# Rehabilitation and Care of the Disabled in Iraq

#### **Goal of Rehabilitation**

to improve the functional capability of the disabled to its optimal level to secure his or her life requirements regardless his or her disability status.

## Disability & Handicap in Developed Countries

The rate of the disabled in the developed countries is up to 10% of the total.

While the rate of handicapped among them are very low due to developed standards and advance facilities in these societies.

### Handicap in Iraq

Owing to the hard conditions the Iraqi people underwent along decades and being liable to warfare and crises. These conditions indicate to the increase in the number of disabled people to more than 15% with restricted participation of them to perform their social role, that increased handicap rate & severity.



## Exacerbation of the disability in Iraq

- 1. Physical and mental injuries due to direct or indirect military operations.
- 2. Oppression practices and physical and physiological torture of the former regime against Iraqi's.
- 3. Odd behaviors and the increase of crime in the society.
- 4. Violent and terrorist acts against the Iraqi people with out distinguishing.

## Exacerbation of the disability in Iraq

- 5. The negative effects of the sanction on the individual and the society.
- 6. Lack of effective medical rehabilitation services in the health system.
- 7. Lack of social services that facilitate the participation of the disabled in the society.

## Health Services for the Disabled (Current status)

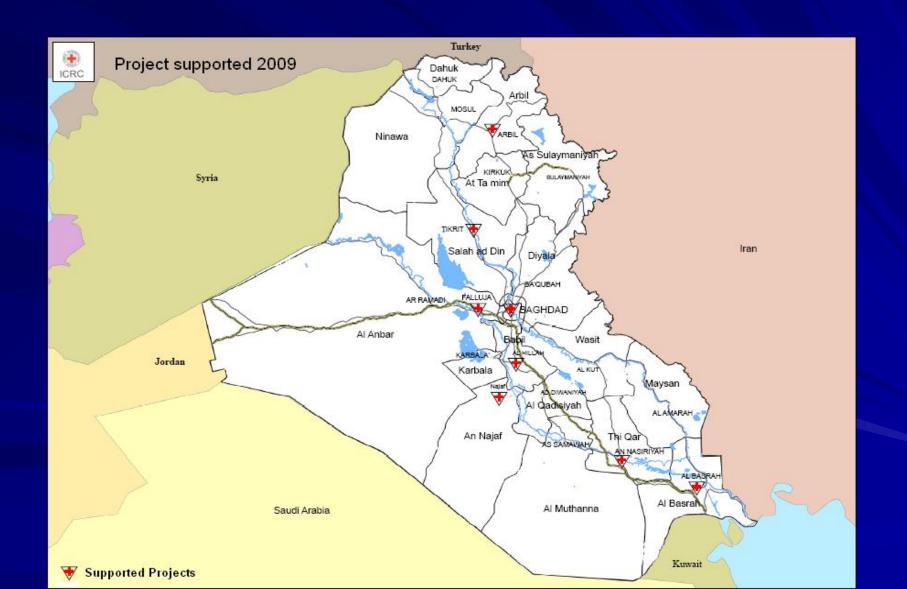
- Rehabilitation Hospitals.
- Rehabilitation Centers.
- Prosthesis Factories.
- Medical Supplies & Aids
- Qualified staff.

#### Prosthesis Factories

■ **The annual need** for prosthesis by 20000 units

■ The annual production of all existing factories is estimated by 5000 limbs when raw material and staff available.

#### Prosthesis factories



### Casting



### Modifacation



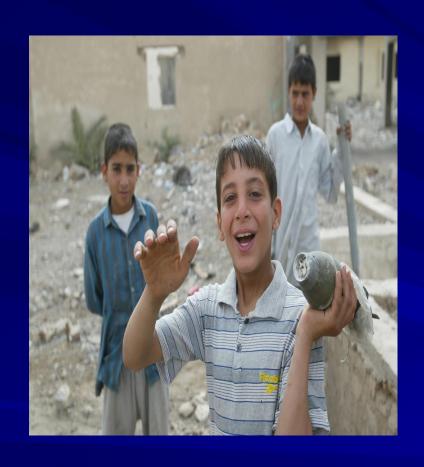
## Training





Women With
Above Knee
Amputation

#### CHILD AMPUTEE











#### Strategic Plan

#### Goals:

- 1. To ensure an effective medical & rehabilitation services for all Iraqis with disability.
- 2. To improve the medical rehabilitation services in Iraq.
- 3. To minimize the incidence of handicap among Iraqis.

## Physical Rehabilitation Programme

#### What is physical rehabilitation?

Physical rehabilitation is an important part of the integrated rehabilitation process, enabling person with physical impairment to gain mobility\*

\* a main condition for the person to participate in social life, work and education

#### What is physical rehabilitation?

an essential component of reintegration into society

Socio-economic integration

Vocational training

**Psychological Support** 

**Physical Rehabilitation** 

Surgery

Evacuation

First aid

Injury

#### What is physical rehabilitation?

Physical rehabilitation includes the provision of assistive devices such as prostheses, orthoses, walking aids and wheelchairs along with appropriate therapy allowing an optimal use of the device





Disease = the process that causes a change in the structure or function of the body usually evidenced as signs & symptoms

Impairment= the pathophysiologic consequences of disease [loss of motion, deformity, pain, stiffness or fatigue]

Functional disability=Loss of ability to perform a task in activity of daily living [ADL], work &recreation which is caused by impairment.

Disability=Limited physical ability that does not meet the needs. The functional limitation or extent of disability from impairment is specific to an individual.

Handicap=the disadvantage due to impairment or disability that prevents fulfillment of the individual's normal role in society.

The nature &severity of the handicap is largely determined by society constraints Determination of rehabilitation treatment is based on:

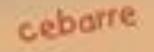
1-Assessment of functional deficits
2-Evaluation of patient for potential improvement.



#### Rehabilitation program

Should be re evaluated adjusted periodically because patients may fail to meet or may exeed the initial goals. There are four key elements of successful rehabilitation program

First=Goals should be realistic, measurable& precisely defined after discussion with the patient.





2=Needs for adoptive equipments.



#### Second=

1-Realistic time-frame for goals should be determined.

2-Program adjusted according to patient performance & needs.

3-Patient must have realistic expectations of results.



#### **Third**=Preventive Measures.

1-Halting deterioration of function.

2-Anticipating or avoiding complications.

3-Making adjustments in lifestyle.





#### **REHABILITATION TEAM**

- 1-Multidisciplinary.
- 2-Interdisciplinary.
- 3-Active communication &cooperation among various disciplinary.

The team is consists of= physician, physiotherapist, occupational therapist, psychologist, social worker, vocational rehabilitation counselor, recreational therapist, speech therapist & rehabilitation nurse.





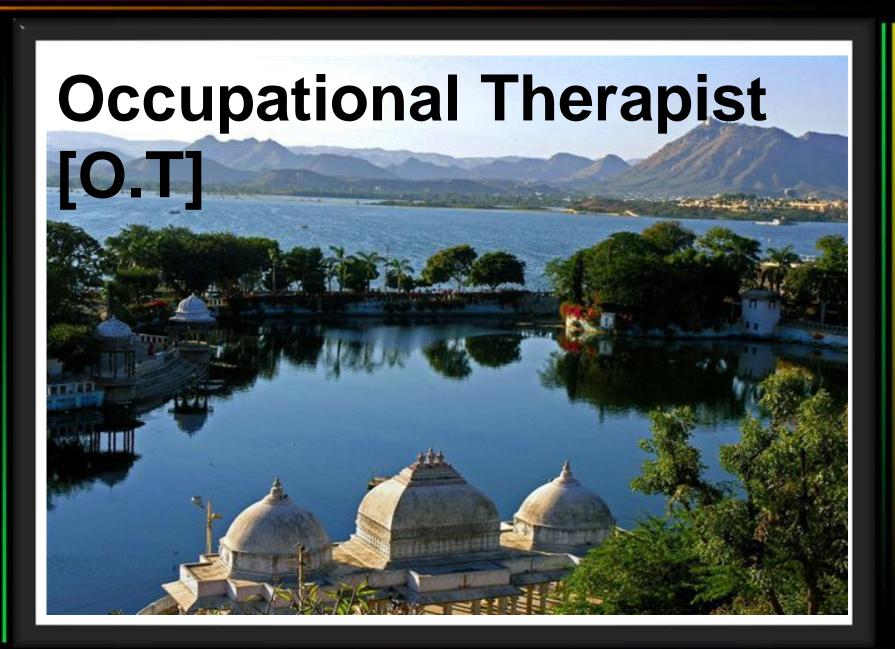
# **Physical Therapist [P.T.]**

1-Improve the level of function, exercise, increase ROM, strength, coordination, endurance.

2-Transfer safely.

3-Evaluate gait & ambulation safely.

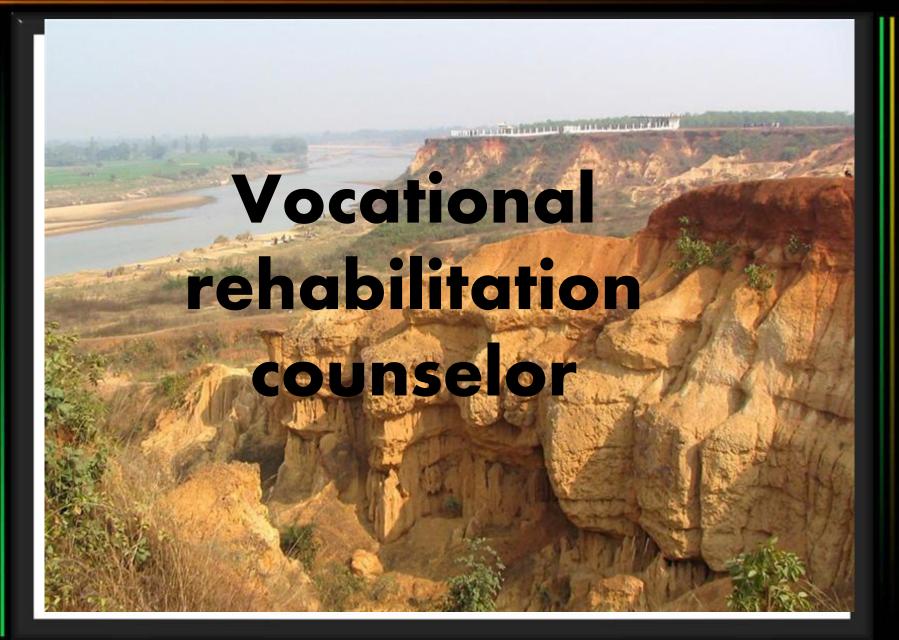
l-Home& worksite evaluation for safety& modifications. accessibility,





2-Assess& train patients for independent& safe self-care skills, ADL









1-Evaluate the patient desired recreational activities.

2-Educate the patient about adopted recreations, new leisure activities& social interests.

3-Valuable resource for adaptations & modifications.

### Rehabilitation psychologist

1-Identify psychological issues.

2-Provide insight into unique needs& goals of the patient.

3-Counsel patients & families to help with their adjustment to various impairments & other mental health needs.

4-Assist in understanding& managing behavioral issues.

#### Social worker

1-Serve as communication between rehabilitation team & the family.



2-Coordinate planning for home care needs, worksite needs& financial concern.

3-Coordinate continued outpatient therapies.



1-Integrate the knowledge& skills learned by the patient during therapies.

2-Provide patient education about his disease & therapy.

# PREFACE TO THE REHABILITATION OF SPINAL CORD INGURIES

#### INTRODUCTION

- Medicine has been divided in to three phases:
- 1-Preventive.
- 2-Diagnosis and treatment.
- 3-Convalescence and rehabilitation.

#### THE EFFECTIVE SYSTEM OF SCI CARE

- Includes: 1 Prehospital management.
  - 2-Trauma centers.
  - 3- Spinal cord injury centers.
  - 4- Social supporting.

#### THE REHABILITATION DEFINITION

Is the process by which a disabled or ill patient is enabled to achieve his maximum possible physical, mental, and social efficiency.

#### WHAT'S A SPINAL CORD INJURY?

- Spinal cord injury (SCI) is an insult to the spinal cord resulting in a change, either temporary or permanent, in its normal motor, sensory or autonomic function leads to:
- 1-Loss of motor and sensory function bellow the level of injury (complete or incomplete).
- 2-Spasticity.
- 3-Pain.
- 4-Sexual dysfunction.
- 5-Loss of bowel & bladder control.

#### TYPES OF PARALYSIS IN SCI

- 1-Tetraplegia (replaces the term quadriplegia): Injury to the spinal cord in the cervical region, with associated partial or total loss of muscle strength and Sensation in all 4 extremities.
- 2-Paraplegia: Injury in the spinal cord in the thoracic, lumbar, or sacral segments, including the cauda equina with associated partial or total loss of muscle strength and sensation in the lower extremities and conus medullaris.
- 3-The term incomplete (tetra.para) replace the terms (paraparesis & quadriparesis) now.

### SYSTEMS AFFECTED BY SCI

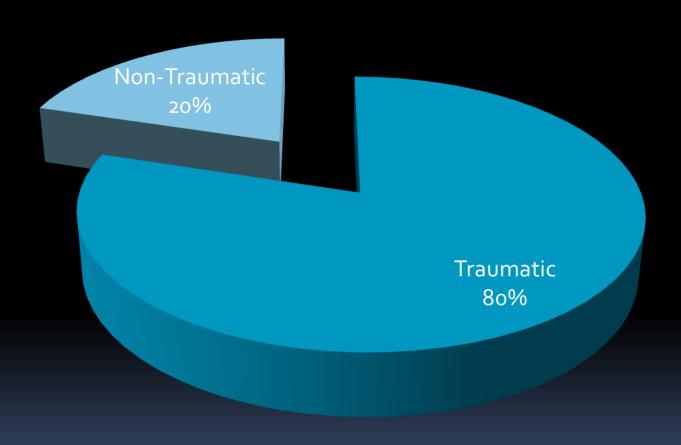
- Cardiovascular •
- Integumentary •
- Gastrointestinal
  - Metabolic •
  - Neurologic •

- Musculoskeletal
  - Urologic •
  - Psychosocial
    - Sexuality •
    - Respiratory •

# SCI-RELATED MEDICAL CONDITIONS

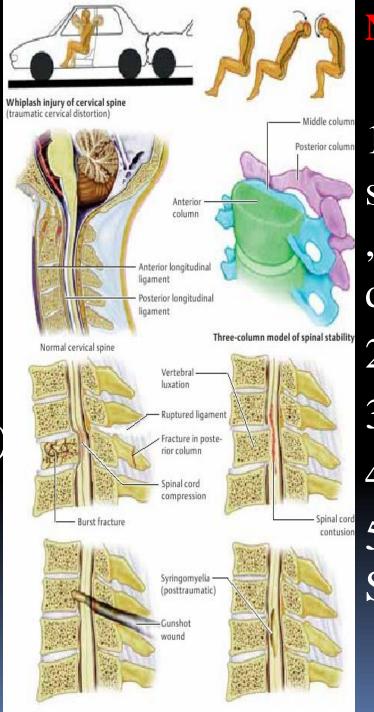
- Spinal shock
- Spinal cord syndromes
- Autonomic dysreflexia
- Neuropathic pain
- Spasticity
- Heterotopic ossification
- Syrinx
- Gynecomastia

# ETIOLOGY OF SCI



#### **TRAUMATC**

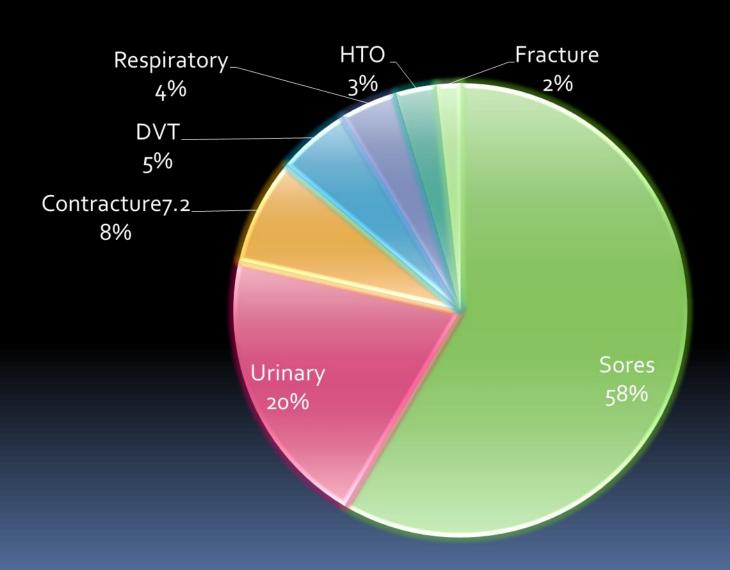
- 1-Vehicular (car, motorcycle, R.T. A).
- 2-Falls.
- 3-Violence.
- 4-Sports(diving



#### **NONTRAUMTIC**

- 1-Degenerative: spinal stenosis, herniated disc.
- 2-Tumors.
- 3-Infections.
- 4-Vascular.
- 5-Multiple Sclerosis.

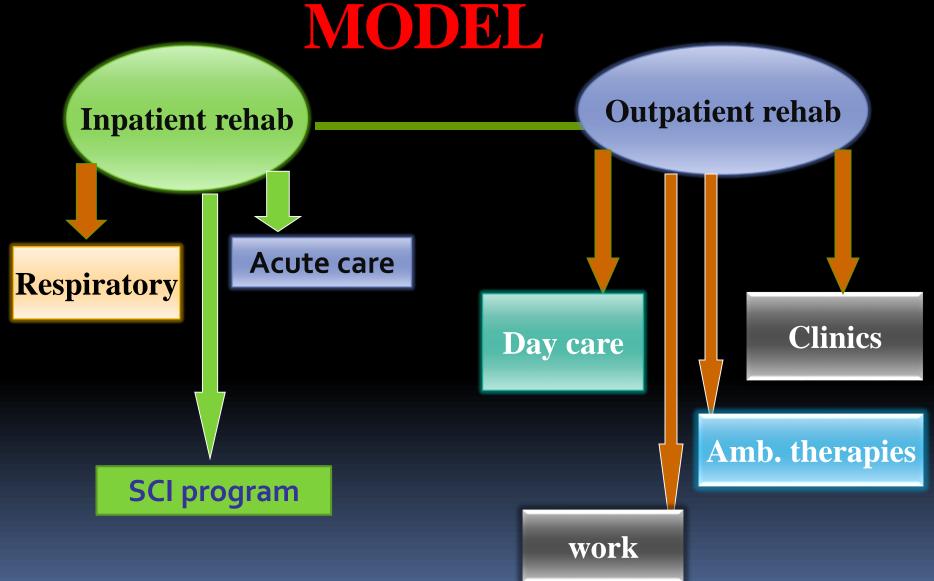
# MAIN COMPLICATIONS



# CAUSES OF DEATH

- 1-Pneumonia
- 2-Heart disease.
- 3-Septicemia
- 4-Pulmonary embolus
- 5-Suicide.
- 6-Kidney failure.

# SCI REHABILITATION MODEL



#### THE AIM OF REHABILITATION

To Regain The Patients Ability To Live In The Society-restoration Of Independence.

- 1-Regain A.D.L Activities According To The Level Of Injury.
- 2-Prevention Of Complications:
- -Exacerbation Of The Spinal Injury.
- -Respiratory disfunction.
- -Pressure Sores.

- -Contractures & H.Ossification.
- -D.V.T & Edema.
- 3-Bladder & Bowel Care.
- 4- Psychological Care.
- 5-To Gain As High A Degree Of Social Adaptation (House
- & Work) As Possible.

# THE REHABILITATION TEAM WORK

- 1-Rerhabilitation requires a team of persons working together and contributing specialized services that may be required to assist the patient.
- 2-The team members represent a variety of disciplines.
- 3-They meet in group sessions at frequent intervals to:
- \*Evaluate the patient's progress.
- \*Make the necessary program changes.

### THE TEAM WORK MEMBERS

- 1-physiatrist.
- 2-Physiotherapist.
- 3-Nursing.
- 4-Occupational Therapist.
- 5-Social Worker.
- 6-Pcychologist.
- 7-Nutrition Specialist.

# PHYSICAL THERAPY FUNCTIONS

- 1-Respiratory care.
- 2-Therapeutical exercises.
- 2-Acclimate To Upright Position.
- 3-Sitting Balance Supported And Unsupported.
- 4-Bed Mobility.
- 5-Transfers.
- 6-Wheelchair Mobility.
- 7-Upper Extremity ROM And Strengthening.
- 8-Pressure Relief.
- 9-Walking Training.
- 10-Splinting If Needed.

# OCCUPATIONAL THERAPY **FUNCTIONS**

- 1-Upper Extremity Activity 6-Dressing training.
- 2-Neuromuscular
- Electrical Stimulation
- 3-Neurofacilitation
- Techniques
- 4-Feeding training.
- 5-Tenodesis(handgrip).

- 7-Bathing training.
- 8-Toileting training.
- 9-Driving evaluation and training.
- 10-Assistive devices.

#### NURSING CARE FUNCTIONS

- 1-Bladder rehabilitation
- 2-Bowel rehabilitation.
- 3- Personal hygiene (bathing).
- 4- Dressing(wound or pressure sore).

- 5-Turning the patient's position(every 2 hours).
- 6- Feeding the disabled patient.
- 7-Medication.
- 8-Check the vital signs.





