

## **Definition, Objective and Scope of Rehabilitations**

#### Introduction

According to various estimates, about 5 to 10 percent of the world's population is affected by one or more disabilities. Since over 70% of our population are in rural areas, the number of those with less severe disability could be much larger. The incidence of disability is reported to be just over 2 percent in rural area and 1.6 percent in urban area. Prevalence was marginally more among males. About one in four in rural area and one in five in the urban area are reported to be severely disabled.

In modern society, acting independently is of supreme. Due to physical or mental handicap a disabled person cannot act independently in many spheres of life and hence faces many problems in the social adjustment. His/her incapability generates emotional problem like apathy, self-pity and resentment and tends to isolate from society.

### **Definition of rehabilitation**

Rehabilitation is the utilization of the existing capabilities of the handicapped person, by the combined and coordinated use of medical, social, educational and vocational measures to the optimum level of functional ability.

It makes the life more meaningful more productive and therefore worth living. It is the third phase of medical care after prevention and curative.

### **Definition of health**

According to world health organization (WHO) Health is defined as a state of complete physical, mental and social well being and not merely the absence of disease or infirmity.

## **Definition of disease**

A pathologic process with a characteristic and identifiable set of sign and symptom.

# Levels of prevention of a disease

Any health care that attempt to halt a person's slide down the slope of the health status scale is term as preventive health care and any attempt to push it up towards the peak i.e. optimum is term as therapeutic health care. This total spectrum is classified into three levels of prevention by the world health organization.

## 1. Primary prevention

It explains as measures taken prior to the onset of any disease, eg immunization against childhood infections or chlorination of drinking water. It is designed to promote general health and to improve the quality of life

## 2. Secondary prevention

It is explained as a measure taken to arrest the development of a disease while it is still in an early asymptomatic stage of the disease. It involves early diagnosis and immediate treatment.

# 3. Tertiary prevention

It is explained as a measure taken to minimize the consequence of a disease or injury once it has become clinically manifested.

# **Definition of impairment, Disability and Handicap**

The WHO's defined these term as follows

**Impairment**- Any loss or abnormality of psychological or anatomical structure or function e.g.; loss of finger, loss of pinna of the ear. Not all impairment leads to disability.

**Disability**:- Any restriction or lack of ability to perform an activity in the manner or within the range consider normal for a human being resulting from an impairment e.g. Difficult in walking after lower limb amputation.

**Handicap**:- A disadvantage for a given individual in his or her social context resulting from an impairment or a disability that limits or prevents the fulfillment of a role that is normal for that individual.

Impairment is a manifestation of a problem at the tissue or organ level, Disability at the level of the individual, while handicap in the translation of the problem at the societal level.

# Types of disability

a. primary disability

b. Secondary disability

Disabilities that are direct consequence of a disease or condition are called primary disability. Paraplegia following spinal cord injury, inability to walk following hip fracture are example of primary injury.

On the other hand, disabilities that did not exist at the onset of the primary disability but develop subsequently are called secondary disabilities. Secondary disabilities are indirectly related to the disease or condition that is responsible for the primary disability. Examples are joint contracture in poliomyelitis, subluxation of shoulder joint in hemiplegia.

# **Diagnosis of disability**

Diagnosis of disability may be expressed either in term of the amount of disability (disability evaluation) or in term of the amount of remaining function(Functional diagnosis)

The total person, physically, emotionally, and socially must be considered in the diagnosis. The patient is evaluated as a human being not as a case. -

The expression of disability evaluation or functional diagnosis varies according to the method used. The most common method is numerical presentation in either percent or digits based on a specific scale.

# **Different types of Handicaps**

The WHO has identified 6 handicaps

- 1. Locomotor (which forms 60% of all handicaps)
- 2. Visual
- 3. Hearing and speech
- 4. Cardiopulmonary
- 5. Intellectual challenge
- 6. Emotionally disturbed

# **Objective of rehabilitation**

Rehabilitation must be started at the earliest possible time in order to ensure the best results. It is administered in conjunction with the specific medical or surgical treatment of the precipitating disease.

### Scope of rehabilitation

In a person with disability it is not possible for a single person to guide the whole course of rehabilitation. Due to diversity symptoms and the spectrum of disease which leads to disability, optimum result can only be obtained when a group of qualified professionals get together and chart out a comprehensive program for the relevant disability.

## Rehabilitation may be medical or socio-vocational.

Medical rehabilitation is the utilization of medical and paramedical skills to help treat the patient. The role of medical rehabilitation is to limit disability.

Socio-vocational rehabilitation are sometimes delivered simultaneously along with medical follows rehabilitation.

#### The rehabilitation team

The member of this group are classified according to their area of specialization and function

- 1. Medical and paramedical team
- 2. Socio-vocational

# 1. Medical and paramedical team

- i. **Physiatrist**:- Also known as physical medicine. The physiatrist is the leader of the rehabilitation team. The functions of the physiatrist are
- a. clinical assessment of the patient
- b. functional diagnosis
- c. evaluation of disability
- d. coordination with other member of the team and charting out a line of management with their help.
- e. Rehabilitation surgery to correct deformities.
- f. prescription of physiotherapy, occupational therapy programme, orthosis and prosthesis.
- g. vocational evaluation, counselling, training and job placement.
- h. statistics research
- i. Review and follow up of the course of rehabilitation.
- ii. **Physical therapist:-**the physical therapist assists the patient in movement restoration. His task includes the following
- a. Muscle strength evaluation and quantification
- b. Exercise to maintain and increase joint range of motion.
- c. Evaluate and train sitting and standing balance.
- d. Exercise to increase strength, endurance and coordination for other specific muscle groups or the entire body.
- iii. **Occupational Therapist**: The WHO defines occupational therapy as "the art and science of directing mans participation in selected activities to restore, reinforce and enhance function or performance or decrease disability and thus to promote healing. The occupational therapist is involved in evaluating and training the patient in self care activities such as dressing, eating, bathing and personal hygiene to maximize independence.
- iv. **Prosthetist- orthotist**:- The prosthetist-orthotist is responsible for the design, fabrication and fitting of the orthosis(brace) and prosthesis(artificial limb)
- v. **Recreational therapist**:- The recreation therapist uses recreational activity to improve social and emotional behaviour and promote the growth and development of the patient.
- vi. **Rehabilitation nurse**:- The rehabilitation nurse maintains the health of the bed ridden patient and helps to reach short and long term goal. She takes care of nursing needs during hospitalization and in the rehabilitation ward. In some case she makes house visits and look after the self care activities of the patient.
- vii. **Speech pathologist**:- The speech pathologist helps the patient in the area of communication and swallowing.

- viii. **Psychologist and child development specialist**:- The psychologist prepares the patient and his or her family member for full participation in rehabilitation.
- ix. **Horticultural therapist**:- Trees and plant soothe the mind. The cultivation of flowers, vegetables and ornamental plants is thought to have therapeutic value in building confidence and self-esteem.
- x. **Music therapist**:- Music is one of the finest of the fine art. It can transport one to the highest plane of ecstasy. The intervention of the music therapy may involve instrumental or vocal performance by the person with disability or helping him appreciate music or attend musical events.
- xi. **Dance therapist/play therapist**:-Dance therapy and play therapy is practiced more often with mental health patient with physically disabled patient. The dance therapist sometimes called as movement therapist, rhythmic body movement as physical and psychological medium to improve gross motor control and to relief stress.
- xii. **Biomedical engineer**:- the field of rehabilitation is an interface between the medical and engineering profession. With the advance of technology, we have newer user friendly environment control units, communication aids, orthosis and limbs. All these have to design by electronics and mechanical engineering professionals.

## 2. Socio-Vocational Rehabilitation

Socio-vocational rehabilitation is a team effort, which aims at providing the disabled a vocation and reducing handicap. It is the concept of the "RIGHT TO WORK", that is to treat work much more than a means of money, but a way of living and mode of dignity to the individual.

#### Socio-vocational team

- i. Social worker:- The social worker has a very important role in socio-vocational rehabilitation. This is because he has to interact with the patient, family and rehabilitation team. He has a major role in
- a. Evaluating the patient's living situation, including lifestyle, family, finances and community resources.
  - b. To analyze the patient's social situation in relation to his present situation.
- c. To explain to the family the patient's problem and the treatment recommended by other rehabilitation team and suggest alternative living condition.
- d. Help the patient and the family to work out a way for a more adequate social adjustment using social case work technique. Group activities with patient's family member for imparting knowledge about the illness and care of the patient.
- ii. Vocational counselor:- The vocational counselor is an important professional in the socio-vocational team who identifies the right vocation, skill or way of life of these patients. The skilled trainer trains the client in a particular vocation, and placement officer places him in a suitable job.
- iii. Special educator:-Disability is viewed as a punishment, an act of God by some, who will refuse to co-operate with the patient. The special educator shows a path of appropriate

behaviour and if reinforced by family and team of the patient, then improvement is expected.

- iv. NGO's:- It is not only the responsibility of the government to take care of the disabled; the community is also responsible. Several philanthropist come together to set up organization catering to the rehabilitative requirement of the handicap. Some of this are run by the handicapped individuals themselves.
- v. Banks/Funding agencies:- Help by giving money to deserving candidates to set <u>dealership</u> and business, at concessional waiving with certain clauses and requirements.
- vi. Placement officer:- He place the disabled individual in a suitable job and visits at the work place frequently. He coordinates with the social worker, the counselor, the candidates and the employer regularly.

## **Delivery of rehabilitation**

The delivery of rehabilitation is done through the following approach

- 1. Institute based rehabilitation (IBR)
- 2. Homes
- 3. Day care centre
- 4. Outpatient clinics
- 5. Camps
- 6. Community based rehabilitation (CBR)

## **Conclusion**

It is the collective responsibility of the able bodied to rehabilitate the handicapped individual. The role of rehabilitation is to minimize disability and handicap and help a handicapped person leads a useful life within the limitation, in other words make a disabled person into a differently abled person. And goal of rehabilitation is not to produce an immortal being but to maintain an optimum health as long as possible ideally until death. Add life to years not years to life.