevention of Disability**

The concept of prevention should also be applied to the issue of disability. Primary prevention consists of measures which prevent diseases, injuries or congenital conditions which can result in disabilities. Secondary prevention consists of treatments used for diseases, injuries or conditions which could cause impairments. Tertiary prevention includes all measures aimed at the reduction or elimination of impairments, disabilities and handicaps. The relationship between the levels of prevention and the occurrence of impairments, disabilities and handicaps is illustrated in Figure 1 below:

**Figure 1: Disability Prevention**



## Rehabilitation

Rehabilitation is generally considered to be the component of tertiary prevention which focuses on the reduction or elimination of a disability. Measures which treat an impairment, such as the provision of a hearing aid to compensate for damage in the ear, or the removal of a cataract from the eye, are tertiary prevention, but are generally not considered to be examples of rehabilitation. Measures used to assist people with disabilities to improve their abilities in activities such as self-care, communication, moving around, behaving according to social norms or developing vocational skills, are generally considered to be rehabilitative measures.

There are three major strategies for carrying out rehabilitation programmes: (1) community-based rehabilitation; (2) out-reach programmes; and (3) institution-based rehabilitation.

### (1) Community-based rehabilitation (CBR)

In a community-based rehabilitation (CBR) programme, people with disabilities go through the process of rehabilitation in their homes and communities. The community is involved in the process because the rehabilitation and social integration of disabled people is a concern of the community. A community worker is responsible for identifying disabled people and their rehabilitation, and making referrals to appropriate services. General and special services are provided in the referral systems of the health, education, vocational and social sectors. CBR has been jointly defined by the World Health Organization (WHO), the International Labour Organization (ILO) and the United Nations Education, Scientific and Cultural Organization (UNESCO), as follows:

*Community-based rehabilitation is a strategy within community development for the rehabilitation, equalization of opportunities and social integration of all people with disabilities. CBR is implemented through the combined efforts of disabled people themselves, their families and communities, and the appropriate health, education, vocational and social services.*

CBR programmes provide assistance and support to enable disabled people to reduce the effects of their disabilities. They also help the disabled person to develop skills and knowledge through which they can compensate for their disabilities and take part in the social, cultural and economic activities of the community. These programmes have been described as multi-disability oriented in principle, aiming for joint multi-sectoral action at the level of the community, supported by an appropriate referral and supervisory system. They empower disabled people by enabling them to be involved in the broader rehabilitation process.

Community-based rehabilitation programmes aim:

- to promote awareness, self-reliance and responsibility for rehabilitation in the community;
- to build on local manpower resources in the community, including disabled persons, their families and other community members;
- to encourage the use of simple methods and techniques which are acceptable, affordable and appropriate to the local setting;
- to use existing local organizations and infrastructure to deliver services, especially primary health care services, but also labour and social services including the education system.

Nurses should encourage the active involvement of disabled people in rehabilitation programmes, by inviting them to provide input into the design and implementation of these programmes, and to act as resource people in programmes for new participants.

## **(2) Out-reach programmes**

An out-reach programme for rehabilitation is one in which services are provided to people with disabilities by specialists who visit the community, or the homes of disabled people. Advice is given on how to improve in specific activities, such as self-care, moving around or communication. The community is not involved, and social integration of people with disabilities is not promoted. Out-reach services may be provided as part of the referral services in support of a CBR programme.

## **(3) Institution-based rehabilitation**

Institution-based rehabilitation takes place in institutions, as the name implies. People with disabilities are temporarily removed from their homes so that they can go through a training process under the direction of staff in an institution. Staff should include specialists in various aspects of rehabilitation, but in developing countries the necessary specialists may not be available. Institutions may also serve as referral services to a CBR programme, particularly when a very specialized service is required. Staff of the institution should train the disabled person and the family how to continue the training at home. Information should also be sent to all levels of the referral system to ensure follow-up after the disabled person leaves an institution.

## **3. The Need for Tertiary Prevention**

The rationale for nursing in disability prevention is demonstrated by the following:

### **(a) Magnitude and Scope of the Problem**

In most countries, the number of people who have disabilities is not known. In a few developed countries, information gathered through census and survey questions indicate



that the percentage of the population with disabilities is 10% to 14%. A number of developing countries have found 4% to 5% of their population have disabilities. The United Nations Statistical Office published the Disability Statistics Compendium (1990), which gives data on disability from 55 countries. The percentages of disabled people reported from those countries varies from 0.2% to 20.9%. The lack of standard terminology and methods of data collection account for some of the variation in percentages. Countries which asked questions about impairments, e.g., blindness, deafness, or paralysis, have lower percentages of people with disabilities. Countries which asked questions about disabilities, e.g., difficulty moving, seeing or hearing, have higher percentages.

WHO has used the estimate of 7% to 10% to determine how many people within a population may be disabled. In a population with a 10% disability rate, the households affected by disability may be as high as 25%. Because the rate of disability rises in older people, the lower figure of 7% is recommended for developing countries where elderly people form a small percentage of the population. In addition, children with severe disabilities may not survive in developing countries where highly specialized medical and surgical services cannot be provided.

As noted in the Introduction, only a small percentage of people with disabilities in developing countries receive rehabilitation services, perhaps 15% of disabled people in urban areas, and 2% in rural areas. To appreciate the number of disabled people who need services, the following example can be used:

A developing country has a population of 5 million, with 7% disabled; 40% of the population in urban areas and 60% in rural areas. This means that there are 350,000 people with disabilities, 140,000 in urban areas and 210,000 in rural areas. The 85% without services in urban areas would be 119,000 people, while the 98% without services in rural areas would be 205,800. Hence the number of people with disabilities who need services could be 324,800.

The number of disabled people who face difficulties in obtaining routine health services has not been estimated in percentages. Based on reports from individuals with disabilities, and from organizations of disabled people, most of them face this difficulty, both in developed and developing countries.

**(b) Need for Detection and Intervention for Impairments and Disabilities**

Early detection can lead to early intervention, which can minimise the impact of an impairment or a disability. This can be done through the early treatment of an impairment, through the provision of aids to compensate for an impairment and reduce or eliminate a disability, and through the training of a person to use other abilities to compensate for a particular ability which is limited.

For example, detection of a visual impairment soon after its onset may lead to treatment of the disease or condition causing the impairment. The treatment may eliminate the impairment. If it does not, it will prevent the impairment from getting worse and may also minimise any disability which could result from the impairment. If the impairment cannot be changed through treatment, eye glasses may correct the impairment. Treatment of ear conditions, or provision of hearing aids, may have the same effect with regard to hearing impairments.

In situations where there is no effective treatment for a disease or condition causing an impairment, or there are no aids available, the person can be taught how to compensate for the loss of seeing or hearing.

When a sight or hearing impairment is not detected in a child, the family and the child's teachers may not understand some of the child's behaviour, such as lack of understanding or cooperation. The family or teacher may conclude that the child has difficulty learning, or has behavioural problems. Loss of hearing or vision in an older person can also lead to social isolation.

Early detection of delayed development in a child is particularly important because the earlier interventions begin, the greater the benefit will be for the child. When delayed development is undetected, the potential problems include the development of deformities from lack of movement, poor relationship between the child and the parents from lack of communication, and poor relationships between the child and the entire family due to lack of appropriate behaviour on the part of the child and lack of understanding on the part of the family.

It is important to identify all people in the community who have acquired a disability through a disease or injury. Simple interventions, such as small modifications within the home, may make it possible for the person to carry out routine daily activities. The person and the family may also need encouragement to help the person to remain active in family and community activities.

**(c) Need for Addressing Society's Role in Creating Handicaps**

Measures aimed at the reduction of handicaps include rehabilitative activities as well as activities focused on changes in the society which would increase the equalization of opportunities and the social integration of people with disabilities.

During the International Decade of Disabled Persons, 1983-1992, international organizations of people with disabilities were particularly concerned with equalization of opportunities in education and work. Attention was drawn to the fact that disabled people experience barriers which exist as a result of societal beliefs and attitudes. These are reflected in policies and practices that exclude people with disabilities from full participation in their societies. However, despite the efforts made at international and national levels during the Decade, there was only limited progress in the provision

of equal opportunities for people with disabilities. A great deal of work remains to be done.

Actions aimed at decreasing handicaps may include public education about disabilities and the potential abilities of disabled people, motivation of communities to provide equal opportunities for people with disabilities, implementation of policies providing equal opportunities for people with disabilities to have education and jobs, and regulations to ensure the accessibility of public facilities.

#### **4. The Role of the Nurse in Disability Prevention and Rehabilitation**

The following description of what nurses do for disability prevention and rehabilitation refers to their work within PHC. Primary and secondary prevention includes promotive, preventive and curative care. Tertiary prevention includes rehabilitative care, as well as detection of impairments and disabilities and promotion of changes in the community and society which will improve the quality of life of people with disabilities.

##### **(a) Primary and Secondary Prevention**

All nurses devote a significant amount of their time to the promotion of healthy lifestyles. Their promotion of regular check-ups for prenatal and postnatal care, of safe delivery, and of follow-up for care of infants and young children, contributes to the prevention of disabilities in women and children. Health education regarding safety in the home and community also contributes to prevention of disabilities.

Immunization of children prevents diseases which can cause disabilities, such as polio and measles. Treating and monitoring conditions, such as hypertension and diabetes, and teaching people with those conditions how to maintain their health, contribute to the prevention of disabilities. Treatment of infections, particularly those which affect the eye or ear, also prevents impairments and disabilities.

The provision of general health care to people with disabilities is part of primary and secondary prevention, just as it is for people who do not have disabilities. People with disabilities have the same need for prevention of diseases and injuries, and for treatment of diseases, as others. The general health services offered to the members of the communities served by a health centre or clinic should be available to people with disabilities.

In order to provide routine health services, the nurse has to communicate with people who have difficulty hearing, speaking or seeing. Nurses should also be able to communicate with individuals who have difficulty learning, or who have a mental disorder. People who are paralysed, or have poor control of their muscles, should also receive health assessments and treatment when needed.

Nurses carry out many of these preventive activities during direct contact with people in the community, either through their exchange with individuals who come to the clinics or through home visits. Advice is provided to address specific health problems and also to encourage life styles that improve or maintain health. However, the nurses' influence extends beyond individual contacts. They teach and supervise community health workers to do health promotion and to assist in activities which prevent diseases and injuries, some of which can result in disabilities. Nurses also meet with groups or organizations in the community to provide information on issues relevant to the health of the community. Hence, they have the opportunity to have a significant impact on the prevention of disabilities.

**(b) Tertiary Prevention**

Tertiary prevention covers a variety of activities which should be carried out by nurses in PHC. These range from identifying an impairment which can cause a disability to promoting changes in community attitudes and the integration of people with disabilities in community activities. These activities are the least well developed in the work of most nurses in PHC.

**(i) Detecting/Identifying Impairments**

The basic routine training for nurses includes methods for assessing vision, hearing, movement and mental function. Hence, nurses have the basic knowledge for the detection of impaired vision, hearing or movement, as well as impaired ability to learn or to behave in a conventional manner. Nurses may develop their skills for detection of impairments if they are involved in the screening of children or adults for specific types of impairments. However, nurses should also apply their knowledge in their work with individuals. Nurses should be observant of people's actions and detect signs of poor vision, hearing, movement, or mental disorders. When a nurse observes signs of an impairment, she should do a specific assessment to determine the severity of the impairment and take appropriate action or make a prompt referral.

A particularly important aspect of tertiary prevention is the early detection of delayed development in children. Nurses have the opportunity to observe infants and young children who are brought to the health services periodically for weighing, measurement and immunizations. As the nurse handles the children, she is able to observe whether the child is performing activities characteristic for his or her age. Even in the first months of a child's life, the nurse should observe the child's behaviour, noting such abilities as head control, eye contact, formation of sounds and general level of alertness. During the first year all landmarks of development should be observed.

**(ii) Informing and Educating Disabled People and their Families**

Any indication of a delay in a child's development should be discussed with the parents, who should be taught to stimulate the child to do the activities which appear to be delayed, and to observe the child carefully. If the impression of delayed development persists, and there are specialists available to do more specific assessments of the child, the nurse should refer the child. If specialists are not available, the nurse should take the responsibility to guide and encourage the mother to stimulate the most normal development possible. If the child has impaired movement, it may be necessary to teach the mother how to position the child, and how to move the limbs each day, in order to prevent deformities.

Children and adults who have disabilities can also benefit from advice offered by nurses. This may include information about methods to communicate, positions and movements to prevent deformities; adaptations which can be made for clothing or feeding utensils to facilitate self-care activities; or general modifications to be made in the home, such as rearrangement of furniture, or raising or lowering a bed, chair or table.

**(iii) Facilitating Attitudinal Changes**

As noted above, nurses provide information about health issues to the community. Nurses can also provide information about disabilities and the potential of people who have disabilities. Sometimes the most important contribution a nurse can make to the well-being of a person with a disability is to assure the person that he or she can do many activities despite the disability and to encourage the person to try to do as much as possible. When it is a child who has a disability, the mother, as well as other family members, need assurance and encouragement. If a nurse knows people with similar disabilities, and some have a very active life while others do not, she/he can bring all of these individuals together so they learn from each other. The same can be done with mothers of children with disabilities.

**(iv) Facilitating Social Integration**

Disabled people experience social isolation which can be caused through barriers they encounter in society and the community. These barriers can range from the physical aspects encountered in the environment to rejection by the social and work-based organisations they need to encounter during their day-to-day interactions. Disabled people should be able to participate in daily events, such as participating in household activities and decisions, attending social events and ceremonies, and generally engaging in work or recreational activities appropriate to their chronological age.

The rehabilitation and social integration of people with disabilities requires the cooperation of people in many sectors, not only health. Nurses in PHC may work with other sectors on issues related to community development. However, it is rare, particularly in developing countries, for nurses to take part in a multi-disciplinary team to address issues related to disability. The nurses' participation in a team approach to disability can be very useful for all concerned, i.e., people with disabilities, the nurse and other team members. The nurse will learn more from rehabilitation specialists about what can be done to assist people with disabilities. The nurse will help the specialists to better understand the situation faced by people with disabilities in their homes, schools, workplace and communities.

(v) **Counselling (social and psychological adjustments)**

The experience of disability greatly affects the individual and the family. Some disabled people adjust successfully by being loved and valued by their family, as well as being respected members of the community. Other disabled people need support from outside the family in order to adjust to the situation. Those who experience difficulty in learning how to live with a disability may benefit from counselling from a nurse with the knowledge and skills to provide appropriate assistance.

The above examples of tertiary prevention activities describe work that is not routinely done by nurses in primary health care in many countries. The proposed additions to training focus on the preparation of nurses for these activities.

The following is a summary of the roles that nurses can have:

- Educator:** Provides education to the person about her/his illness and/or disability and the implications. This education extends to the family and other health professionals where appropriate. Identifies areas of need and counsels the person and groups both formally and informally.
- Resource person:** Provides information to the person about appropriate resources to assist her/him in rehabilitation and community participation. Empowers and enables individuals and their families.
- Advocate:** Promotes self determination in the person, family, and peer group. Assists with legal and ethical matters. This may need to be carried out on her/his behalf until the ability to act with little or no assistance is achieved.

- Facilitator:** Assists administrators, groups and organisations to solve problems related to the needs of disabled people and organizations. Where possible, encourages people to become involved in the process of promoting measures related to problem solving.
- Team Member:** Is a member of a multi-disciplinary health care team, and incorporates all aspects of disability prevention and rehabilitation into the overall concept of the nursing process, including assessments and evaluations.
- Counsellor:** Talks with disabled people and their families about the impact of the disability. Information should be given and, if possible, the disabled person should be referred to the appropriate services.
- Researcher:** Contributes to monitoring and evaluation of the impact of rehabilitation services on improving the care and overall quality of life for people with a disability.

## **5. Proposed Additions to the Nurses' Curriculum**

### **(a) Time allocation (Theory & practice)**

The additional topics and relevant practical experience could be implemented over a period of 30 hours, or the number of hours determined by the specific needs of each nursing programme. An example of time allocated to content could be:

#### **10 Hours: Theory**

This may include 8 hours of classroom work for presentation and discussion of the topics listed below, and 2 hours of review and integration of relevant topics already in the basic curriculum.

#### **20 Hours: Practical Experience**

This should consist of practice in which the subject matter is applied in situations where the student works with people with disabilities and their families, and also has the experience of working with representatives of other sectors (e.g., education and social) and the community on disability issues.

Case studies or course projects done by individuals or groups of students should also include analyses of needs and services for people with disabilities.

**(b) Overall Aims of the Curriculum:**

*At the individual level:* Strengthen the competency of the nurse to interact with individuals who have disabilities, taking into consideration their special needs.

*At the community level:* Increase the awareness of the role of the nurse in providing disability prevention and rehabilitation services to the community.

**(c) Learning Objectives**

The additional topics proposed for the curriculum should provide student nurses with the information and experiences needed to develop attitudes, knowledge and skills which will prepare them to do the following:

- (i) Provide preventive and curative services to people with diseases causing disabilities;
- (ii) Carry out routine screening procedures for early detection of impairments and disabilities, particularly in children;
- (iii) Assist people with disabilities and their families in the rehabilitation process and in adjusting to life with a disability;
- (iv) Promote intersectoral collaboration to address the needs of people with disabilities;
- (v) Increase the public awareness of the causes of disabilities and the potential of people with disabilities;
- (vi) Motivate community members to assist in the rehabilitation process of people with disabilities;
- (vii) Mobilize community resources to assist in the rehabilitation process of people with disabilities.

**(d) Additional Topics for the Curriculum**

Topics which are relevant to primary, secondary and tertiary prevention are presented in Annex I, which lists subjects currently in the curriculum for nurses' training.

- (i) Disability and Primary Health Care (PHC)
  - ▶ Definitions of Impairment, Disability and Handicap. Types of disability prevention and types of rehabilitation.
  - ▶ Types and magnitude of disabilities related to moving, seeing, hearing, learning and behaviour and the magnitude of the related problem.



(ii) Social and Psychological Aspects of Disability

- ▶ Cultural beliefs about causes of disability and attitudes concerning people with disabilities.
- ▶ Experiences of people with disabilities and their families.
- ▶ Social integration of people with disabilities in the family, community and society.

Economic situation of people with disabilities:

- Social roles;
- Vocational training and jobs;
- Schooling;
- Factors which affect particular groups of people with disabilities.

▶ Social and psychological aspects of disability:

- Attitude of disabled people towards their disability;
- The disabled person's perception of attitudes of others towards their disability;
- Participation in counselling.

(iii) Tertiary Prevention Measures

- ▶ International policies on disability prevention and rehabilitation, eg; the World Programme of Action Concerning Disabled Persons;
- ▶ National policies and programmes on disability prevention and rehabilitation reflecting intersectoral collaboration;
- ▶ Networks within the rehabilitation referral system;
- ▶ Expected outcomes of rehabilitation programmes for people with various types of disabilities;
- ▶ Community action to reduce or eliminate handicaps;
- ▶ National organizations of disabled persons: their programmes and activities.

(iv) Community Development:

- ▶ Needs assessment;
- ▶ Development of community resources;
- ▶ Leadership and committee formation;
- ▶ Power and decision-making;
- ▶ Community decision-making, community mobilization.

**(e) Practical Activities in Clinical and Field Practice**

The students will have experience in the following:

- (i) Interacting with a disabled person and his/her family, so as to learn from the disabled person and the family what it is like to live with a disability.
- (ii) Effective communication and interviewing/history taking skills with persons who have disabilities.
- (iii) Assessment and delivery of curative care for a person who is ill and who also has a disability.

Assess people who cannot hear, see, comprehend or move in a manner considered to be normal. Provide appropriate care, including medication or injection, instructions for follow-up care at home, and advice about how to prevent the illness from reoccurring.

- (iv) Routine assessments of children and adults to identify impairments and disabilities.

To ensure experiences in identifying impairments and disabilities, clinical supervisors should arrange for assessments of people who have already been identified as having impairments.

- (v) Experiences should include identification of the following:

- delayed development in infants or very young children;
- impaired movement, vision, hearing, learning and behaviour;
- disabilities which result from these impairments.

- (vi) Planning and implementing programmes for individuals with disabilities. This should include working with disabled people, their family members, and representatives from various sectors of the rehabilitation referral services. The experiences should include the following:

- early stimulation programme for a child with delayed development;
- programme for prevention of deformities for person with impaired movement;
- training in self-care activities for people with disabilities due to impaired movement and to impaired vision;
- programme for changing the behaviour of a person with a mental disorder;
- comprehensive plan for a child or an adult who requires a variety of rehabilitation services.

(vii) Preparation and delivery of an education programme for a community group, such as a women's or youth group, business leaders, or a community group interested in issues related to disability. The education programme should address a concern that was expressed within the community or by people with disabilities. Examples of issues which may be addressed are:

- What can the community do to prevent disabilities?
- What can the disabled person do to become involved in the broader rehabilitation process?
- What can the community (or group) do to promote the social interaction of people with disabilities?
- What can the community do to prevent handicaps?

(viii) Case studies

Identify a child or an adult with a disability who can be followed for a period of time, perhaps three to six months. The student nurse should do an assessment of the person's impairment, disability, and social situation, plan an appropriate programme, with relevant referrals; monitor the person's progress; and prepare a summary of the experiences of the disabled person during the period of contact. The summary should include an analysis of change in the impairment, disability and social situation, including interactions within the family, participation and performance at school or work, and social activities.

(ix) Group projects

- Analyze the situation of people with disabilities in a community by conducting interviews with disabled people, their families, and members of the community. Based on the analysis, propose appropriate actions to be taken to improve the situation of people with disabilities.
- Identify ways in which nurses could assist in influencing attitudes towards disabled people in the community. Based on this information, plan discussion material which will assist in the process of change in all possible interactions with members of the community.
- Identify all services which are available to people with all types of disabilities within a specific geographical area (e.g., district or sub-district). Briefly describe each service. (A thorough description could be provided to the health care services within the area for use in making referrals for people

**(f) Teaching Methods**

The topics to be added to the curriculum should be integrated during the total period of training. Hence, the definitions and the situation of people with disabilities should be presented early in the training programme. The information on interventions and work with the community should occur later, after the appropriate background material on medical and social sciences, health education, and community relations has been presented.

A variety of teaching methods used in the basic training of nurses should be used for the additional topics related to disability. These include the following:

- Lectures;
- Demonstrations and Illustrations;
- Seminars;
- Debates;
- Small Group Discussions;
- Role Playing;
- Case Studies;
- Projects;
- Self Directed Learning;
- Field Visits;
- Clinical/Field Practice.

Within some of these methods, students should be asked to work with problem-solving, i.e., to consider a complex situation and to make decisions about actions to be taken. The decision-making process should be guided by the teacher, whether in the classroom or during clinical practice.

The presentation of topics relating to tertiary prevention of disability will require contributions from nurses experienced in working with people with disabilities, as well as from specialists in rehabilitation and from people with disabilities. The specialists may include physical or occupational therapists, psychologists, teachers in special education, and vocational counsellors. The contribution of disabled people themselves is essential for the presentation of the issues which are their primary concerns. Educators should develop relevant teaching materials that will facilitate learning and development of competencies. Students' contribution should be encouraged.

**(g) Student Evaluation**

The evaluation of students' knowledge and skills is carried out in a variety of ways. Based on classroom discussions, teachers should be able to judge whether most students understand what has been presented. This informal, on-going assessment of student progress is an important part of the entire student evaluation process.

Individual assessments can be done through written and oral examinations, and through assessment of each student's performance during clinical/field practice.

Students can also be evaluated on the basis of individual work, such as case studies or special projects carried out independently or in groups. When group projects are used as a basis for student assessment, it must be clear what each student contributed to the joint project so that each student's performance can be assessed.

## Relevant Topics Present in Existing Basic Nurses' Curricula

### 1. Primary Health Care (PHC)

- ▶ Concept
- ▶ Structure

### 2. Primary, Secondary and Tertiary Prevention

### 3. Social Sciences

### 4. Psychology

### 5. Medical Science

- ▶ Anatomy and physiology
- ▶ Systems most relevant to disabilities, e.g:
  - Musculoskeletal;
  - Neurological;
  - Visual;
  - Auditory.

### 6. Diseases and Conditions Which May Be Related to Disabilities in Children

These may be different for each country:

- Delayed development;
- Club foot;
- Middle ear infections;
- Disorders of speech apparatus, cleft palate;
- Eye infections;
- Xerophthalmia (vitamin A deficiency);
- Epilepsy;
- Cerebral palsy;
- Spina bifida and hydrocephalus;
- Poliomyelitis;
- Down's Syndrome;
- Cretinism;
- Mental disorders;
- Burns;
- Child abuse;
- Cancer.

## **7. Diseases, Injuries and Conditions Which May Be Related to Disabilities in Adults**

These may be different for each country:

- Arthritis;
- Stroke;
- Cataract;
- Loss of hearing;
- Diabetes;
- Peripheral vascular disease;
- Cancer;
- AIDS;
- Mental disorders;
- Amputations;
- Head injuries, unconsciousness;
- Spinal cord injuries;
- Peripheral nerve injuries;
- Burns.

## **8. Assessment Procedures**

Assessment of Children:

- Mobility; i.e., head control, roll, sit, stand, walk.
- Communication; i.e., sounds, eye contact, words, sentences.
- Self-care; i.e., feeding, toileting, dressing.
- Behaviour; i.e., interaction with others.
- Learning; i.e., ability to build blocks, recognize shapes.

Assessment of Adults:

- Self-care activities;
- Mobility, vision, hearing, speaking;
- Mental functions: comprehension, memory, behaviour;
- Activities in the household, at work, in the community.

## **9. Interventions**

Primary prevention:

- Hygiene;
- Health education;
- Nutrition;
- Immunization.

Secondary prevention:

- Treatment of diseases, injuries and other conditions.

Tertiary prevention:

- Prevention of deformities by positioning and movement;
- Basic training in self-care activities for people with locomotor, mental and impairments;
- Mobility training for people with severe visual impairments;
- Counselling for people with mental disorders and their families;
- Facilitation of learning, work and social participation.

## **10. Appropriate Aids and Environmental Adaptations**

- Adaptations for self-care (modifications to clothing, eating utensils);
- Adaptations to the home and environment (higher or lower seats, wider doors or paths, removal of obstructions);
- Availability of eye glasses and hearing aids;
- Availability of appliances (artificial limbs and braces);
- Availability of equipment for mobility (canes, crutches, walking frames, wheel chairs).

## **11. School Health**

## **12. Occupational Health**

## **13. Principles and Methods of Teaching/Learning**

- Teaching clients and their families.
- Community health education.

## **14. Principles of Counselling**

## **15. Working with the Community**



## Resource List of Teaching and Learning Materials

This list contains mostly background reading, a few examples of disability prevention and rehabilitation programmes and a sample of teaching and learning resources. It is obvious to consider the necessity for further search for suitable material which will meet the needs of each individual course.

### Background Reading:

- (1) Arnold, M., Case, C. "Supporting the Providers of In-home Care: The Needs of Families with Relatives who are Disabled". *Journal of Rehabilitation, USA*, February/March 1993, pp 55-59.
- (2) Baine, P. "Handicapped Children in Developing Countries: Assessment, Curriculum and Instruction". Edmonton, University of Alberta, Canada, 1988.
- (3) Baine, P. "Testing and Teaching Handicapped Children and Youths in Developing Countries". UNESCO, 1986.
- (4) Bertolote, J.M. "Empowering the Mental Patient". *World Health - The Magazine of the World Health Organization*, 47th Year, No.2. March/April 1993, pp 28-29.
- (5) Boylan, E. "Women and Disability". London Zed Books, 1991.
- (6) Butler, P., Cass, S. "Case Studies of Development in Health". Centre for Development and Innovation in Health. Melbourne, Australia, 1993.
- (7) Davis, L., Zeigler, J. "Working with People who are Chronically Mentally Ill in Rural Areas: Developing a Community Resource Team". *Psychosocial Rehabilitation Journal, USA*, No.13, 1990, pp 37-39.
- (8) Delahunt, R. "Independent Living Training". National Council on Intellectual Disability: Interaction, 1990, pp 33-37.
- (9) "Consultation with People with Disabilities and their Families". Disability Advisory Council for Australia (DACA), May 1991.
- (10) Finkelfugel, H. "The Handicapped Community: The Relation Between Primary Health Care and CBR", 1993.
- (11) Franzen, B. "Attitudes Towards Persons with Disabilities in Kenya and Zimbabwe". School for International Training, Nybro, Sweden, 1990.

- (12) Gething, L. "Across The Divide: Solutions for Distance, Diversity and Disability - Volume 1". Community Disability and Ageing Programme, University of Sydney NSW 2006, Australia, 1994.
- (13) Gething, L. "Judgements by Health Professionals of Personalities Characteristics of People with Visible Disabilities". Social Science and Medicine, 1992, No.34, 809-815.
- (14) Helander, E. Mendis. P., Nelson, G., Goerdt A. "Training in the Community for People with Disabilities". WHO, Geneva, Switzerland, 1989.
- (15) Hornby, B. "Review of Fathers' Accounts of their Experiences of Parenting Children with Disabilities". Disability Handicap and Society, Vol. 7:4, 1992.
- (16) Jonsson, T. "Special Needs Education: Background Document". UNESCO, Paris, France, 1993.
- (17) Miles, C. "Speech, Language and Communication with the Special Child". Peshawar, Mental Health Centre, 1988.
- (18) Omohundro, J., Schneider, M.J., Marr, J.N., Grannemann, B.D. "A Four-Country Needs Assessment of Rural Disabled People". Journal of Rehabilitation, 1983, pp 19-24.
- (19) Salone, G. "Building on Peoples' Strengths: The Case for Contextual Child Development". Van Leer Studies Paper, No.5, SCF Harare, Zimbabwe, 1992
- (20) Schut, H.A., Stamford, H.J. "Goals in Rehabilitation Teamwork". Disability and Rehabilitation - An International Multi-Disciplinary Journal, USA, Vol.6, pp 14-20.
- (21) Swain, J., Finkelstein, V., French, S., Oliver, M. "Disabling Barriers - Enabling Environments". SAGE Publications (for Open University), London, 1993.
- (22) "United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities". United Nations, 1994.
- (23) "Guidelines on Childhood Disability Prevention and Rehabilitation". UNICEF, New York, USA, 1988.
- (24) Werner, D. "Disabled Village Children: Guide for Health Workers". Hesperian Foundation, UK, 1992.
- (25) "International Classification of Impairments, Disabilities and Handicaps", WHO, Geneva, Switzerland, 1980.
- (26) "Guidelines for the Prevention of Deformities in Polio", WHO/EPI/POLIO/RHB/91.1 Rev.1, World Health Organization, Geneva, Switzerland, 1995.
- (27) Wirz, S., Winyard, S. "Hearing and Communication Disorders", TALC.

- (28) "Ottawa Charter for Health Promotion", World Health Organization, 1986.

### **Examples of Disability Prevention and Rehabilitation Programmes and Related Concepts:**

- (1) North, Latid, M. "Community Action: Helping Oneself to Health". World Health - The Magazine of the World Health Organization, 47th Year, No.2, March/April 1994, pp 28-29.
- (2) Rumano, R. "Rehabilitation in the Community". World Health - The Magazine of the World Health Organization, 47th Year, No.2, March/April 1994, pp 12.
- (3) Thara, R. "A Family Burdon". World Health - The Magazine of the World Health Organization, 47th Year, No.2, March/April 1994, pp 10-11.

### **Teaching and Learning Packages:**

- (1) Gale, J. (*under preparation*) "Rehabilitation Course for Nurses". Ryde Rehabilitation Centre, NSW, Australia.
- (2) Gething, L., Poynter, T., Renoulds, F. "Disability Awareness Package" (includes video). The University of Sydney. Sydney, Australia, 1994.
- (3) "Coping with Chronic Illness and Disability: A Psychoeducational Approach for Health Professionals. A Practitioner's Manual" prepared by Olga Piatkowska, revised by John Hambidge. (includes video), University of Sydney, Sydney, Australia, 1992.
- (4) Helander, E. Mendis. P., Nelson, G., Goerdt A. "Training in the Community for People with Disabilities". WHO, Geneva, Switzerland, 1989.

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