

Community 432 Medicine

Doctor's notes are in **green**.
Additional information are in **orange**.
Unmentioned information are in **grey**.

For any mistakes, contact team leader *Rozan Murshid*:
Roza1066@gmail.com



Done By: **Rozan Murshid**
:D

Reviewed By:

جامعة
الملك سعود
King Saud University



PEOPLE LIVING WITH DISABILITIES

Learning objectives

1. Distinguish between health and quality of life
2. Portray with a diagram the spectrum of health
3. Develop an understanding to the concept of disability
4. Recognize that the term “handicap” doesn’t exist anymore
5. Compare between the medical model and social model of disability
6. Explain the strengths of the ICF in mapping disabilities, prevention and interventions
7. Distinguish between capacity and performance
8. State the main health conditions associated with disability
9. List the disabling barriers
10. Outline the interventions for prevention of disabilities and rehabilitation
11. Give an account on CBR

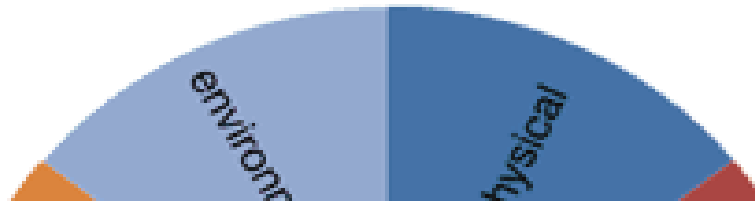
Definition of health

“State of **complete physical, mental, and social well-being**, not merely the absence of disease or infirmity”(WHO, 1948). In recent years, this statement has been amplified to include the ability to lead a "**socially and economically productive life**”

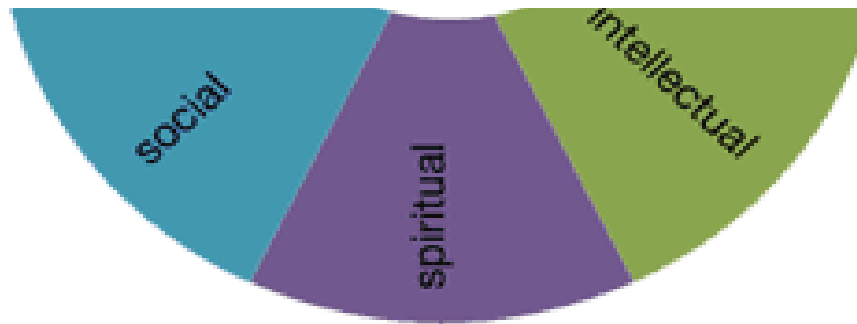
Dimensions of health



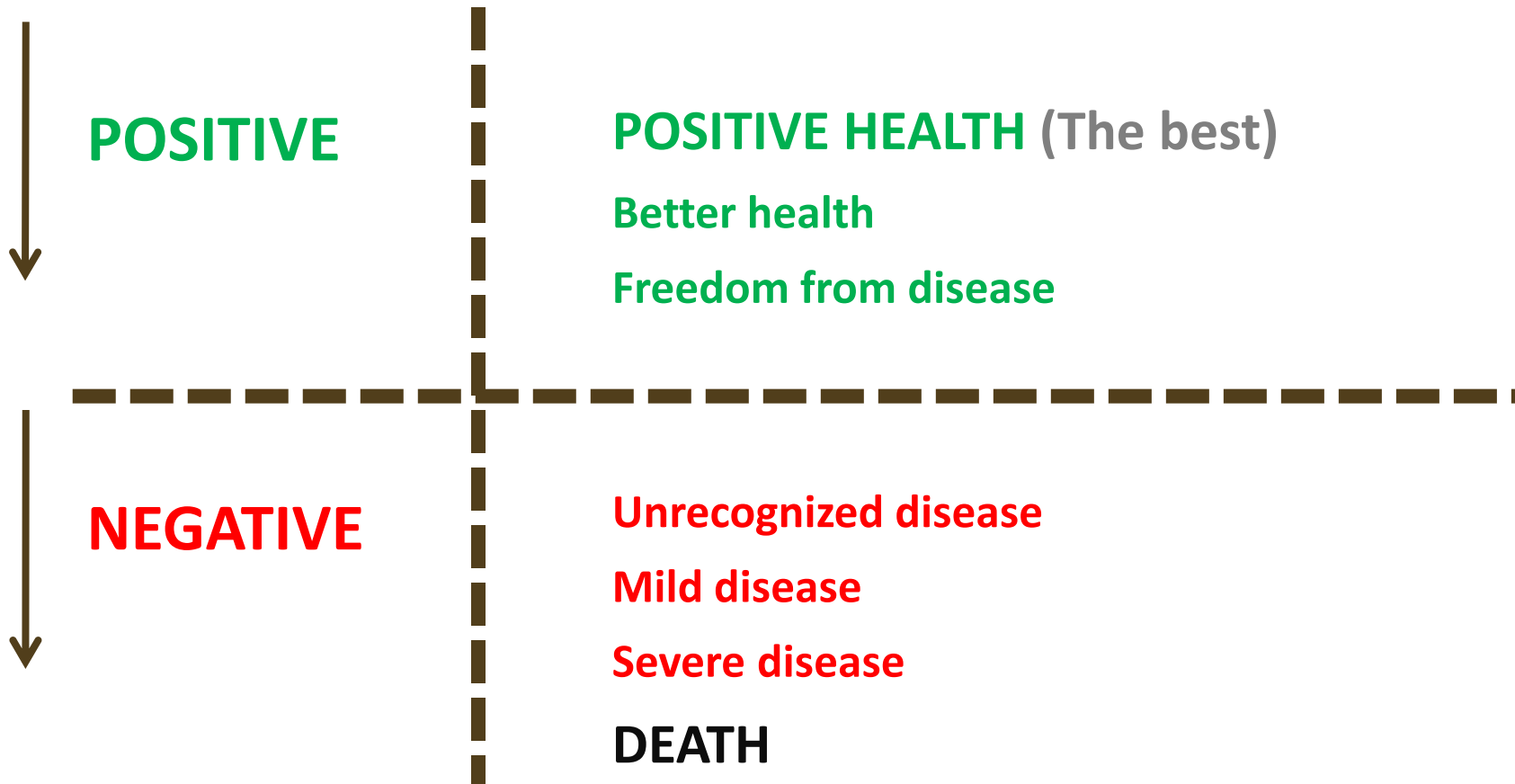
Dimensions of health



RIGHT BASED APPROACH TO HEALTH



Health – Disease spectrum

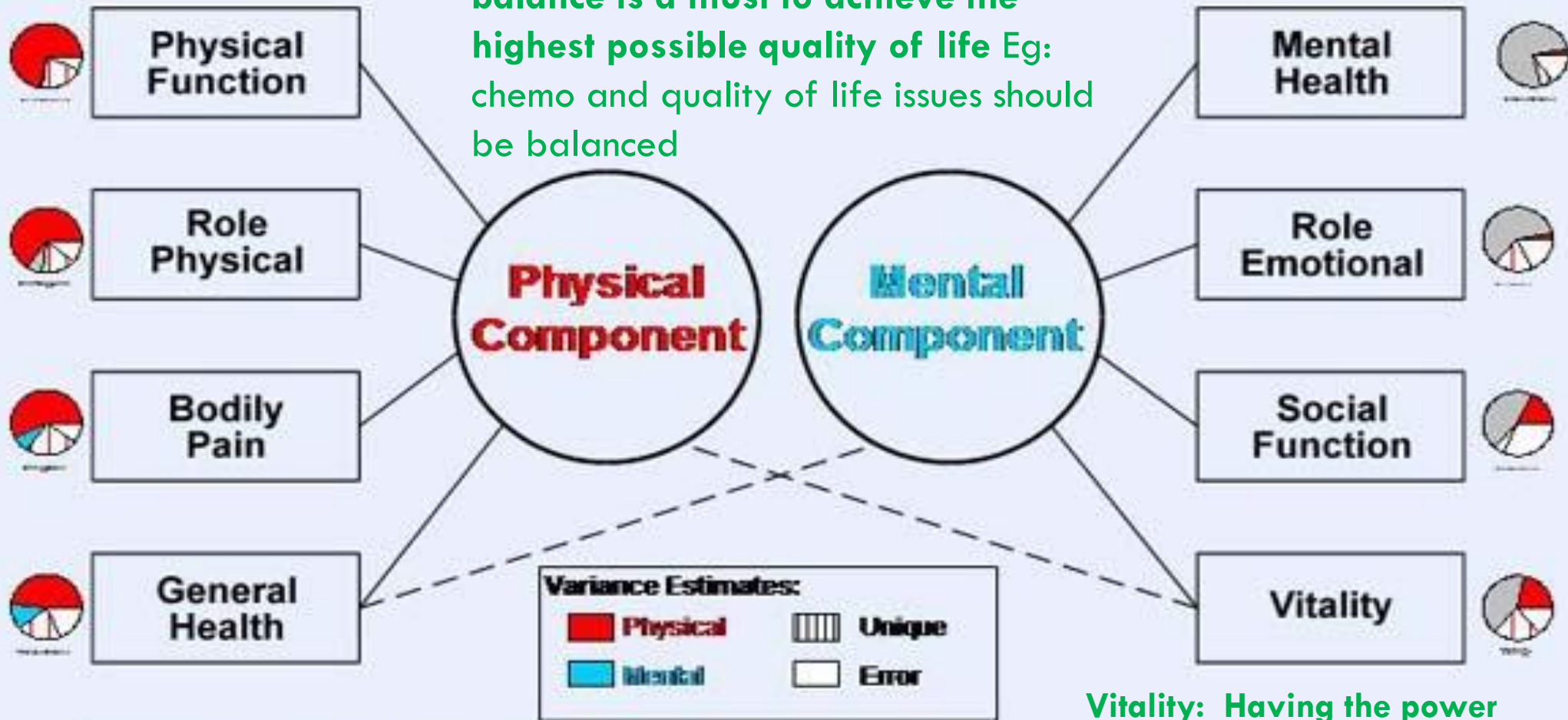


Quality of life

“Individual's PERCEPTION OF THEIR POSITION in life in the context of the culture and value systems in which they live and in relation to **their goals, expectations, standards and concerns.**” (WHO)

SF-36[®] Scales Measure Physical and Mental Components of Health

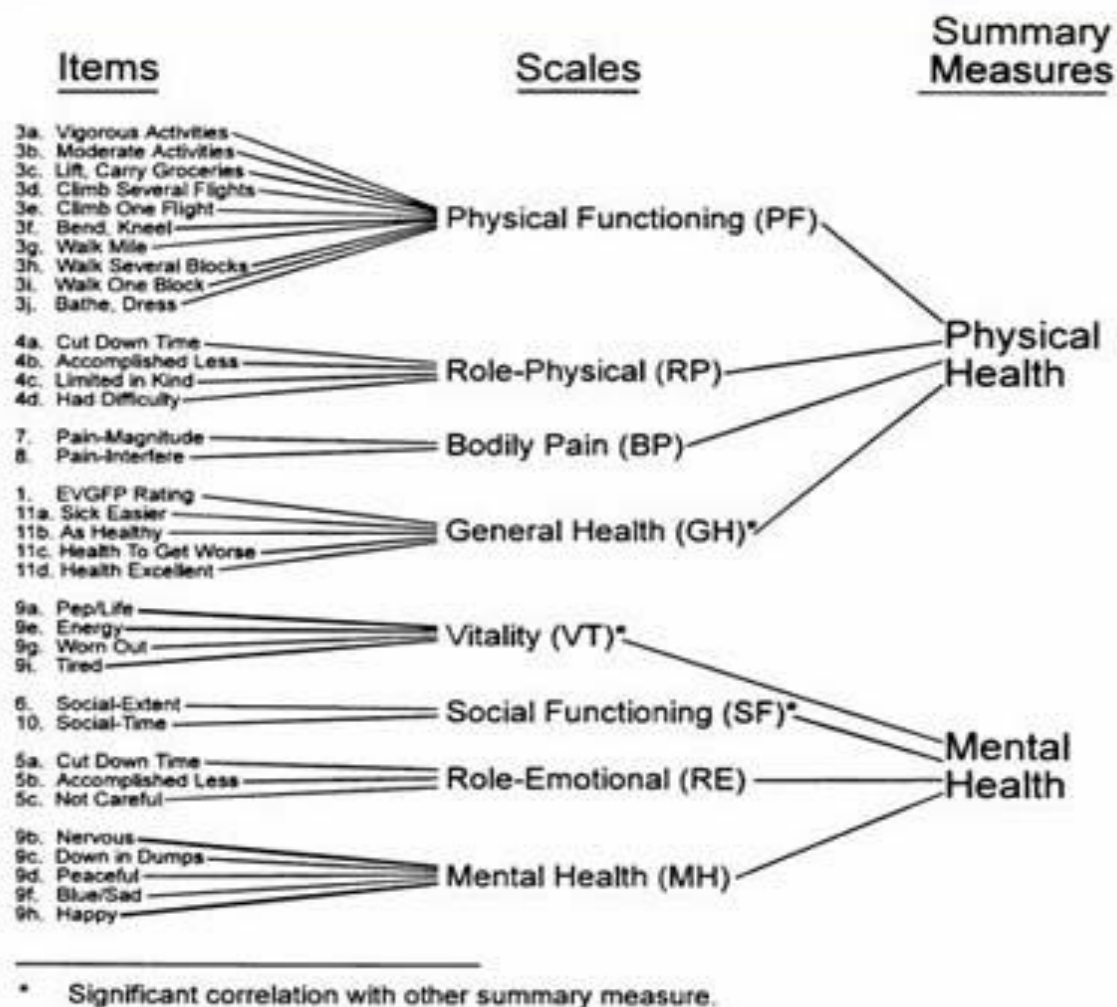
balance is a must to achieve the highest possible quality of life Eg: chemo and quality of life issues should be balanced



Source: Ware, Kosinski, and Keller, 1994

Vitality: Having the power and ability to do something

SF-36[®] Measurement Model



Summary - 1

- A single definition of health referring to the level of health that people and nations strives to achieve
- Health is **multidimensional**
- People are moving across the spectrum of health
- Health is a right and not a need
- Quality of life is a **subjective** state and should be considered

Disability

There is an impairment

A long-term **physical, mental, intellectual, or sensory impairment** which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.

Dyslexia can be considered a disability

Fever and in bed 3 days is a disability

Magnitude of disability - Global

Numbers are expected to increase because of increasing age without cure

- Nearly **10%** of the world's population lives with disabilities (650 millions)
- **80%** of persons with disabilities live in developing countries
- Nearly 200 million children are living with disability
- In any population at least 2.5% of children below the age of 15 years have an overt moderate to severe degree of physical or intellectual impairment and an additional 8% are expected to have learning or behavioral difficulties or a combination of both learning and behavioral difficulties
- Expected increase in the number of persons with disabilities as a result of population growth, the advances in medical technology and the ageing process.
- In countries with life expectancies exceeding 70 years, individuals spend on average 8 years or 11.5% of their life span living with disabilities

Magnitude of disability - KSA

- It is estimated that 3.73% of the population has **functional disabilities** which limit their independence.
- Data from national census indicates that approximately 135,000 or nearly 0.8% of the total Saudi population has disability. **Functional disabilities : unable to live independently**
- The main causes of disabilities are **cerebral palsy and developmental delay** followed by **road traffic accident**.
- The main care gaps are **low access to poor families, low service coverage,** and **low quality of services** in public agencies.

Persons living with disability

The needs of persons living with disabilities have been recognized more than three decades ago.

- 1981: Declared by the UN as the “International Year of Disabled Persons” with the theme of “full participation and equality”
- 1983 – 1993: “International Decade of Disabled Persons”
- 2007: **الميثاق** “Convention on the **Rights** of Persons with Disabilities”, a legally binding document by international law.

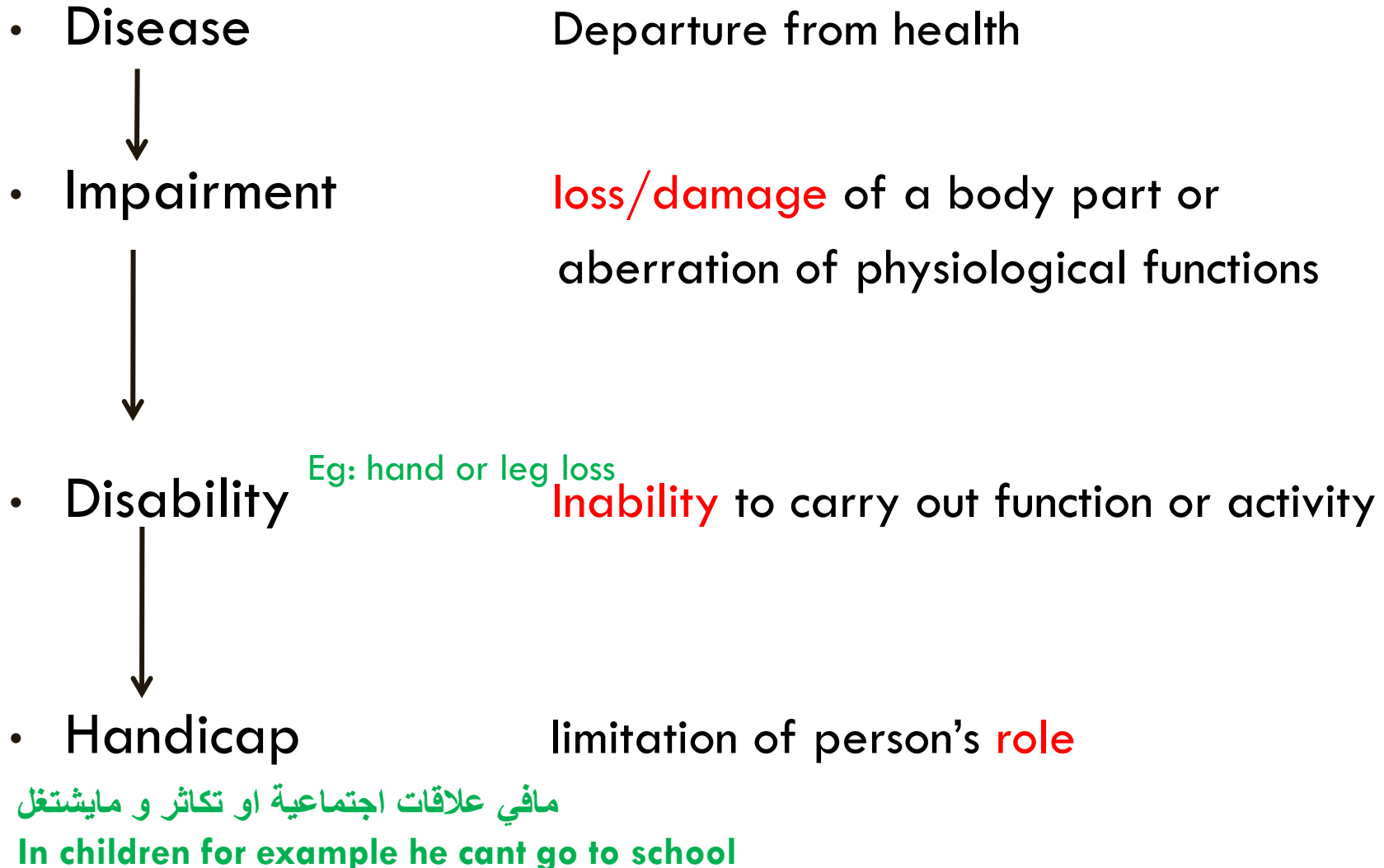
Persons living with disability - KSA

- (1987) the legislation of disability (LD) passed as the first legislation for people with disabilities in KSA with provision to warrant **equal rights**
- (2000) the disability code was passed by the Saudi government to pledge that people with disabilities have **access to free and appropriate medical, psychological, social, educational, and rehabilitation services through public agencies.**

Disability

A long-term physical, mental, intellectual, or sensory impairment which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.

Development of disability

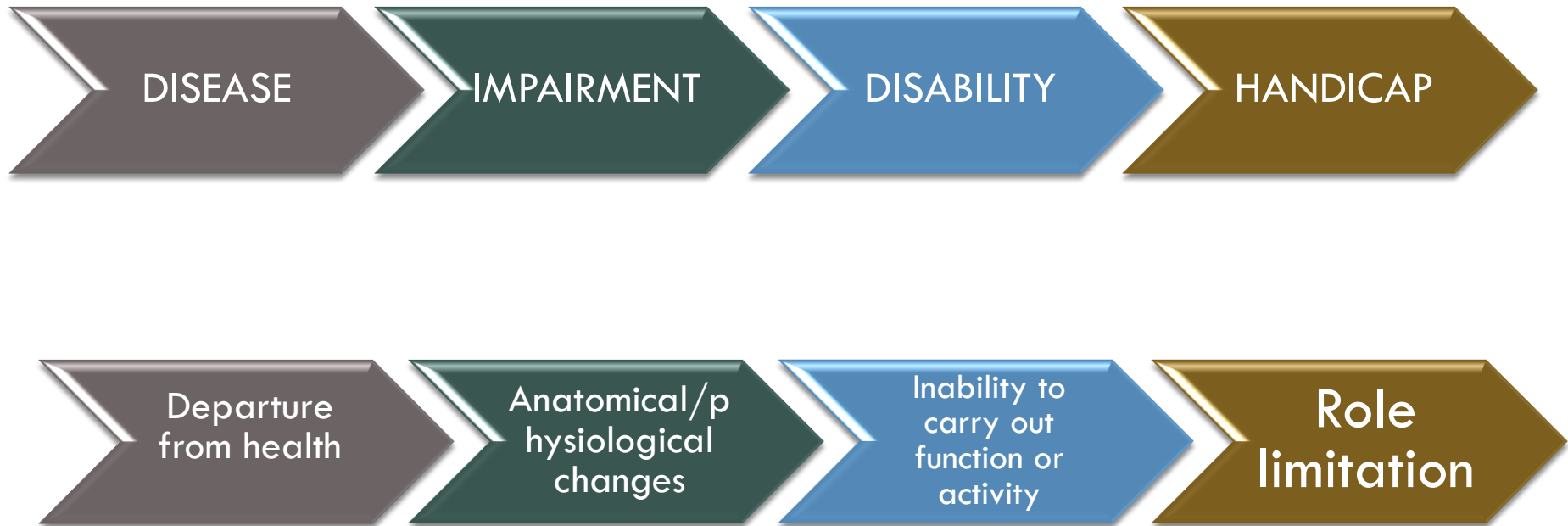


Handicap

“Reduction in person’s capacity to fulfill a social **role** as a consequence of an impairment, inadequate training for the role, or other circumstances”.

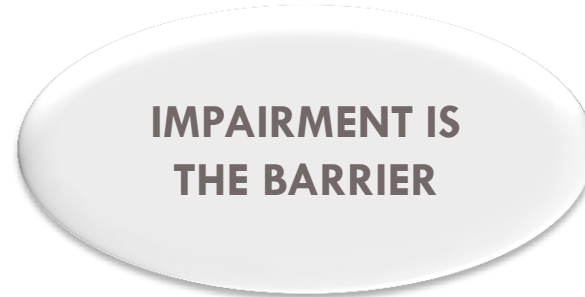
Applied to children, the term usually refers to: “the presence of an impairment or other circumstances that are likely to interfere with **normal growth and development or with the capacity to learn.**”

Medical model of disability



New approach to disability

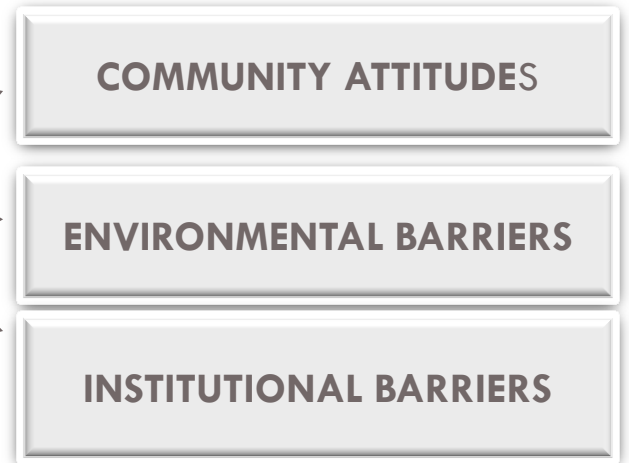
MEDICAL MODEL



Community barriers :
they withdraw from society eg: someone who gets fits during class.
Environmental barriers :
they don't want a person with disability to work at their company.



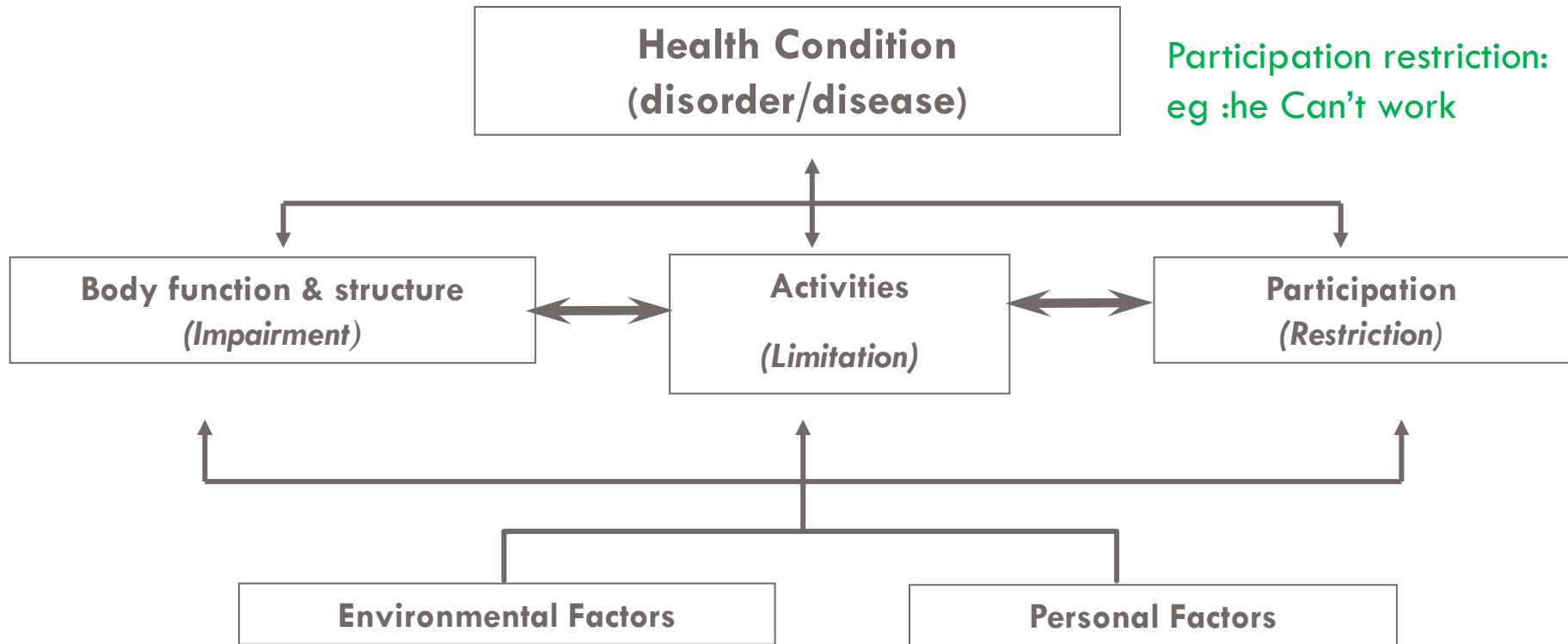
SOCIAL MODEL



International Classification Of Functioning, Disability & Health (ICF)

just for you to know BUT go through it

activity limitations: Eg: He lacks a hand so he can't eat



The International Classification of Functioning, Disability and Health (ICF)

Source: Mont D. Measuring disability prevalence. World Bank Special Protection No. 0706, 2007

Summary - 2

- Disability is the consequence of an impairment caused by a health problem
- Handicap is the result of the **barriers** imposed on the disable; handicapped doesn't exist under the social model

We have to provide everything for this person to participate, it eases the burden on the family and sociality

International Classification Of Functioning, Disability & Health (ICF)

- Activity limitations

Refers to the **difficulties in executing activities** such as walking, eating, taking transport, counting money

- Participation restrictions

Limitation or lack of involvement in any area of life such as education, gainful employment, spending leisure time.

ICF – Estimation of disabilities

A shift from “impairment” approach to a “difficulties in functioning” approach

ICF- Estimation of disabilities: Core questions

1. Do you have difficulty seeing, even if wearing glasses?
2. Do you have difficulty hearing, even if using a hearing aid?
3. Do you have difficulty walking or climbing steps?
4. Do you have difficulty remembering or concentrating?
5. Do you have difficulty with self-care, such as washing all over or dressing?
6. Using your usual (customary) language, do you have difficulty communicating (for example, understanding or being understood by others)?

ICF- Estimation of disabilities: Response and scoring

Core domain

- Seeing
- Hearing
- Mobility
- Cognition
- Self-care
- Communication

Response: Self report

- No difficulties
- Mild difficulties
- Moderate difficulties
- Severe difficulties
- Extreme difficulties

Scoring: composite

- Range is 0 – 100
- Score of 40= significant difficulties
- Score of 50= very significant difficulties

ICF – Estimation of disabilities: Further details

ICF determines

- The **FUNCTION** in which difficulties are experienced
- The body **STRUCTURE** affected
- Restriction in **ACTIVITIES** and **PARTICIPATION**
- Contributing **ENVIRONMENTAL** factors

ICF – Estimation of disabilities: Further details

Function

- Mental
- Sensory and Pain
- Voice and Speech
- Cardiovascular, Haematological, Immunological and Respiratory Systems
- Digestive, Metabolic, Endocrine Systems
- Genitourinary and Reproductive
- Neuromusculoskeletal and Movement-Related
- Functions of the Skin and Related Structures

ICF – Estimation of disabilities: Further details

Structure

- Structure of the Nervous System
- The Eye, Ear and Related Structures
- Structures Involved in Voice and Speech
- Structure of the Cardiovascular, Immunological and Respiratory Systems
- Structures Related to the Digestive, Metabolic and Endocrine Systems
- Structure Related to Genitourinary and Reproductive Systems
- Structure Related to Movement
- Skin and Related Structures

ICF – Estimation of disabilities: Further details

Activities and participation

- Learning and Applying Knowledge
- General Tasks and Demands
- Communication
- Mobility
- Self Care
- Domestic Life
- Interpersonal Interactions and Relationships
- Major Life Areas
- Community, Social and Civic Life

ICF – Estimation of disabilities: Further details

Environmental factors

- Products and Technology
- Natural Environment and Human-Made Changes to Environment
- Support and Relationships Attitudes
- Services, Systems and Policies

ICF – Estimation of disabilities: Further details

Environmental factors: capacity versus performance

- **Capacity** indicates what a person can do in a **standardized environment**, often a clinical setting, **without the barriers** or facilitators of the person's usual environment;
- **Performance** indicates what a person does in the **current or usual environment**, **with all barriers** and facilitators in place

Health conditions associated with disability

Infectious diseases

- HIV/AIDS
- Malaria
- Poliomyelitis
- Leprosy
- Trachoma

Non-communicable diseases

- Diabetes
- Cardiovascular
- Mental disorders
- Cancers
- Respiratory illnesses

Injuries

Arthritis and back pain

Children

- learning disabilities (associated with autism, attention deficit)
- Hearing problems
- Vision disorders
- Speech problems
- Dyslexia
- Cerebral palsy

Health conditions associated with disability

Primary

Starting problem

Reason for
impairment,
activity limitations,
or participation

Secondary

Developed as a
result of the
primary

Results in reducing
functioning, lower
quality of life,
increase health
care cost, and pre-
mature death

Co-morbidity

Unrelated
condition

Results in
difficulties in
managing and
aggravation of
disability

ICF – Estimation of disabilities: Examples

Health condition	Impairment	Activity	Participation
Leprosy	Loss of sensation	Difficulties grasping	Unemployment
Epilepsy	Neurologic	Being on his own	No schooling
Vitiligo	Disfigurement	None	Social relations
Past mental disorders	None	None	Unemployment , social relations

ICF – Estimation of disabilities: Examples for intervention and prevention

	Intervention	Prevention
Health condition	Medical treatment or care	Health promotion, Nutrition, Immunization
Impairment	Medical treatment or care Surgery	Prevention of the development of further activity limitations
Activity limitation	Assistive devices Personal assistance Rehabilitation therapy	Preventive rehabilitation, Prevention of the development of participation restrictions
Participation restriction	Accommodations, Public education Anti-discrimination law Universal design	Environmental change, Employment strategies, Accessible services, Universal design, Lobbying for change

Summary - 3

ICF

- Universal tool for **classification and reporting** of disabilities
- It is a shift from cause to impact
- It is based on the perception of individual functioning or disability as a **dynamic interaction** between health status, personal factors, environmental condition and will have an impact on disability policy and services
- Basis for intervention and prevention

Disabling barriers

- **Inadequate policies and standards** which does not consider the needs of people with disabilities, or existing policies and standards are not enforced.
- **Insufficient funding** for implementation of policies and plans
- **Negative attitudes** leading to rejection and marginalization
- Specialized services: availability, accessibility and quality
- **Lack of accessibility** to transport and information system (sign language)
- **Lack of consultation** and involvement of persons with disability

Lack of statistics = persons with disabilities are not seen

□ Examples:

- policies and standards: eg: ماحنسوي تجهيزات في الحافلات و لا فلوس للكراسي

eg : Africa المتحركة لانو عندنا مثلا نسبة صغيرة منهم فمو لازم

- But in London on the other hand: there are some London buses for these people, we should accommodate and integrate them in the system to give them empowerment and a positive attitudes towards these children.
- Information : knowledge is power , eg many programs now are using sign
- language
- Eg: in turkey's TV series there is an option for people who can't hear :subtitles in their own language to increase their participation.
- Critinism is the only preventable cause for disability : اذا اكتشف بعد الولادة ع
- thyroxin is low طول

Effects of disabling barriers

- **Poor health outcomes** (preventable secondary and co-morbid conditions)
- **Low education attainment**
- **Lower economic participation**
- **Higher rates of poverty**
- **Higher rates of dependency** and restricted participation

Prevention of disabilities

Major interventions provided by general services for prevention of childhood disabilities

- **Pre-marital genetic counseling** (hereditary conditions)
- **Maternal and neonatal care** (ante-natal and natal events)
- **Screening of neonates for hypothyroidism** (cretinism – preventable cause of mental disability)
- **Expanded program on immunization**
- **School services** (growth monitoring and medical evaluation)

Primary prevention of disabilities entails all interventions required for the prevention of underlying health problems

ICF – Estimation of disabilities: Examples for intervention and prevention

	Intervention	Prevention
Health condition	Medical treatment or care	Health promotion, Nutrition, Immunization
Impairment	Medical treatment or care Surgery	Prevention of the development of further activity limitations
Activity limitation	Assistive devices Personal assistance Rehabilitation therapy	Preventive rehabilitation, Prevention of the development of participation restrictions
Participation restriction	Accommodations, Public education Anti-discrimination law Universal design	Environmental change, Employment strategies, Accessible services, Universal design, Lobbying for change

Rehabilitation

Prevent activity limitation ===== Rehabilitation

Outcome of rehabilitation

- Prevention of the loss of function
- Slowing the rate of loss of function
- Improvement or restoration of function
- Compensation for lost function
- Maintenance of current function

Rehabilitation Services – KSA

I don't really know whether this is important to memorize or not :

- (1960'S) Modern medical rehabilitation following an outbreak of poliomyelitis with many victims, mainly children.
- (1970's) the government availed some prosthesis and orthotic centers in some of the MOH hospitals.
- (1980's) the Ministry of Defense and Aviation (MODA) commissioned many medical rehabilitation centers within the Military Hospitals.
- (1980's) Some private hospitals also allocated some rehabilitation beds for people who sustained work related disability and were insured by general organization for social insurance.
- (21st century) rehabilitation centers were opened in few of the MOH hospitals. In addition, there have been some private for non-profit centers, which opened, including Sultan Bin Abdulaziz Humanitarian City
- (Present) many rehabilitation hospitals/ centers, mainly in large cities, such as Rehabilitation Unit of Prince Sultan Military Medical City of Riyadh, Rehabilitation Unit of King Abdulaziz Medical City, National Guard (Riyadh), Rehabilitation Hospital of King Fahad Medical City (Riyadh), King Saud Medical Complex, Rehabilitation Hospital of Al-Hada Military Hospital (Taif) and Riyadh Care Hospital (Private), and Abdulatif Jameel Rehabilitation Center (Jeddah).
- (Present) Disabled Children Association has 7 centers and provides medical, social, and vocational services for children.
- (Present) most of MOH hospitals in different regions of KSA have Medical Rehabilitation Department. Their services are mainly physiotherapy for outpatients.

Addressing barriers to participation restriction

- Rehabilitation: **Building capacity** of persons with disabilities
- Support and assistance: living in a community with provision of assistance services for meeting the needs including **day care programs and home support system**
- Environment: Policies and legislation and interventions for public facilities and transport system to promote participation and decrease dependency and social isolation
- Education: Policies and legislation to complete basic education, inclusion and mainstreaming
- Employment: Policies and legislation regarding employment, training for capacity building, inclusion in employment

Addressing barriers to participation restriction

Ministries

Social development, health, education, employment,
environmental planning

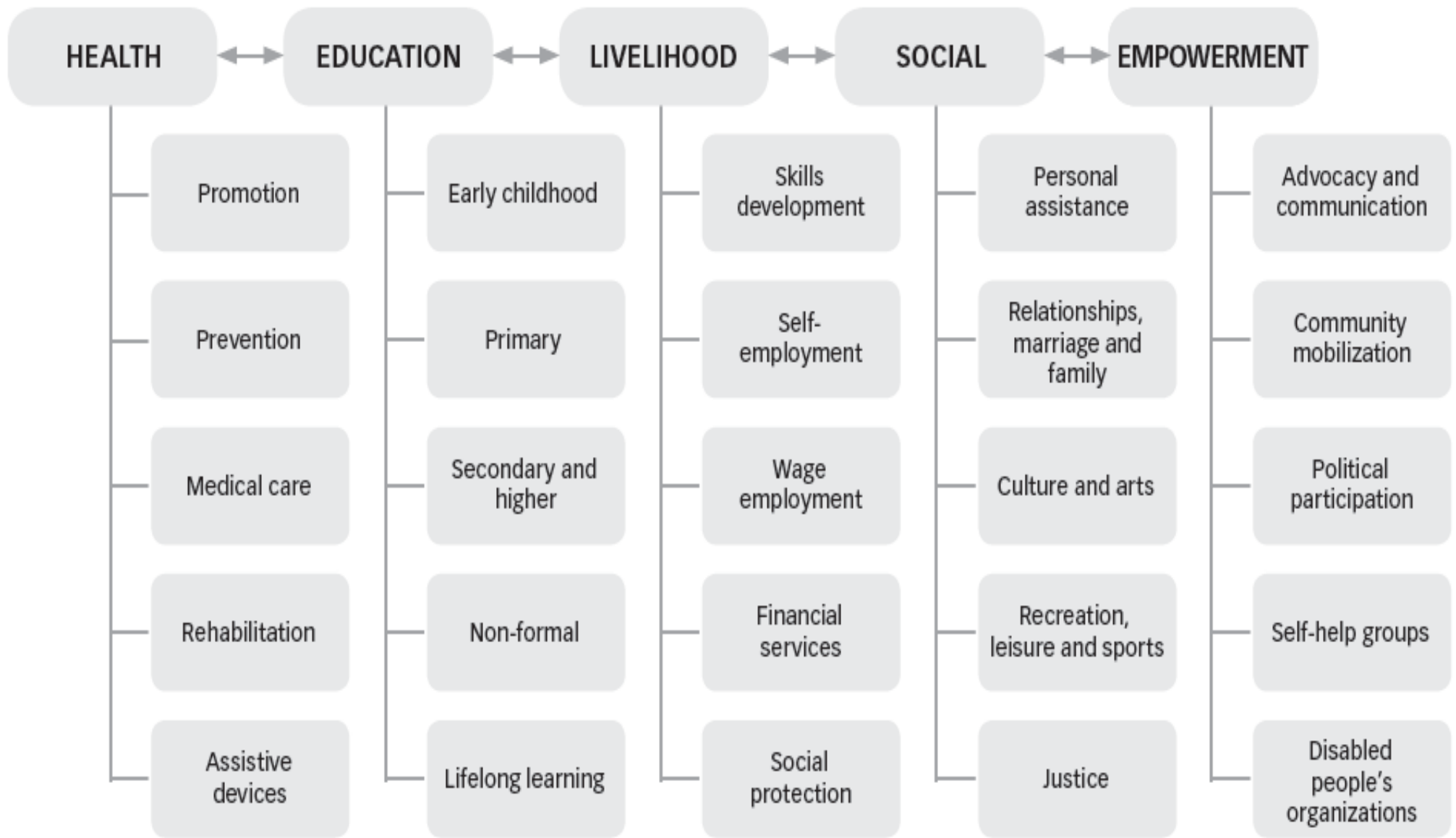
Governmental organizations

Non-governmental
organizations

JOINT RESPONSIBILITY

Community based rehabilitation - Overview

- It is a right-based approach (Convention on the Rights of Persons with Disabilities)
- A strategy within general community development for rehabilitation
- Intended to address the **needs of people living with disabilities and their families**
- Implemented in over 90 countries throughout the world
- CBR aims to
 - Provide rehabilitation,
 - Reduce poverty,
 - Equalize opportunities and
 - Promote the inclusion of persons with disabilities in their communities.



CBR matrix

Link: <http://www.who.int/disabilities/cbr/en/>

Community based rehabilitation - Overview

- The implementation of CBR is multi-sectorial involving people with disabilities, their families, organizations, and communities, and the relevant governmental and non-governmental sectors
- The expected outcomes are to **provide health, education, vocational, social,** and other services.

Community based rehabilitation – Success story

Succeeded in challenging negative attitudes in rural communities, leading to greater visibility of and participation by people with disabilities

A three-year project in a disadvantaged community near Allahabad, India, resulted in children with disabilities attending school for the first time, more people with disabilities participating in community forums, and more people bringing their children with disabilities for vaccination and rehabilitation.

MCQS

□ The **main cause** of disability in KSA is ?

A: RTA

B: Malaria

C: cerebral palsy and developmental delay

Answer : C

Resources

- *Al Jadid M. Disability in Saudi Arabia. Saudi Med J 2013; 34 (5): 453-60*
- World Report on Disability. WHO, 2011
- The International Classification of Functioning, Disability and Health (WHO, 2002)
- Community Based Rehabilitation
(<http://www.who.int/disabilities/cbr/en/>)