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Title: Rehabilitation models and teem work

Increasing the Conformance of Academia towards Rehabilitation Engineering (i-CARE)

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Rehabilitation models and teem work

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BATTI
Ideas transforming the future

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Introduction:

- Rehabilitation focuses primarily on the prevention, diagnosis and treatment of disabilities to help individuals live as independently as possible.
- Rehabilitation involves treatment and training programs tailored to meet each client's physical, social, emotional and vocational needs.
- It is dynamic process to restore the lost abilities to the best possible potentials.

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Rehabilitation

Rehabilitation is a treatment or treatments designed to facilitate the process of recovery from injury, illness, or disease to as normal a condition as possible.

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- It is a branch of medicine
- Holistically evaluate and manage patients with impairments and disabilities associated with vocational and psychosocial disruptions.

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Purpose:

- To restore some or all of the patient's physical, sensory, and mental capabilities
- Assisting the patient to compensate for deficits that cannot be reversed medically.

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Problem solving process

Assessment

↓

Identify needs/modifiable factors

↓

Goal setting

↓

Measurement, planning & implementation of interventions

↓

Evaluation of change & effectiveness

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A typical rehabilitation program may include:

- Screening
- Assessment and diagnosis
- Goal-setting
- Medical care and treatment
- Social, psychological and other types of counseling and assistance

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- Training in self-care activities
- Fitting of assistive devices
- Specialized education services
- Vocational guidance, training and placement
- Follow-up and referral

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Mental

Hearing

Multiple

Visual

Intellectual

Physical

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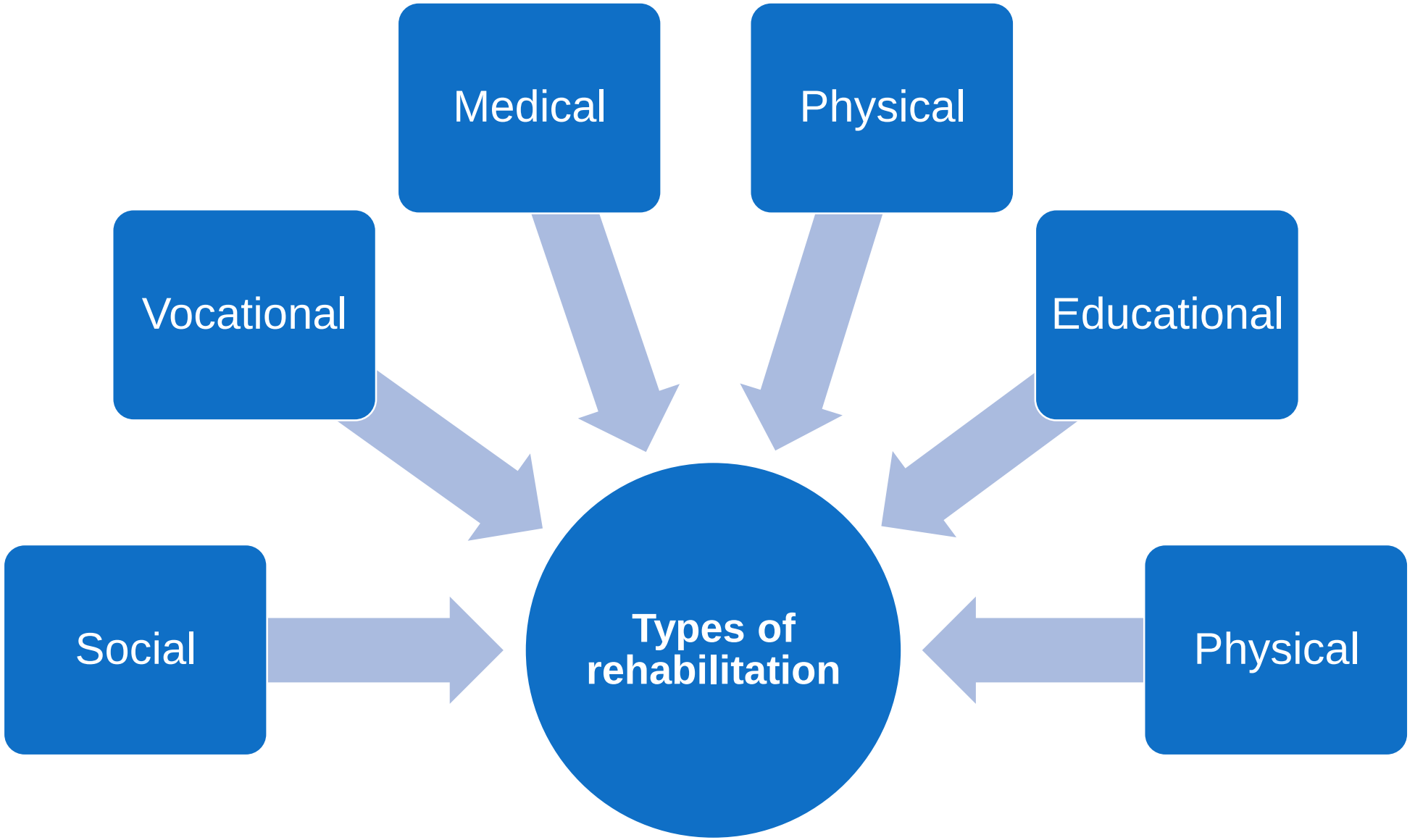

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Types of rehab programs include:

- amputee
- burns
- cardiac
- chronic pain
- geriatric
- musculoskeletal
- neurology
- oncology
- respiratory
- spinal cord
- stroke
- trauma

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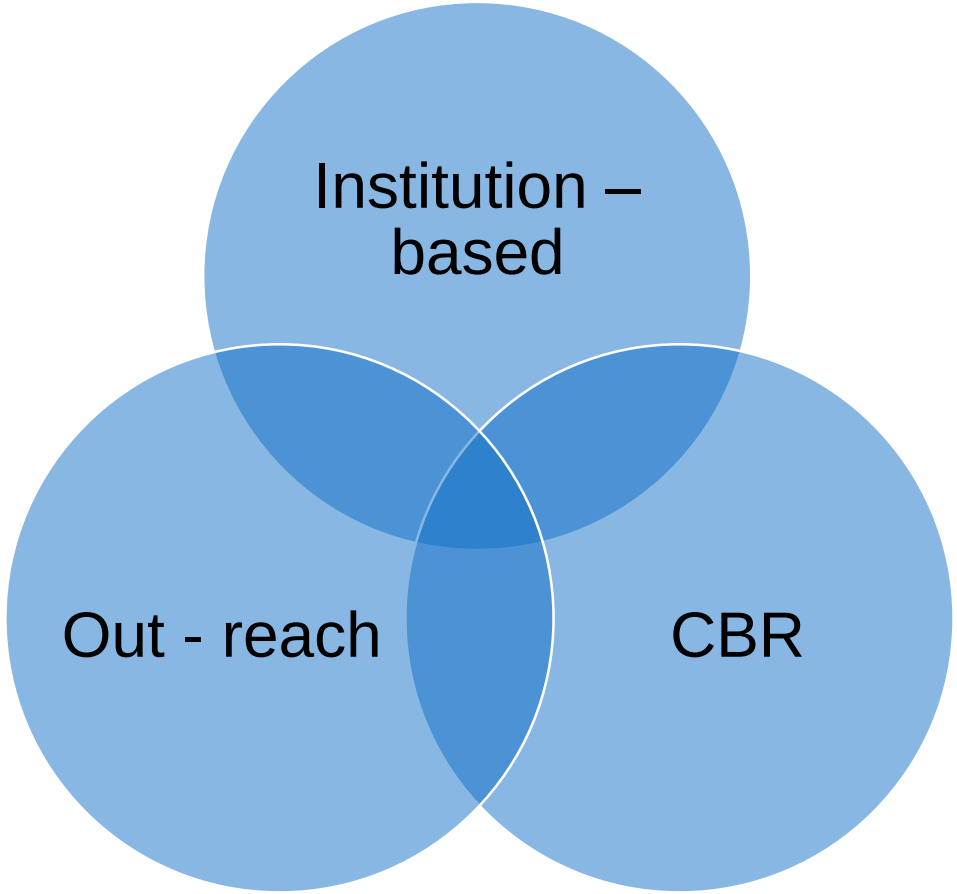
Major Strategies for Rehabilitation



WHO, (1994)

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Institutional Based Rehabilitation (IBR)

- Offered in a hospital or in a clinic where disabled people received special treatment or short – term therapy.

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Characteristics

- Focuses on the person's disability
- Gives little attention to the person's family and community.
- High cost
- Locate usually in urban centers
- Difficult to get to those living in remote areas.

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IBR services and programs:

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Hospital programs

- Provided by special rehabilitation hospitals or by rehabilitation units in acute care hospitals.
- Complete rehabilitation services are available.
- Patient stays in the hospital during rehabilitation.
- Organized team of many specially.
- More intense and require more effort from the patient.

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Hospital programs

Acute inpatient rehabilitation

- Begin rehabilitation as soon as they are medically stable
- Transferred from acute hospital care.

Outpatient

- Non-residential programs
- Addressing the advanced needs of the injured survivor

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School-based rehabilitation

- Schools should aim to ensure that disabled children and young people receive the best possible education their abilities allow.

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Nursing home programs:

Nursing facility programs are very different from each other. Some provide a complete range of rehabilitation services; others provide only limited services.

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Outreach rehabilitation services

- Provided by health care personnel based in institutions to the homes of people with disabilities.

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Characteristics

- Focuses on the person's disability.
- Gives attention to the person's family.
- High cost per person for treatment
- Vocational training and education are not included
- Community involvement with little social change .

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Community- based rehabilitation (CBR)

- The alternative strategy for rehabilitation places the primary focus on community care or family care, with institutions playing a support role rather than being the main rehabilitation resource.

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Characteristics

- Dynamic role of people with disabilities, families, and community in the rehabilitation process.
- Knowledge and skills for the basic training of disabled people are transferred to disabled adults themselves, to their families, and to community members.
- Community committee promotes the removal of barriers such as physical and attitudinal one and ensures opportunities for people with disabilities to participate in school and community activities.

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- **CBR concerned with attend the disabled children to:**

- local school,

- provide local job training for disabled adults,

- support community resources by referral services within the health, education and social service systems,

- train and support community workers, and provide skilled intervention (WHO,1994).

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Exercise

- According to the previous mentioned rehabilitation Strategy & program list some of rehabilitation services in Gaza with its calcification.

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Rehabilitation Stages:

- Successful rehabilitation is only possible when treated as an overall process of integrated assistance and not as a sequence of individual medical, vocationally supportive and social therapeutic measures.

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medical rehabilitation (Stage I):

- Is to treat an existing complaint or results of an accident to the extent that the patient can be integrated into work, career and society after being brought or restored to health.

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Medical and vocational rehabilitation (Stage II):

With certain disabilities, pre-vocational training programs leading to vocational rehabilitation can be introduced and integrated into the stage of medical rehabilitation itself. Special so-called “Stage II” rehabilitation centers are available for this.

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Vocational rehabilitation (Stage III):

- Aims to maintain, improve, create or restore a person's fitness to work to the best of his/her ability.
- Permanent integration into work, career and society is to be achieved.
- Individual requirements, as well as developments in the world of work and the employment market, should be taken into account.

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Social rehabilitation:

Comprises assistance with social integration, particularly in the realms of the family, living, participation in society, leisure and culture, and religious and political activities.

Social rehabilitation is thus a basic part of the total rehabilitation process.

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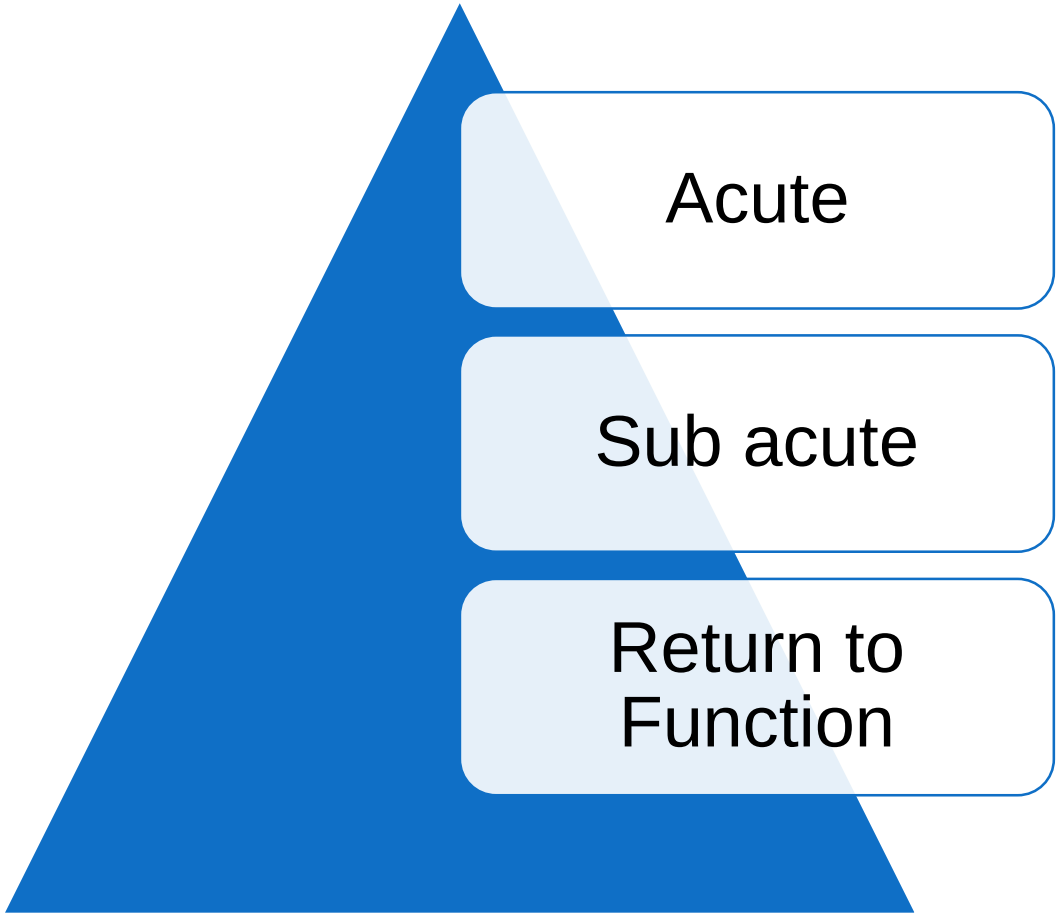
Phases of Rehabilitation



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Rehabilitation medicine team

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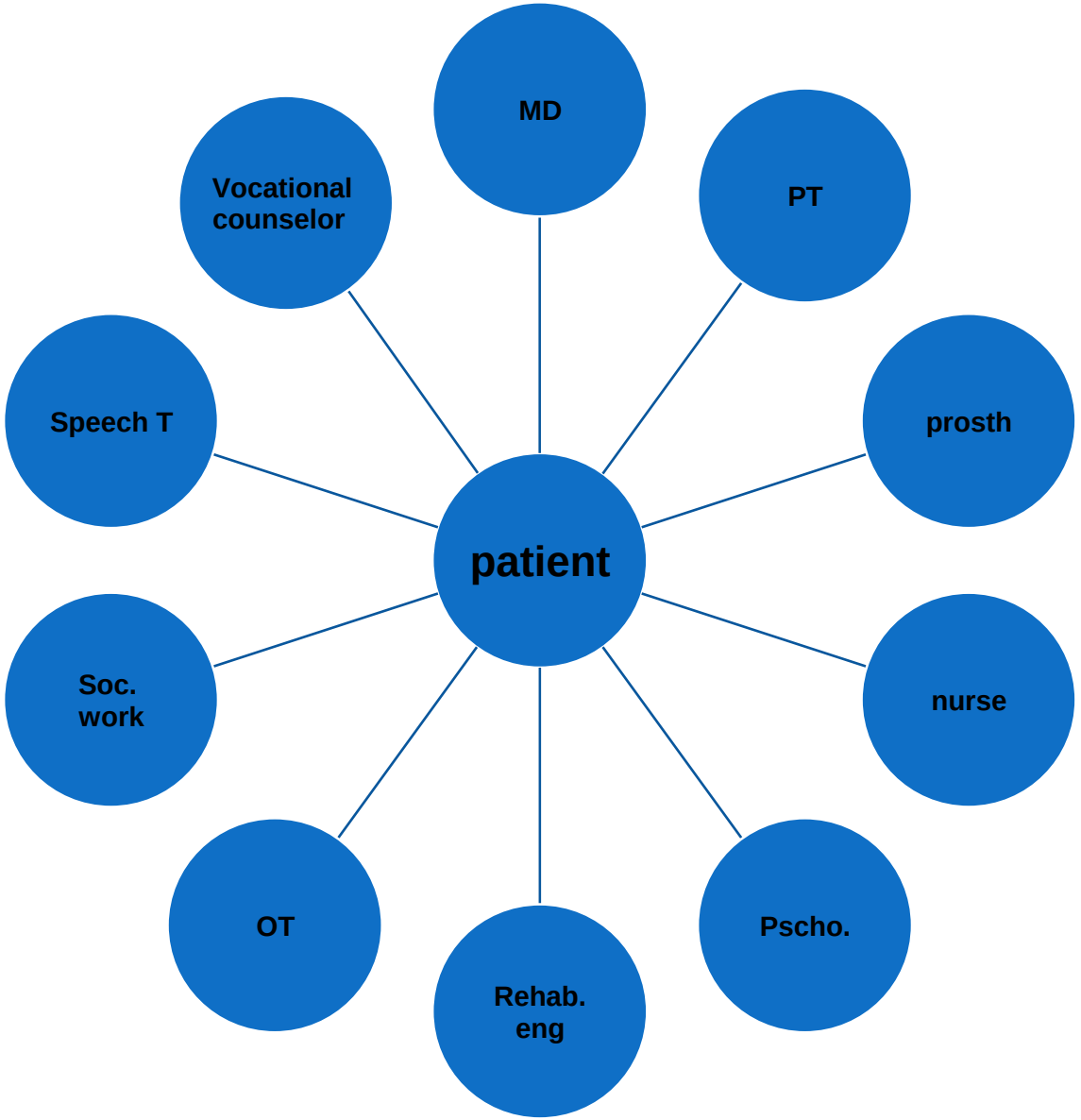

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Main types of Rehabilitation team

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Multidisciplinary team

- Various professionals evaluate & treat the patient separately
- Each discipline has his specific goals
- Each discipline has his specific plans
- Patient progress is communicated through documentation and at team meetings
- Team is led by physician
- The Sum (1+1=2)

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Interdisciplinary team

- Professionals evaluate patient separately then they share assessment and draw goals later at meeting
- Goals of each discipline is then coordinated into a unified plan through the synergistic interaction of the team
- All Team participates in problem-solving ad decision-making
- Team is led by physician
- The sum (1+1=>2)

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Transdisciplinry team

- Designed through cross-training of members & procedures to allow overlap of responsibilities among disciplines
- This overlap allows flexibility in problem-solving & give closer interdependence of members
- Leadership may differ for each patient
- Discipline with extensive involvement with patient mat become the case manager and coordinate team efforts

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Why there is an increasing demand for rehab. Medicine specialists?

This growing need stems from the followings

- Improved health care systems
- Decreased mortality rates and increase in aging population.
- Increase in the number of wars and conflicts
- Increase in vehicular and industrial accidents
- Increase in communicable disease in poor areas (e.g.. Meningitis) leading to physical disabilities.

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Components of a good & comprehensive rehabilitation

- Unique patient-centered plan, formulated by the patient & the team
- Goals derived and prioritized through an interdisciplinary team
- Patients participation is required to achieve the goals
- The process results in improvement in patient personal potentials
- Outcomes demonstrate reduction in impairment, disability and handicap.

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Definitions Health & Disability

- Health: is the optimum condition of a person including the physical, mental and social well-being. so health is not merely the absence of a disease or disability.
- Disease: is that diagnosis or disorder characterized by a set of signs, symptoms and pathology and is attributable to infections, diet, hereditary or environment

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3 Concepts of ICIDH-1980

- Impairment: any loss or abnormality of physiological, psychological or anatomical structure or function.
- Disability: any restriction or lack of activity resulting from an impairment to perform an activity in the manner or average considered to be normal for people of the same age ,sex and culture.
- Handicap: is a disadvantage for a given individual resulting from impairment or disability that limits or prevents the fulfillment of a role in society that would otherwise be normal for that individual.

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Concepts of ICIDH II 1999

- Impairment: any loss or abnormality of physiological, psychological or anatomical structure or function.
- Activity limitation: the nature and extent of functioning of a person. It may be limited by nature, duration and quality
- Participation restriction: a problem in the manner or extent of person's ability to participation in a life situation.

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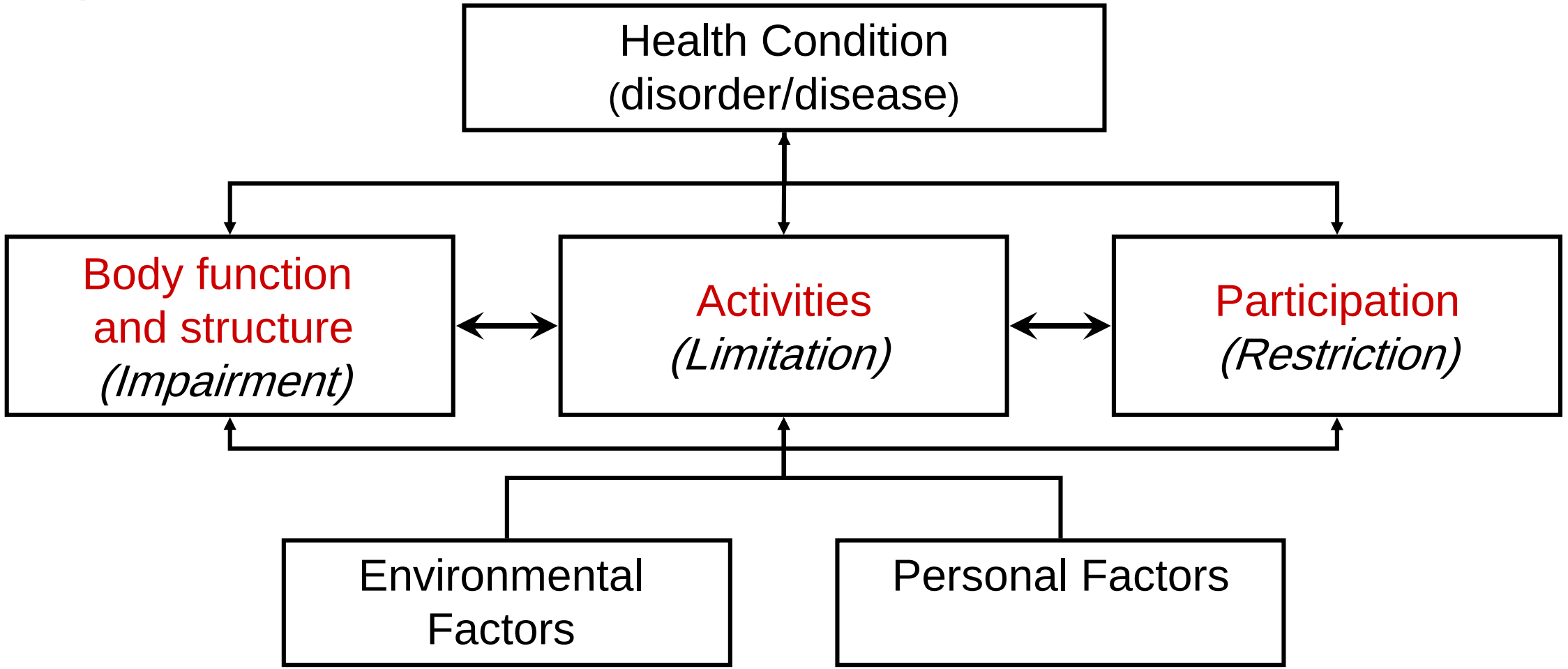
International Classification of Functioning, Disability, and Health (ICF) 2001:



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Definitions

Impairment	Loss or abnormality in body structure or function (including mental function)
Activity Limitations	Difficulties individual may have in executing activities in terms of quantity or quality
Participation Restrictions	Problems an individual may experience in involvement in life situations
Facilitators & Barriers	Environmental factors may be a facilitator for one person & barrier for another

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ICF Components

Body functions: Physiological functions of body systems

Body Structures: Structural or anatomical parts of the body

Activities: Execution of a task or action by an individual (individual perspective)

Participation: Persons involvement in a life situation (societal perspective)

Environmental Factors: All aspects of the external world that impact on the person's functioning

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ICF Structure

Two parts:

1. Functioning and Disability
    a) Body functions and structures
    b) Activities and Participation
2. Contextual Factors
    a) Environmental factor
    b) Personal factors

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Exercise

- Mention three examples for the previous calcifications

(5 min)

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Models of Disability

- **Medical model of disability**
- **Social model of disability**

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Medical model assumptions of disability

- Disability is individualized, regarded as a disease within the person, problem and solution may both lie within the individual.
- Disability is a disease state, that necessitate some form of treatment or cure

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- Being disable, he/she is considered biologically and psychologically inferior to other able bodied people.
- Disability is viewed as a personal tragedy, it assumes the presence of a victim, the objective normality of professionals give them a dominant decision-making role in the doctor-Px relationship

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Social model assumptions of disability

- A persons' impairment is not the cause of restricted activity
- The cause of restriction is the organization of the society
- Society discriminates against disables people
- attitudinal, sensory, architectural, and economic barriers are of equal, if not greater importance than health barriers
- Less emphasis is placed on the involvement of professional in the life of the disabled

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Models of Rehabilitation: Relationship between consumers and providers

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Biomedical model of rehabilitation

Assumptions

- There is an objective impairment that is causing the disability. Recipients are called patients
- Professionals have the knowledge and skills necessary to solve the problems of the disabled
- Problems can be analyzed into their component parts and solved systematically

Advantages

- Benevolent-intend to do good
- Professionals willing to assume responsibility

Disadvantages

- Disempowering
- Time limited in its relevance
- Lacks expertise about living with disability

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Client-centered model of rehabilitation

Assumptions

- Recipients of services are called clients
- Clients have the skills and know what they want and need from therapy
- Ultimate relevance of the client perspective on problem
- Professional dominance is counter therapeutic
- Therapists cannot be an element of change ,only facilitator

Advantages

- Empowering
- Highly individualized
- Opportunity for personal growth for therapist

Disadvantages

- Perception of less skilled , active role of a therapist
- Ambiguity about therapist-client relationship
- Need for structural change to support client centered practice
- Success is based on therapist personality and beliefs

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Community-based model of rehabilitation

Assumptions

- People with disability must be seen in the context of their communities
- Individuals and communities can influence their own health
- The unique knowledge and skills of disabled represent a good resource
- Small improvement in the quality of life of all people in a community is preferable to maximum improvement for a few

Advantages

- Increase accessibility to the services
- All community members increase their understanding of disability issues
- Communities develop their ability to solve problems collectively
- Services are inherently sensitive to the context and culture of community

Disadvantages

- Applicable only to people living in the community
- May take longer to achieve specific benefits
- Vulnerable to changes in resources and attitude of community
- Rehab. Professionals unprepared for community development and health promotion roles

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Independent living model of rehabilitation

Assumptions

- People with disability are rationale, informed consumers of services-lobby system
- Disablement stems from environment& society not the individual
- Disability is life-long personal issue & a time-limited medical issue

Advantages

- Promotes self-determination, mastery and self respect among disabled people
- Focuses on social contributions made by people with disability
- Focuses on equal participation of people with disabilities in all aspects of daily living in the society

Disadvantages

- Many of its basic tenets are unfamiliar to professionals
- Not applicable to some disabled esp. those who find it unsuitable for their personal circumstances
- difficulty in evaluating the long term outcomes of independent living

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Goal setting :

- Is one of the skills that specifically characterizes professional working in rehabilitation.
- Can assist in the treatment planning process and ensure that this is relevant to the patients needs and environment.

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- The essence of rehabilitation is goal setting . the first goal to be established is the final strategic aim. This can vary significantly :

- for some a long term goal would be returning to a completely normal lifestyle.

- for others it may simply be to return home and remain at home with the help of care-giver.

- An active patient –therapist relationship

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All goals should be :

SMART

- **S**pecific
- **M**easurable
- **A**ctivity –related
- **R**ealistic
- **T**ime-specific

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Some examples of rehabilitation centers in Gaza strip:

Name	Services
UNRWA "rehabilitation programs"	
Palestinian association for disability rehabilitation.	
Al – Wafa medical rehabilitation center.	
Fata medical rehabilitation center.	
Physical handicapped rehabilitation .	
Artificial limb center.	
Community based rehabilitation "CBR"	
Al – Nour center.	
Right to life society.	
Shams society .	

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Conclusion

- A proper and adequate rehabilitation program can reverse many disabling conditions or can help patients cope with deficits that cannot be reversed by medical care. Rehabilitation addresses the patient's physical, psychological, and environmental needs. It is achieved by restoring the patient's physical functions and/or modifying the patient's physical and social environment.
- Each rehabilitation program is tailored to the individual patient's needs and can include one or more types of therapy.

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Thanks for al

Thank You

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