**REHABILITATION**

Rehabilitation is the process of helping a person who has suffered an illness or injury restore lost skills and so regain maximum self-sufficiency. E.g. rehabilitation work after a stroke may help a patient walk and speak clearly again.

* The first concept is to make the patient better. This is mainly a matter of treatment directed to pathology but largely based on symptoms.
* The second stage (usually after the first stage is complete, has achieved as much as possible or from another perspective has failed to ‘cure’) is rehabilitation, which attempts to restore function. In a country like UK “rehabilitation services” are primarily directed towards activities of daily living and independence
* The third stage often only considered if the second stage is (expected to be) successful is restoration of capacity for work.

**Medical rehabilitation**

Orthopedic rehabilitation treat injuries and illnesses that affect the musculoskeletal including bones, tendons, ligaments and soft tissue.

Neurological rehabilitation treat injuries and conditions involving the nervous system which includes The brain, spinal cord and peripheral nerve.

Manual Therapy Rehabilitation offers innovative manual therapy techniques that improve the healing and recovery process for many complex patient problems.

Balance and rehabilitation offers help to individuals who experience vertigo, dizziness, or unsteadiness on their feet.

Sport injury rehabilitation offers specific therapy services for patients that have sports related injuries focusing on a full recovery and timely return to the sport.

Occupational therapy helps individuals to achieve daily living and work skills such as eating, dressing, school activities and job tasks.

Speech and language pathology helps people who have communication disorders, voice disorders and swallowing disorders.

Low back pain is based on gentle, hands on treatment to stabilize the muscle in the lower back and improve flexibility and range of motion.

Head and neck pain is done with proven manual therapy techniques, posture reduction and strength and flexibility training

Occupational therapy helps individuals to achieve daily living and working skills such as eating, dressing and school activities.

**Approach**

The therapeutic approach can help to make changes to anything that limits the patient’s ability to perform, including the environment, the task or overall ability.

Occupational therapy utilizes functional techniques that help patients improve motor function and reasoning abilities, enabling them lead more independent productive and satisfying lives.

**Conditions treated in occupational therapy.**

1. Hand and upper extremity injuries.
2. Stroke.
3. Multiple Sclerosis.
4. Parkinson’s disease.
5. Musculoskeletal trauma.
6. Arthritis
7. Work-related injuries.
8. Repetitive strain injuries
9. Joint replacement.
10. Orthopedic trauma.
11. Post-operative conditions.

**There are inpatient and outpatient rehabilitation treatments.**

Inpatient rehabilitation refers to treatment or therapy you receive in a hospital or a clinic prior to being discharged.

Patients who go through an amputation, suffer an injury or a stroke, experience an orthopedic or spinal injury or receive a transplant may require inpatient therapy to recover to a point where they can safely go home.

Outpatient rehabilitation therapy refers to treatment received when not admitted to a hospital or clinic.

Outpatient therapy centers offer a blend of services from physical therapist, occupational therapist, speech pathologist and psychologist.

Outpatient rehabilitation centers tend to offer therapy for a wide range of conditions including cancer, neurological disorders, neck and back pain, speech problems, psychological disorders, pre- and post- natal issues and more.

**Who needs occupational therapy?**

Occupational therapy may be needed by people of all ages, from newborns to seniors.

There are endless ways in which occupational therapy may help patients such as:

1. Children with physical disabilities may need a therapist to help them develop the coordination needed to feed themselves, use a computer or improve their handwriting.
2. Adults with depression may require recommendation from a therapist to engage in daily activities gradually in a manner that maximizes their chance for success.
3. An individual who has lost the ability to hold a fork due to an injury may work with a therapist to regain grip strength and modify movements so that they can feed themselves independently.
4. Seniors with physical limitations may need help from a therapist to participate in activities they love in new and modified ways
5. Those who have suffered a spinal cord injury may require intervention to help them avoid movement or behaviors that may worsen their injuries.
6. Corporate professionals may work with a therapist to create an optimal work/life balance designed to reduce stress and maximize health or modify their work environment based on ergonomic principles.
7. An individual who has experienced a traumatic brain injury and lost cognitive function may require a therapist to assist them with tasks such as applying to jobs or submitting college applications.

**Physical Therapy**

Physical therapists provide treatment for those who are experiencing pain or difficulty in functioning, moving or living life normally.

Physical therapy is commonly used to;

1. Relieve pain.
2. Improve movement.
3. Provide rehabilitation after a stroke.
4. Assist in recover after giving birth.
5. Assist in the recovery of sports-related injuries.
6. Teach individuals how to use devices such as walkers and canes.
7. Manage chronic illnesses like heart disease or arthritis and more.

Therapist will start by assessing your;

1. Mobility
2. Balance
3. Heart rate
4. Gait
5. Posture

Therapist will develop a plan to ease your symptoms and help regain functionality or mobility.

**Common therapies include;**

Special exercises and stretches designed to relieve pain, improve mobility or regain strength.

Massage, hot or cold therapy or ultrasound to ease muscle pain and spasms.

Rehab and exercises to help you learn to use an artificial limb.

Practicing with gadgets that assist in movement such as;

1. Canes
2. Crutches
3. Walkers
4. Wheelchairs.

Balance and gait retaining.

Pain management

Cardiovascular strengthening.

Casting, splinting, burn care or use of orthotics (braces or splints).

**Speech Therapy**

Speech therapists (or speech-language pathologist) provide treatment for those who have speech issues e.g.

1. Language
2. Communication
3. Voice
4. Swallowing
5. Fluency

For newborns a speech therapist may help with conditions such as;

1. Cerebral palsy.
2. Cleft palate
3. Down syndrome that cause difficulties with drinking, swallowing or communicating.

Children with issues such as stammering or lisp can benefit from communication exercises under the instruction of a therapist.

Adults with learning difficulties or who have another condition such as stroke, neck or head cancer, Parkinson’s Disease or dementia can also benefit from a speech therapist.

Common tactics used by speech therapists include language intervention activities (Language drills to practice communication skills), articulation therapy (demonstrating how to move the tongue to create certain sounds) and feeding and swallowing therapy (tongue, lip and jaw exercise designed to strength the muscles of the mouth and throat).

**Conditions or illnesses that may require a speech therapist include**

1. Dyslexia – Difficulty reading accurately and fluently.
2. Dyspraxia – Difficulty controlling muscle function for movement, coordination, language or speech.
3. Aphasia – A loss of ability to understand or express speech due to brain damage.
4. Dysphagia – Difficulty swallowing.
5. Articulation problems – Difficulty speaking and making errors in sounds.
6. Fluency problems - Difficulty with flow of speech, such as fluttering.
7. Resonance or voice problems – Difficulty with voice pitch volume and quality.
8. Oral feeding problems – Difficulty with eating, swallowing or drooling.
9. Parkinson’s disease
10. Cerebral palsy
11. Cleft palate
12. Down syndrome
13. Multiple sclerosis
14. Cancer of the head, neck or throat.

**MODELS OF REHABILITATION.**

**Medical model** focuses on the disease pathology and the physical rather than on the psychological symptoms.

* It aims to alleviate symptoms of disability and find cure.
* The doctor of rehabilitation professional is at the center of rehabilitation process under the medical problem.
* Rehabilitation is delivered across five care phases:
1. Initial management
2. Acute inpatient care
3. Post-acute rehabilitation.
4. Community - based rehabilitation.
5. Ongoing maintenance.

**Models of rehabilitation**

1. Biomedical rehabilitation model
2. Educational rehabilitation model
3. Social rehabilitation model
4. Economic rehabilitation
5. Community base rehabilitation
6. Comprehensive rehabilitation.
7. **Biomedical rehabilitation model.**

Also called rehabilitation engineering principles to:-

1. Develop technological solution and device individuals with disabilities.
2. Aid the recovery of physical and cognitive functions lost because of disease or injury.
3. It is designed and built devices and systems to meet a wide range of needs that can assist individuals with mobility, communication, hearing, vision and cognition.
4. These tools help people with day to day activities related to employment, independent living and education.
5. It may involve relatively simple observation of how individuals perform tasks, and making accommodation to eliminate further injuries and discomfort.
6. It also includes sophisticated brain computer interfaces that allow a severely disabled individual to operate computers and other devices simply by thinking about the task they want to perform.
7. It also improves upon standard rehabilitation methods to regain function lost due to congenital disorders, disease (such as stroke or joint replacement) or injury (such as limb loss) or restore mobility.
8. **Education rehabilitation model.**

Since much of medical rehabilitation is actually training which is focused on helping the patient and/or his/her family become active in the patients daily care the addition of education frame of reference can make rehabilitation professionals more effective.

A recommended model of patient family education has these components;

1. Identification of patient-family understanding necessary for dealing with his/her problems or potential problems.
2. Assessment of current patient- family knowledge, attitude and lifestyle.
3. Setting of education goals based on individual patient and family needs.
4. Planning an appropriate method of achievement of those goals.
5. Implementing the plan; and
6. Evaluating according to goals.
7. **Social Rehabilitation Model.**

Emphasizes a collective therapeutic intervention that addresses both the importance of a person’s engagement in meaningful activity as well as facilitating their participation in wider society.

The medics involved in this are;

1. Psychiatrists
2. Social workers
3. Psychologists
4. Occupational therapists
5. Community support etc.

These workers seek to effect changes in a person’s environment and in a person’s ability to deal with his/her environment, so as to facilitate improvement in symptoms or personal distress and life outcome.

These services often “combine pharmacologic treatment (often required for program admission independent living and social skills training, psychological support to clients and their families, housing, vocational rehabilitation and employment, social support and network enhancement and access to leisure activities.

The key role of professionals to generate insight about the illnesses with the help of demonstration of symptoms and prognosis to the patients.

There is often a focus on challenging stigma and prejudice to enable social inclusion, on working collaboratively I order to empower clients, and sometimes on a goal of full recovery.

1. **Economic Rehabilitation Model**

A person with a disability degree of 20% or over who would like to set up a business for purposes of rehabilitation, and who has not received funding of studies from the national insurance institute, may be entitled to business or strengthening an existing business.

Increase work and employment for a person of working age with disabilities.

Increase the participation of persons with disabilities in vocational training.

Employment of persons with disability is key for their economic empowerment the need to be fully represented in employment in the work place such as government and the private sector.

1. **Community Base Rehabilitation**

It is a strategy for general community development that provides rehabilitation, poverty reduction, equalization of opportunities and social inclusion for all people with disabilities.

It is designed predominantly for low and middle income countries.

Include promoting inclusive education, teaching parents to provide treatment to their child or creating self-help group.

CBR personnel are primarily responsible for identifying people with disabilities and providing them and their families with the necessary support. They work to promote self-esteem, family inclusion and access to services in the health, education, labor and employment sectors.

The five components (health, education, livelihoods, social and empowerment) each have five key elements which inform the implementation of CBR.

Both components and their elements are underpinned by the principles of participation, inclusion sustainability and self-advocacy.

1. **Comprehensive Rehabilitation Model**

Comprehensive Outpatient Rehabilitation Facility (CORF) is a medical facility that provides outpatient diagnostic, therapeutic and restorative services for the rehabilitation of patient’s injury, disability or illness. CORF care is commonly known as outpatient rehabilitation care.

The program offering a wide variety of additional programs and services to support and make PWD able to participate in social communities

**APPROACHES OF REHABILITATION**

It is aimed to help people with disabilities, injuries, or complex medical conditions achieve highest possible degree of health, functioning and quality of life.

It requires focusing on the care people needed before considering what that care cost.

It creates a new model for rehabilitation care that focuses on the whole person, one that looks beyond the medical to address vocational, social and emotional needs.

The Rehabilitation Approach Rehabilitation medicine differs from other types of medical practice in a number of ways.

* A major focus is on preserving residual function and preventing secondary complications (physical, physiological, behavioral, or social) that lead to increased disability.
* Physical medicine and rehabilitation always to restore the patient’s normal function and improve quality of life for patients from a physical, emotional, Psychosocial, and vocational perspective.

Rehabilitation approach/relevance to occupational performance.

* It is much cheaper than institutional care, and therefore has the potential to reach all disabled people, not just a select few.
* It avoids dislocating people from their communities and the risks of institutionalization Psychological scarring and the creation of dependence.
* It trains people to cope directly with the environment in which they live, using resources that are largely available locally.
* It improves detection and referral, greatly reduces problem of transport and access allows easy supervision and follow up and continued support for the whole family.
* It can ensure that disabled people learn useful skills that are directly applicable in their environment, thus promoting their self-sufficiency and also their capacity to contribute directly to their own society.
* It promotes community and rural development by creating jobs rehabilitation workers can be drawn from the locally community, many simple aids and appliances can be drawn from the locally using local materials and skills as far as possible, and disabled people themselves may be trained to work for the rehabilitation of others.
* By keeping disabled and acceptance of disabled people and an understanding of the causes and impairments. This will lead to better prevention of impairments earlier detection and treatment of potentiality disabling conditions and lessened ostracism and social handicapping of impaired individuals.
* It leaves rehabilitations free to concentrate on acute severe disability or special needs requiring technical intervention and on research, development training and other function that make rational use of specialized and scarce resources.