Disability prevention and rehabilitation

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Reduction of handicaps requires a great effort on the part of all sectors to promote changes in beliefs and attitudes which limit the activities of people with disabilities.

Primary prevention

The measures promoted for the prevention of diseases which cause disabilities include immunization, particularly against poliomyelitis, measles, rubella and tuberculosis; prenatal care to ensure the healthy development and delivery of babies; appropriate nutrition, especially iron,

Although different countries are noting different patterns in the occurrence of disability, the number of children with disabilities appears to be on the increase. This may be because those children are surviving longer as a result of improved health care, or because the number of young people disabled through accidents or violence is increasing. The number of elderly people with disabilities may also be growing.

The occurrence of disability calls attention to the need for disability prevention, including rehabilitation. WHO addresses this need by promoting a variety of prevention measures. The terms impairment, disability and handicap are used as a reference for the primary, secondary and tertiary prevention measures which are related to disability (see diagram).

Primary prevention consists of the measures aimed at the prevention of diseases and injuries. Secondary prevention includes interventions which are used to treat diseases or injuries in order to prevent impairments. Tertiary prevention consists of a variety of measures aimed at eliminating or reducing impairments or disabilities. Since handicaps result from the interaction between people with disabilities and their societies, a change in society is also needed in order to reduce or eliminate handicaps.

Definition of terms from the International Classification of Impairments, Disabilities and Handicaps (WHO, 1980). The current revision of this classification is scheduled for 1999 and is now being coordinated by the WHO Division of Mental Health.

- **Impairment** is an abnormality of psychological, physiological or anatomical structure or function. Impairments refer to organs.  
  Example: Paralysed muscles of the legs.

- **Disability** is the restricted ability to perform an activity. Disabilities refer to persons.  
  Example: Person cannot walk.

- **Handicap** is the restriction faced by a person with a disability in fulfilling normal roles due to social barriers. Handicaps refer to the interactions of people and their societies.  
  Example: Person cannot get a job because employers do not want employees who cannot walk.
iodine and vitamin A, for mothers and children; and sanitary measures to prevent eye diseases, such as infections and trachoma.

Injuries may result from intentional or unintentional acts and injury prevention has several aspects. One is education regarding measures which can be taken to prevent acts that cause injuries. A second is protection, which uses environmental or technical devices such as seat belts, helmets and air bags to prevent injuries. A third aspect is the promotion of safety as part of general health promotion policies, and this is being developed under WHO leadership.

**Secondary prevention**

When diseases or injuries occur, medical interventions are needed in order to prevent impairments, such as permanently paralysed muscles, damaged eyes or ears, or brain dysfunction. These interventions include the multidrug treatment of leprosy; the medical treatment of infectious diseases affecting the eye, ear, spinal cord and brain; provision of appropriate nutrients against malnutrition; and medical and other treatment for mental disorders.

Eye glasses can greatly reduce, or even eliminate, difficulty in seeing; a hearing aid can reduce difficulty in hearing; and leg braces can reduce difficulty in walking.

When disabilities occur, measures aimed specifically at the limited function which a disabled person experiences can also be taken to reduce or to limit the progression of the disability. These are the measures commonly referred to as rehabilitation. Because they focus on the activities which people can or cannot do, they require their active participation. The rehabilitation process may require a person to learn how to dress or feed; a new system for communication; a new method for moving around, perhaps using a wheelchair; or new methods for organizing and carrying out daily activities.

Addressing the functional limitations of disabled people may also reduce the handicaps confronting them in their interactions with society. For example, if a person with paralysed legs can learn to walk with braces and crutches, he or she will have a far greater chance of being accepted by other people at school or at work. However, only treating disabilities is not sufficient to reduce handicaps. Societal attitudes must also change so that people with disabilities have increased opportunities to participate in the same educational, work and social activities as other people in their communities.

**Tertiary prevention**

When impairments occur, they can be treated in order to prevent or to reduce disabilities, such as difficulty in seeing, hearing or walking.

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**Intersectoral collaboration**

The prevention of disabilities is often viewed as the responsibility of the health sector, but for tertiary prevention and even for primary and secondary prevention other sectors are needed. Thus, safety measures, sanitation and adequate food supply cannot be provided by the health sector alone. Special education and training for skills needed to produce an income are part of the rehabilitation process, and are provided by the education, social or labour sector. Reduction of handicaps requires a great effort on the part of all sectors to promote changes in beliefs and attitudes which limit the activities of people with disabilities.

WHO promotes an integrated approach to preventing disabilities by including all promotive, preventive, curative and rehabilitative care in primary health care. Integrated health services can strengthen disability prevention by keeping health care personnel at district and sub-district level well informed about all aspects of disability prevention, including rehabilitation. In addition, the health sector can actively participate in intersectoral efforts to provide living conditions which reduce the risk of diseases and injuries, address the needs of people with impairments and disabilities through community-based rehabilitation, and ensure their full integration in society.

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