

بهداشت دوره سالمندی

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

حضرت رسول اکرم (ص)

وجود سالمتان در بین شما باعث برکت و نعمت های الهی میشود

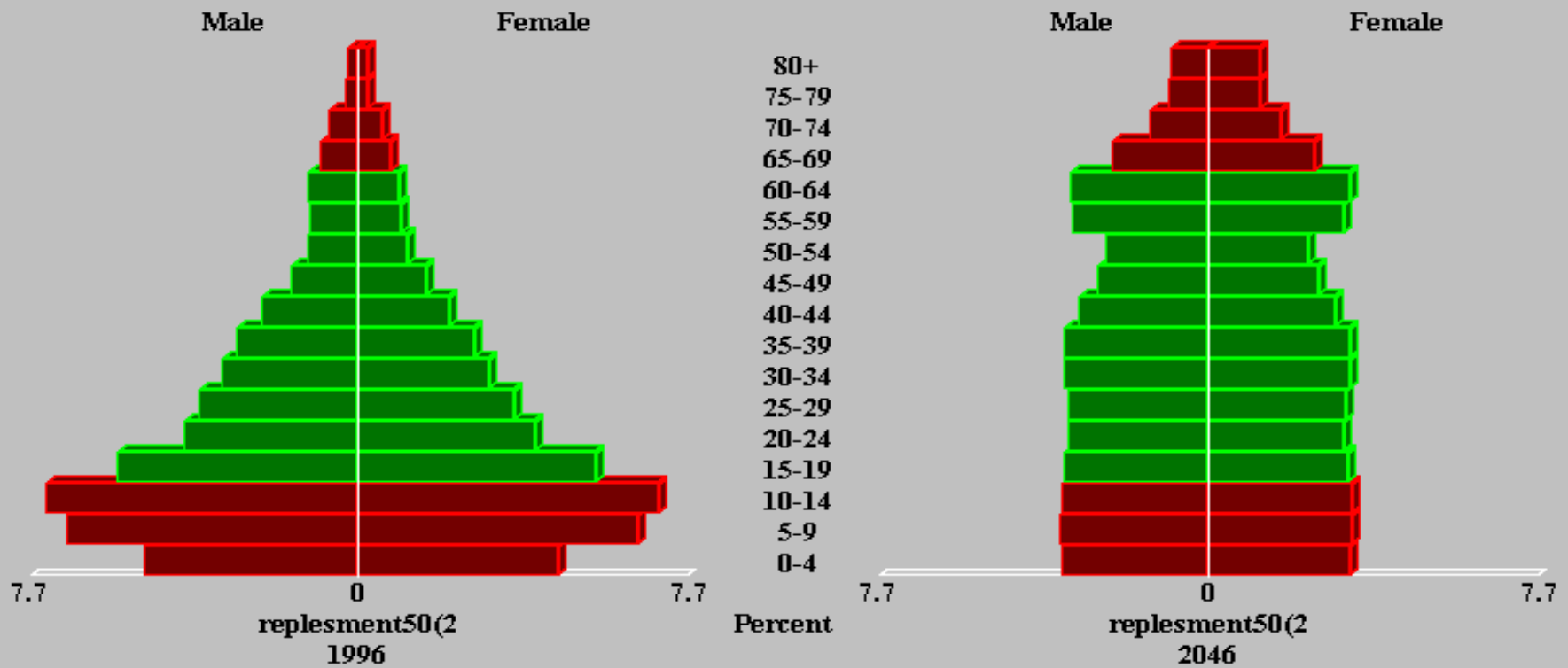
(بحار الانوار)



جوانی چنین گفت روزی به پیری که چون است با پیریت زندگانی؟
بگفت اندرین نامه حرفی است مبهم که معنیش جز وقت پیری ندانی
(پروین)

هرم جمعیت در ۵۰ سال آینده

All Age Groups



The Aging Population

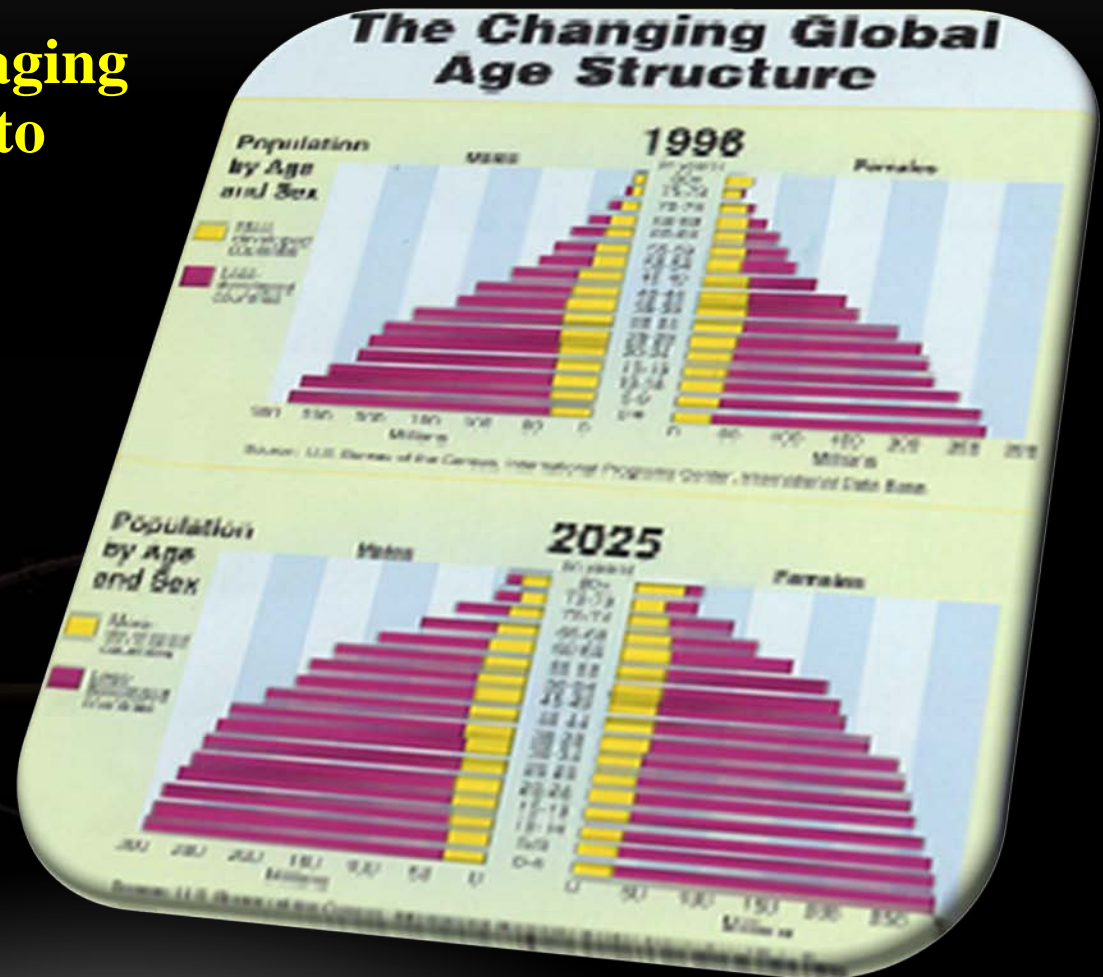
- **Dramatic increases in aging population from 1996 to projected 2025**

- **Age 60 – 64**

- 1996: 70 million
- 2025: > 100 million

- **Age > 80**

- 1996: 30 million
- 2025: 80 million



Population Pyramid

Iran: 2000

MALE

FEMALE

Iran: 2009

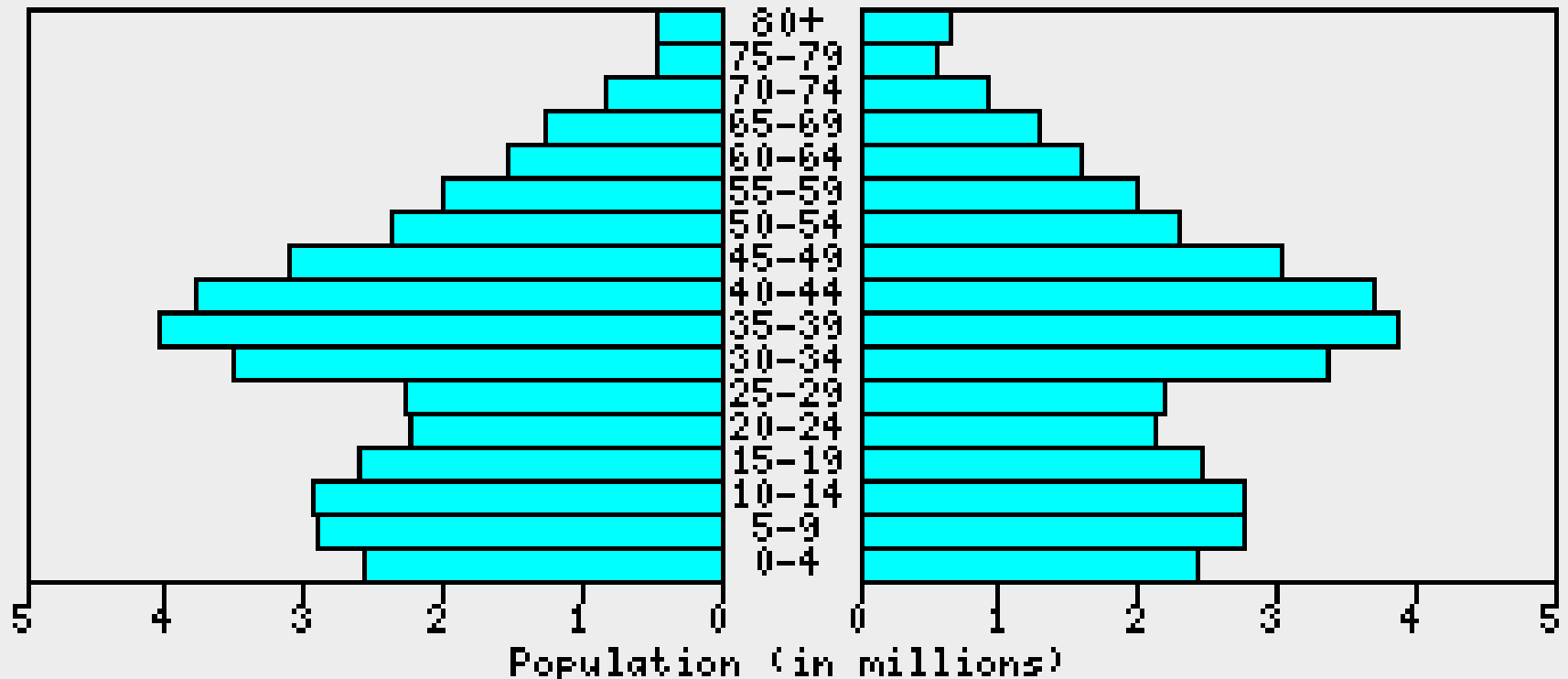
MALE

FEMALE

Iran: 2025

MALE

FEMALE



Source: U.S. Census Bureau, International Data Base.

• پس از پنجه نباشد تن درستی

بصر کندی پذیرد پای سستی

• چو شصت آمد نشست آمد پدیدار



• به هشتاد و نود چون در رسیدی

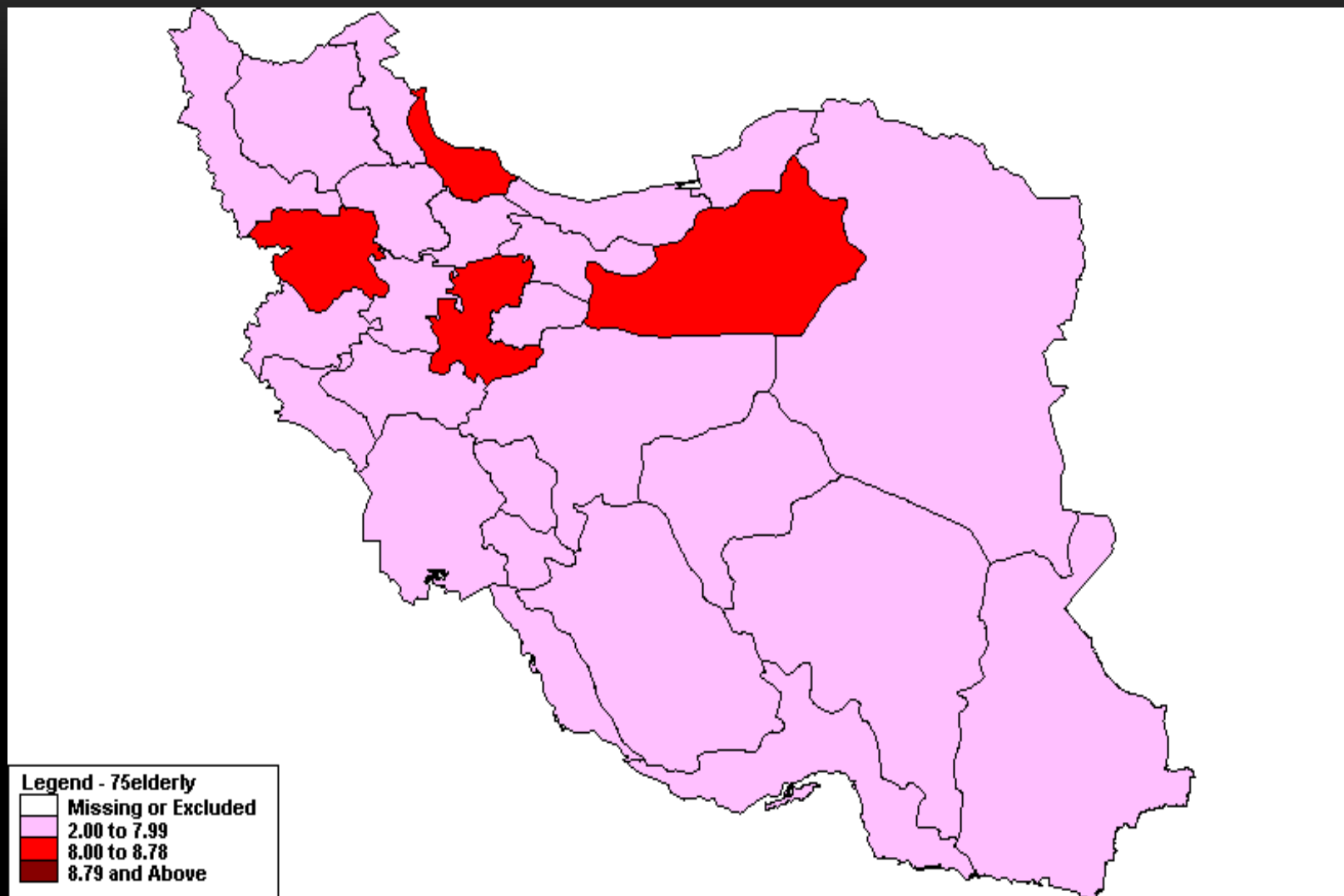
بسا سختی که از گیتی کشیدی

• از آن جا گر به صد منزل رسانی

بود مرگی بصورت زندگانی



نسبت جمعیت بالای ۶۰ سال بر اساس سرشماری ۱۳۷۵

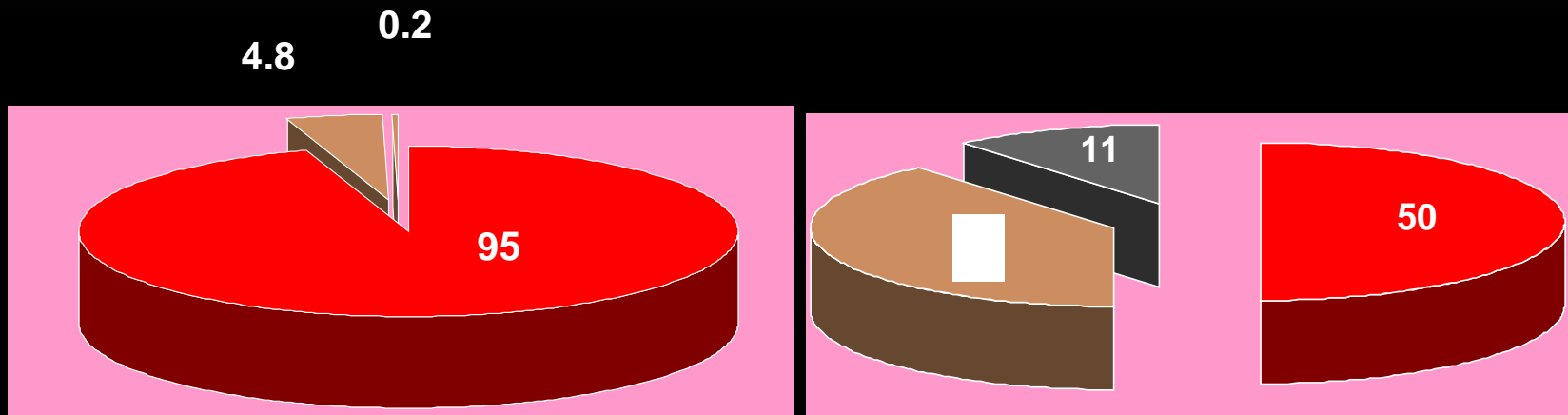


امید به زندگی (Life Expectancy)

- متوسط سالهائی که انتظار میرود که یک گروه سنی زندگی کنند.

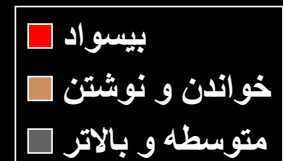
**average number of years of
life remaining at a given age.**

وضعیت سواد سالمندان کشور

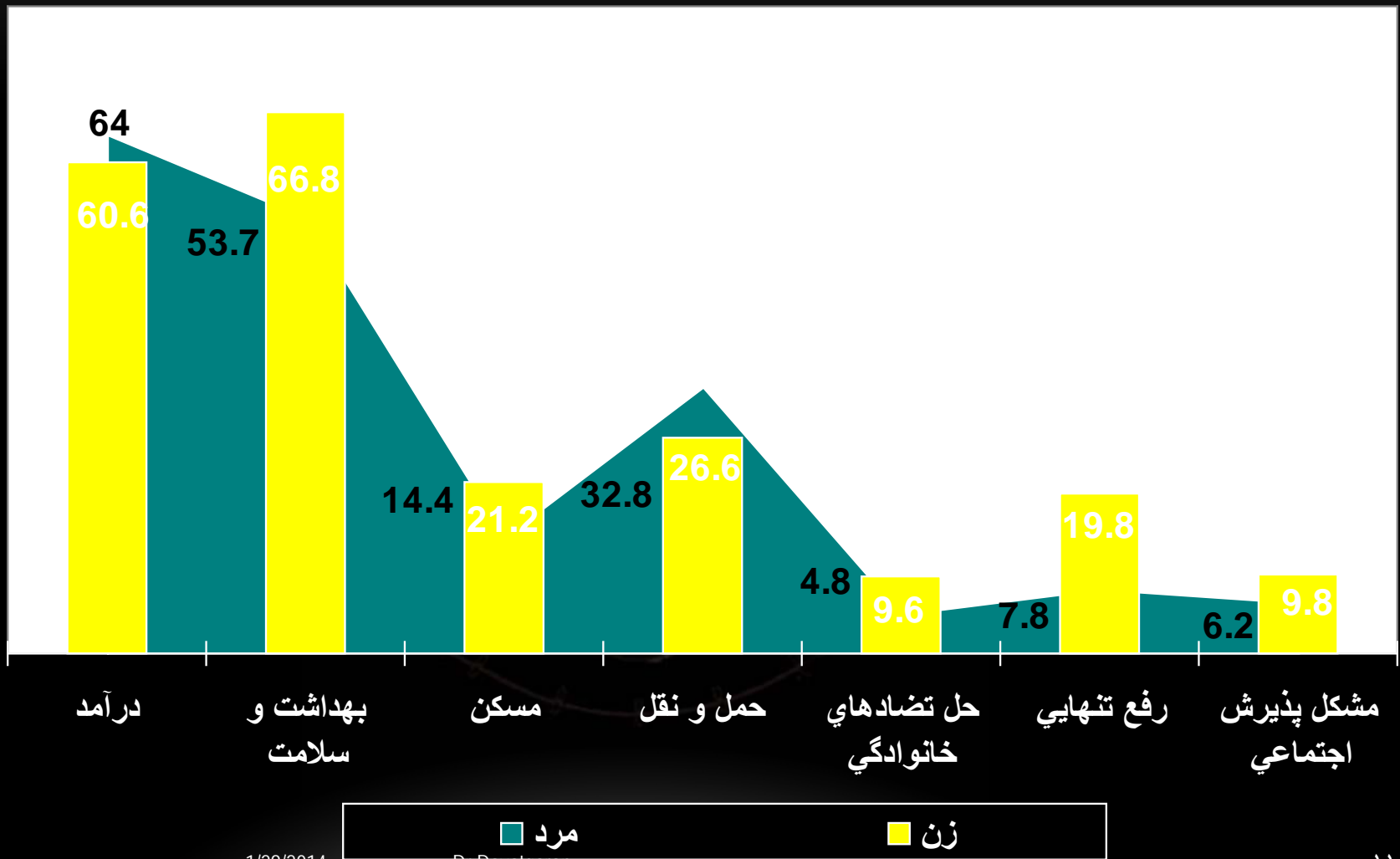


زنان روستایی

مردان شهری



نسبت نیازهای سالمندان



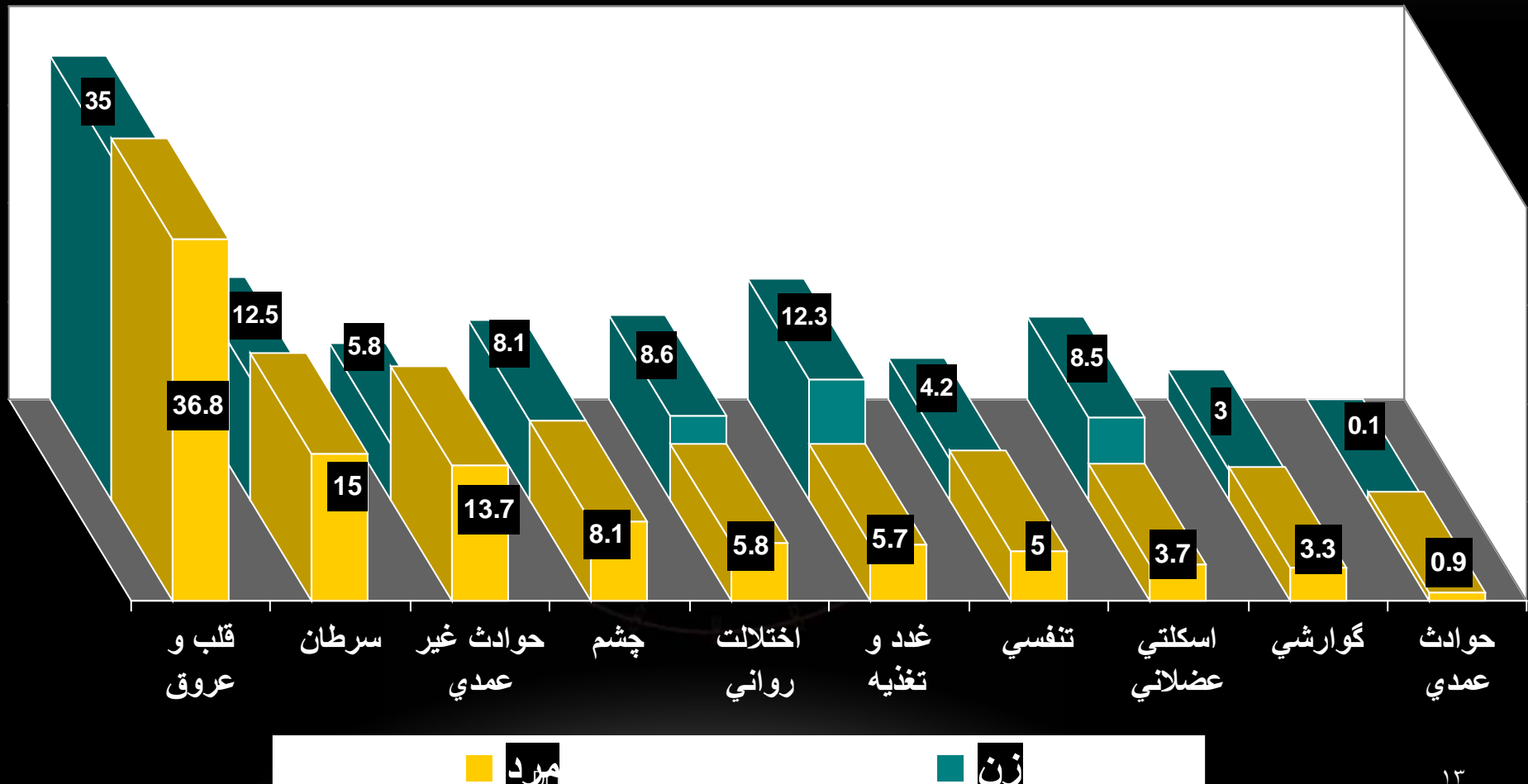
Growing up gracefully

پیری نابینا و مسن به تکدی مشغول بود حضرت با ناراحتی شرسید این کار چیست؟ گفتند ای امیر

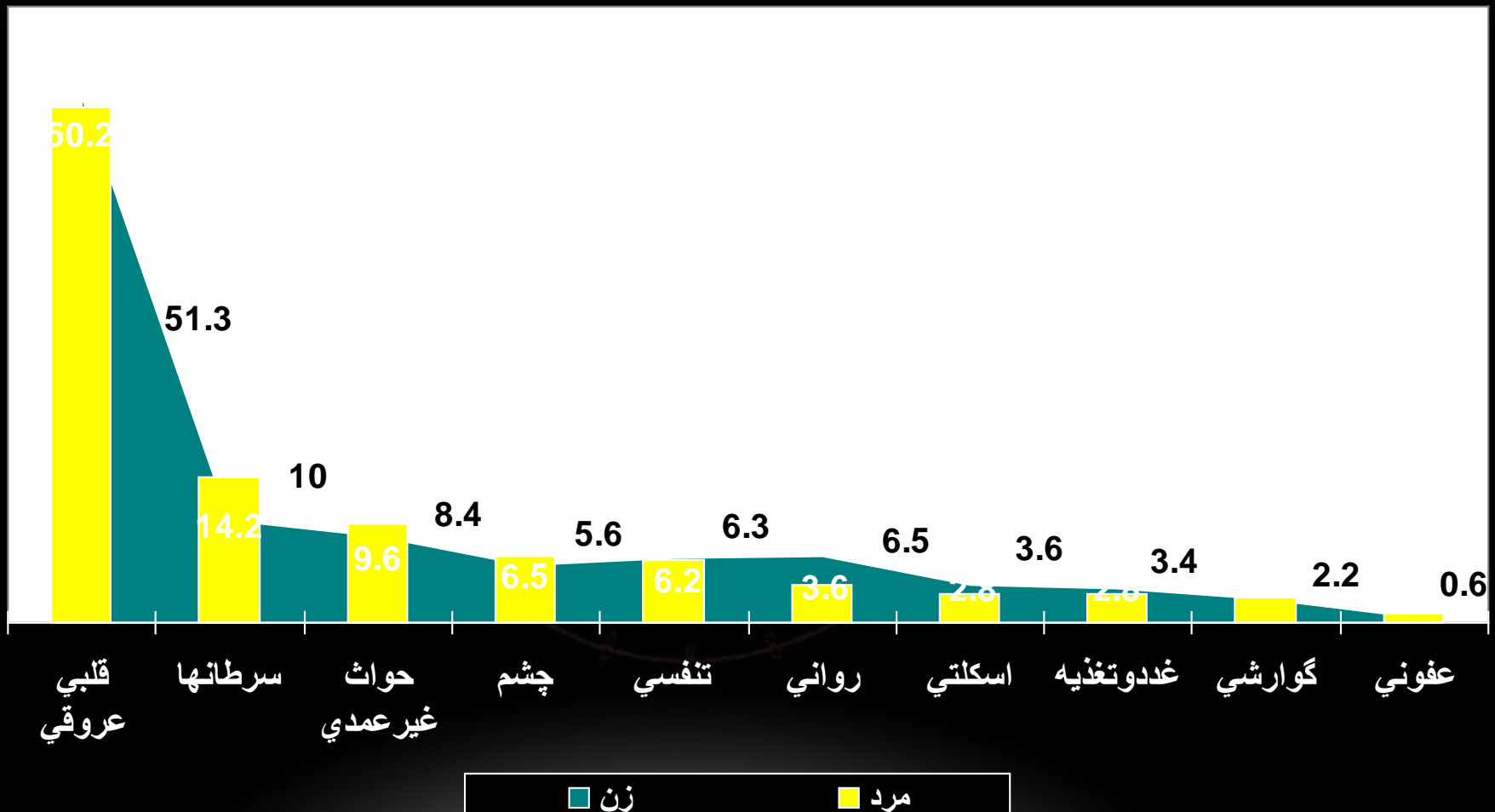
مومنان او نصرانی است امام علی با ناراحتی فرمود او را در دوران جوانی به کار وا داشتید تا پیر و از کار

افتاده شد حال او را از حقش محروم ساخته‌اید؟ برایش از بیت المال مستمری در نظر بگیرید.

وضعیت سلامت سالمندان ۶۰-۶۹ ساله



وضعیت سلامت سالمندان ۷۰ سال و بالاتر

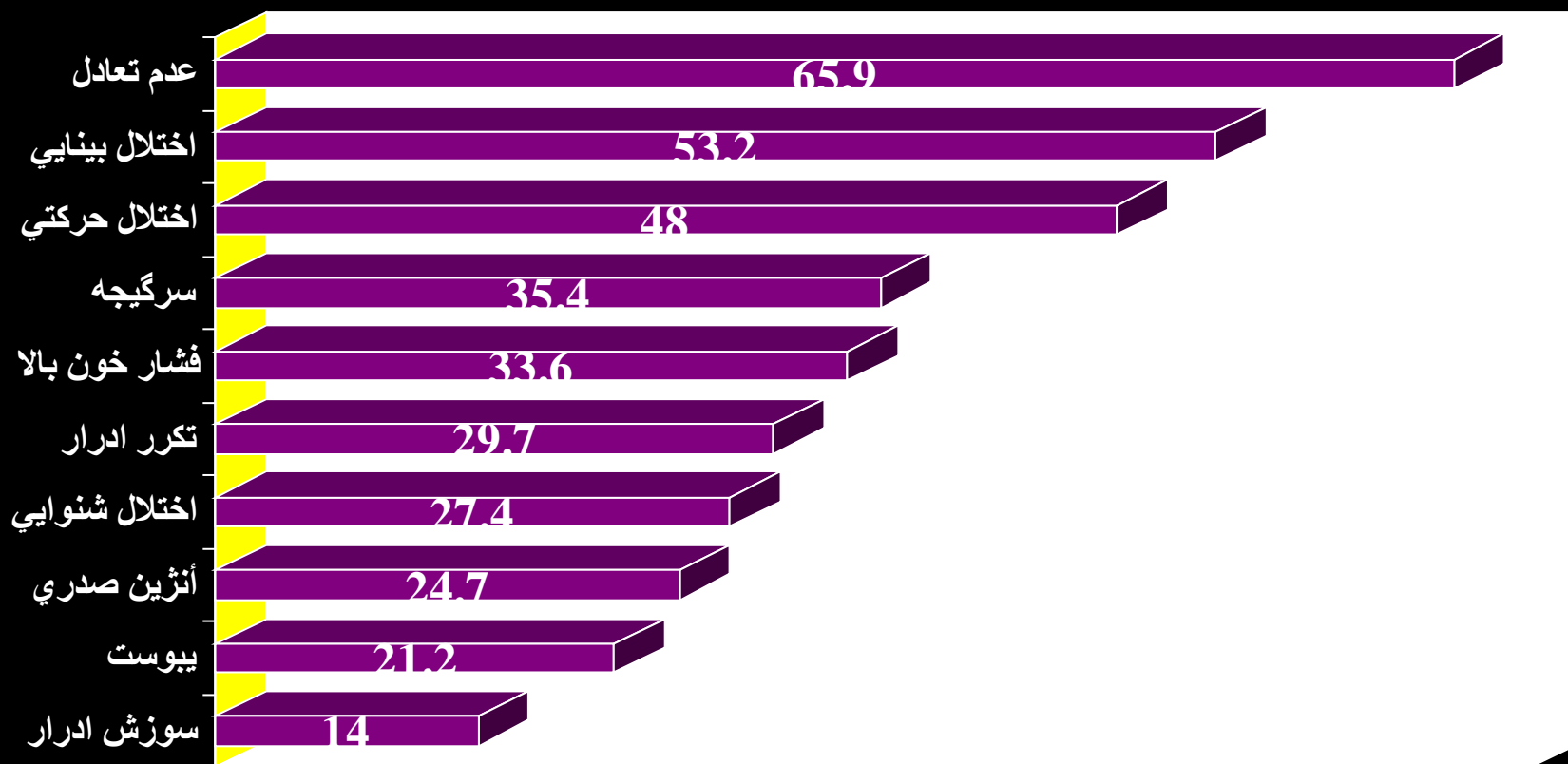




تازه جوانی ز ره نیشخند گفت به پیری که کمانت به چند؟

پیر بخندید و بگفت ای جوان چرخ تورا نیز دهد رایگان

برخی اختلالات شایع سالمندان



- جمعیت کل کشور در سال ۸۵: 70,495,782
- جمعیت سالمند کشور در سال 85 : 5,121,043
- تعداد افراد دارای یک معلولیت یا بیشتر در استان تهران:
۱۵۱۸۹۹ نفر
- تعداد افراد ۱۰۰ ساله و بیشتر در استان تهران: ۱۸۹۱ نفر
- تعداد افراد ۱۰۰ ساله و بیشتر در شهر تهران: ۱۱۳۸ نفر

■ استان تهران:

- کل جمعیت: 13,422,366
- جمعیت سالمند: 973,183
- جمعیت سالمند دارای درآمد بدون کار: 385,200

■ شهر تهران:

- کل جمعیت: 7,975,679
- جمعیت سالمند: 686,431
- درصد سالمندی: ۸.۶
- جمعیت سالمند دارای درآمد بدون کار: 293,815

گروههای سنی سالمندان تهرانی که به صورت انفرادی زندگی می کنند

تعداد سالمندان	گروههای سنی
۱۴۵۶۱	۶۰-۶۴
۱۸۲۱۷	۶۵-۶۹
۲۲۰۴۳	۷۰-۷۴
۳۴۶۸۵	۷۵ به بالا
۸۹۵۰۶	جمع

**پیری جمعیت اولین رویداد موفقیت
آمیز برای توسعه سیاست های
بهداشتی، اجتماعی و اقتصادی
است.**

**گروه‌ها رزم براندازند
دبیر کل سازمان جهانی بهداشت سال ۱۹۹۹**

برنامه سلامت سالمندان

ارایه مراقبت های ادغام یافته

مدیریت ادغام یافته
ناخوشی های سالمند

خدمات درمانی

تربیت
نیروی انسانی

بیمه
1/29/2014

مراقبت از سالمند به
ظاهر سالم

غربالگری

واکسیناسیون

آموزش شیوه زندگی سالم

پرسنل
بهداشتی درمانی

سالمندان

جامعه

سالم

بیمار

SIXTH EDITION

Hazzard's Geriatric Medicine and Gerontology



Jeffrey B. Halter
Joseph G. Ouslander
Mary E. Tinetti
Stephanie Studenski
Kevin P. High
Sanjay Asthana

Dr.Davatgaran

Rehabilitation *and* Health Assessment

APPLYING
ICF GUIDELINES

ELIAS MPOFU
THOMAS OAKLAND

EDITORS

SPRINGER PUBLISHING COMPANY

Edition 3



Functional Performance in Older Adults

Bette R. Bonder
Vanina Dal Bello-Haas

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Definitions

Geriatrics

- A branch of medicine which deals with the clinical, rehabilitative (remedial), psycho-social and preventive aspects of illness in elderly people.

Gerontology

- The scientific approach to all aspects of ageing (health, sociological, economic, behavioral, environmental) (*WHO Chronicle 1974;28:487-494*)

Icons of Gerontology and Geriatrics



Goals of Geriatric Medicine

- The goal of geriatric medicine is to **maximize the positive aspects of ageing**. The compression of morbidity therefore is a major goal of geriatrics, which can be achieved by delaying the onset of chronic disease and maximizing function despite that disease.





The Story of Life: a Postcard from 19th Century Germany



***Courtesy of Elizabeth Barrett-Connor**

Why Ageing? Trends in birth rates

- Fewer births
- More survivors of infancy
- Decreased mortality in adult
- Health improvement

How does Frailty happen?

- Virtually before our eyes.
- Family care givers are so concerned about the “**Big Staff**”-*cancer, MI, Stroke*- and overlook the less obvious: *loss of appetite, ADL, Depression*.
- Since Frailty is not a disease, it can slip through the *cracks*.

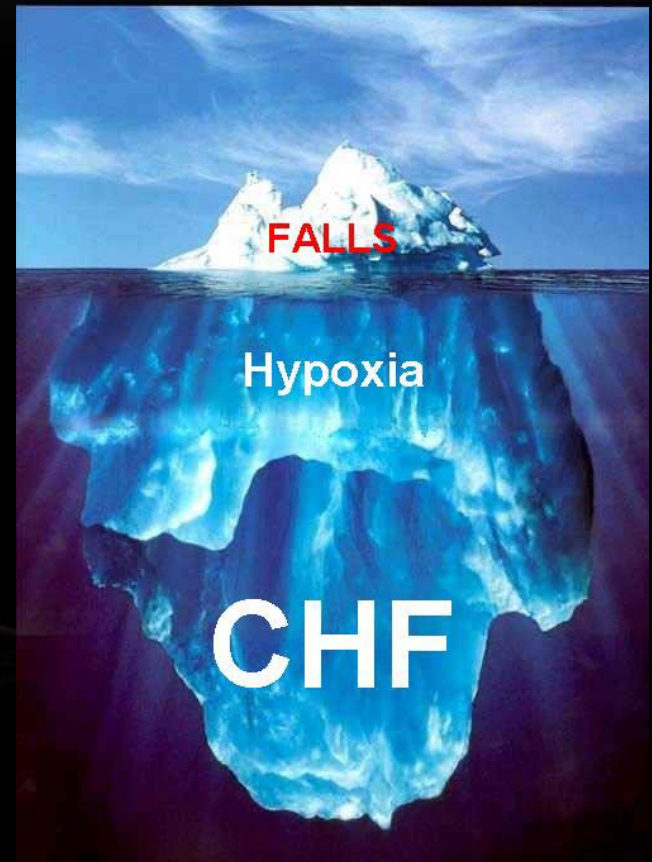
Approach to Illness in the Older Patient

- In older adults, the presenting problem is just the “tip of the iceberg” of a pathological process, which takes careful diagnostic assessment to uncover.
- For example, a certain elderly patient is having recurrent falls. Why?



Approach to Illness in the Older Patient

- After some history taking and some simple laboratory tests, you find this patient has **exercise induced hypoxia**.
- And why the hypoxia? Because of the true but hidden diagnosis of **Congestive Heart Failure** that had not been diagnosed by anyone previously and, now requires treatment.
- And just where did that ice-berg come from (i.e.. Why are they in failure now? How much is reversible?)?



- 
- Their history:
 - “giants”
 - “silent”
 - “atypical”

Illness in old age often presents atypically, or is often masked. This is determined by change in function, not by change in parameters such as cardiac index, serum level of creatinine. For example:

Silent MI or Urinary Tract Infection presenting as confusion

Who do we see?

Geriatric Syndromes

- Confusion
- Falls
- Delirium
- Immobility
- Incontinence
- Pressure ulcers
- Social breakdown
- Loss of independence
- Depression
- Multiple medical problems and medications
- Elder abuse

The Giants of Geriatrics

The Big Three 'I's

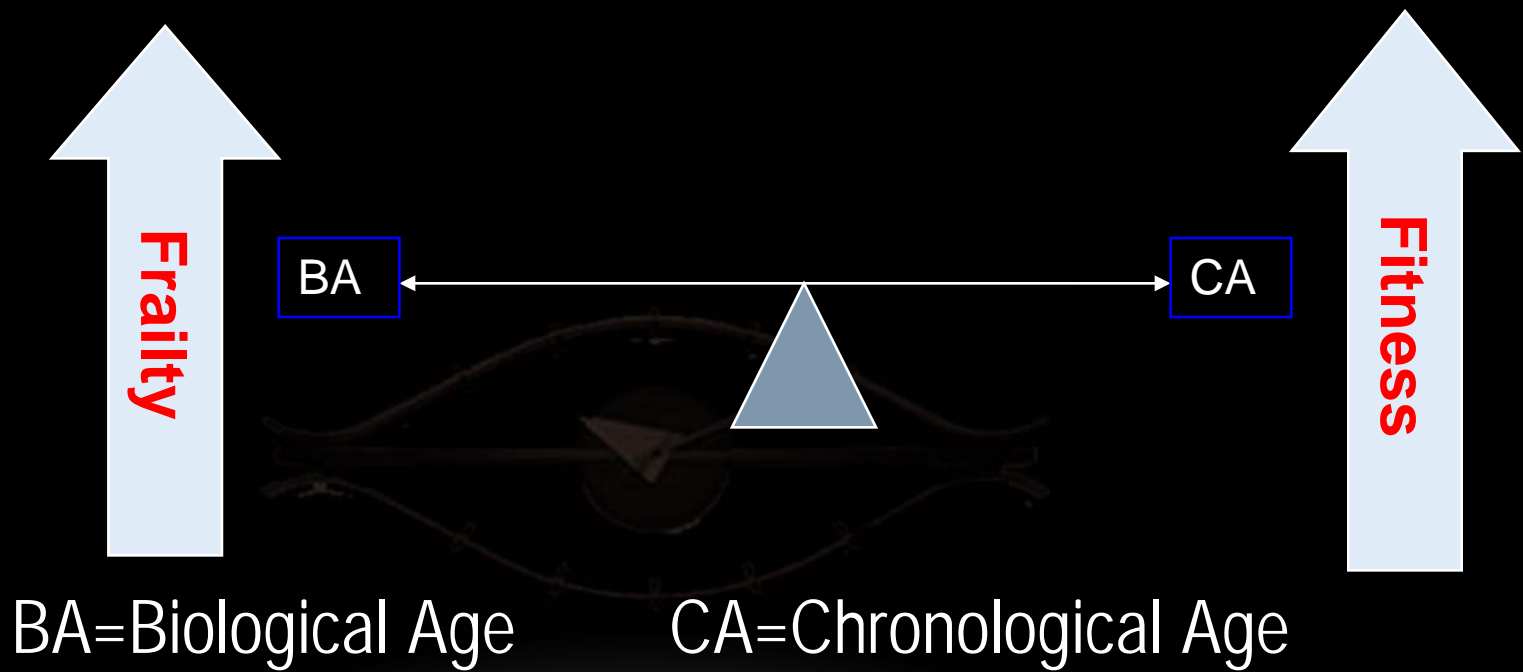
- Intellectual failure
- Instability and immobility
- Incontinence

Age is just a number

“How old would you be if you didn't know how old you were?”

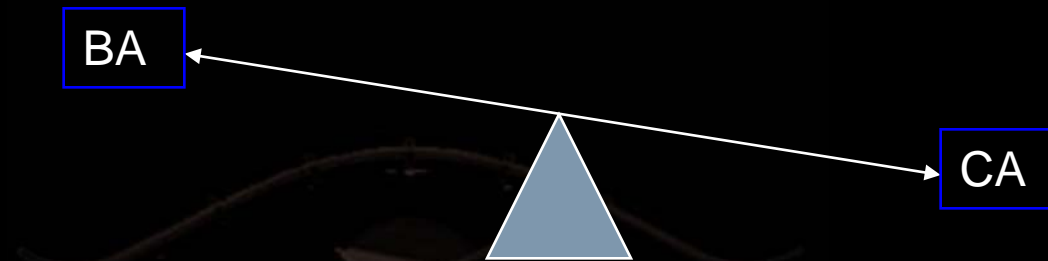
Satchel Paige

Fitness and Frailty



Fitness and Frailty

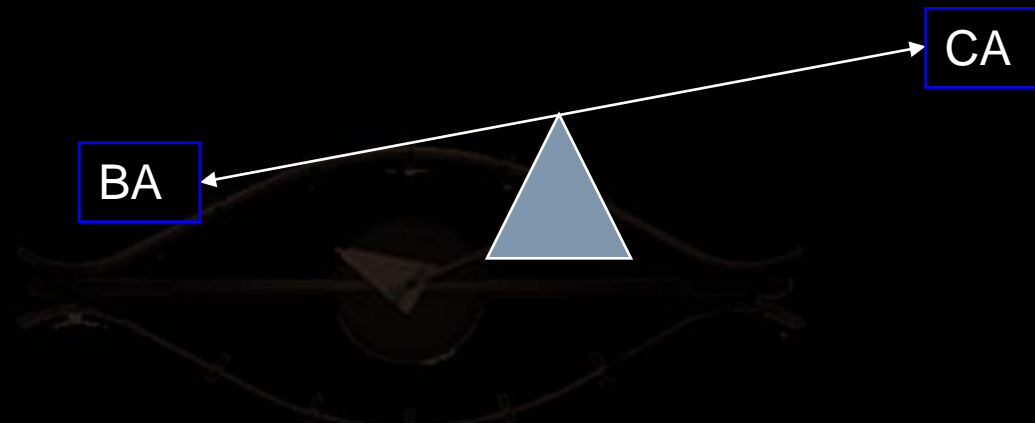
Frail Elderly



BA (Biological Age) $>$ cA (Chronological Age)

Fitness and Frailty

Fit Elderly



BA (Biological Age) $<$ cA (Chronological Age)



CGA: Structure & Setting

- Comprehensive geriatric assessment may be done in:
 - Acute care,
 - Psychiatric, or rehabilitation hospitals,
 - Nursing homes,
 - Outpatient or freestanding clinics, the offices of primary care physicians, or
 - In the patient's home.

The Multi-disciplinary Geriatric Team

- **Core Members:**

- A geriatrician or expert internist (Head of Team)
- Nurse (Coordinator)
- Social Worker
- PT
- OT
- GP
- Dietician

- **Supporting Members:**

- Speech Therapist
- Psycho-geriatrician
- Clinical psychologist
- Cardiologist
- Neurologist
- Psychiatrist
- Clinical Psychologist
- Ophthalmologist
- Orthopedist
- Physiatrist
- ENT Specialist
- Gynecologist
- Urologist
- Rheumatologist
- Endocrinologist



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- To avoid entry (or re-entry) into hospital of a frail older person, or to simply **improve their quality of life** by paying attention to matters that have been neglected by others, a Comprehensive Geriatric Assessment can prove very helpful
- It **differs from the conventional medical** assessment by its attention to many different functional and cognitive domains, as well as attention to preventative health and the current socio-environmental situation.
- **The focus is on function, not cure alone.**

Important Concepts in Aged Care

- To keep the elderly **in their own homes** for as long as possible with appropriate support for themselves and their caregivers.
- To provide appropriate **continuity of care** from the acute hospital setting through to the community setting.
- To develop a **wide range of options** providing help and support to the elderly.
- To increase **links between those services** involved in care for the aged and disabled.
- To provide **appropriate Assessment, Diagnosis , Treatment & Rehabilitation**

What do we do?

- Clinical care
 - Outpatient Clinics
 - Hospital
 - Retirement and nursing homes
 - Usually over 60, but not exclusively
- Research
- Education
- Advocacy



Summary

- Ageing is a (the) **major human achievement of the 20th century**
- Iran is **turning to an Ageing society**
- The focus of geriatric medicine is on **functional independence**, (not cure only) aims to improve quality of life.
- CGA is usually initiated by a referral system
- Conducted by a core team and holistic approach
- ***The right service at the right time in the right place***

You can't help
getting older,
but you don't have
to get old.
(GEORGE BURNS)



Rehabilitation
is the multi- and interdisciplinary patient-
oriented management of
functioning and health of people with a
condition



سازمان بحسنیرتی کشور

Models for Disablement Process [ICIDH of WHO – 1980]

- *Disease* : Cellular Level
- *Impairment* : Tissue , Organ , System Level
- *Disability* : Personal Level
- *Handicap* : Social , Environmental Level

STATE
WELFARE
ORGANIZATION

DEPUTY OF
REHABILITATION
AND
PREVENTION
OF
DISABILITIES

ICIDH - 1980

Impairment...any loss or abnormality of psychological, physiological, or anatomical structure or function

Disability ... any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being

Handicap...a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfillment of a role that is normal (depending on age, sex, and social and cultural factors), for that individual

Disease or disorder



سازمان بھسیرتی کشور

3 Models of Health:

Bio-medical:

Disease / Disorder

Behavioural:

Smoking, Eating habit, Inactivity

Socio-environmental:

Poverty, Unemployment, Powerless

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سازمان بحران‌های کشور

Cardiovascular Disease:

Bio-medical:

Hyper tension,
Hyper Cholestroemia

Behavioural:

Life Style

Socio-environmental:

Living and Working Condition

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سازمان بھرسیرتی کشور

Cardiovascular Disease:

Bio-medical:
Treatment/ Drugs

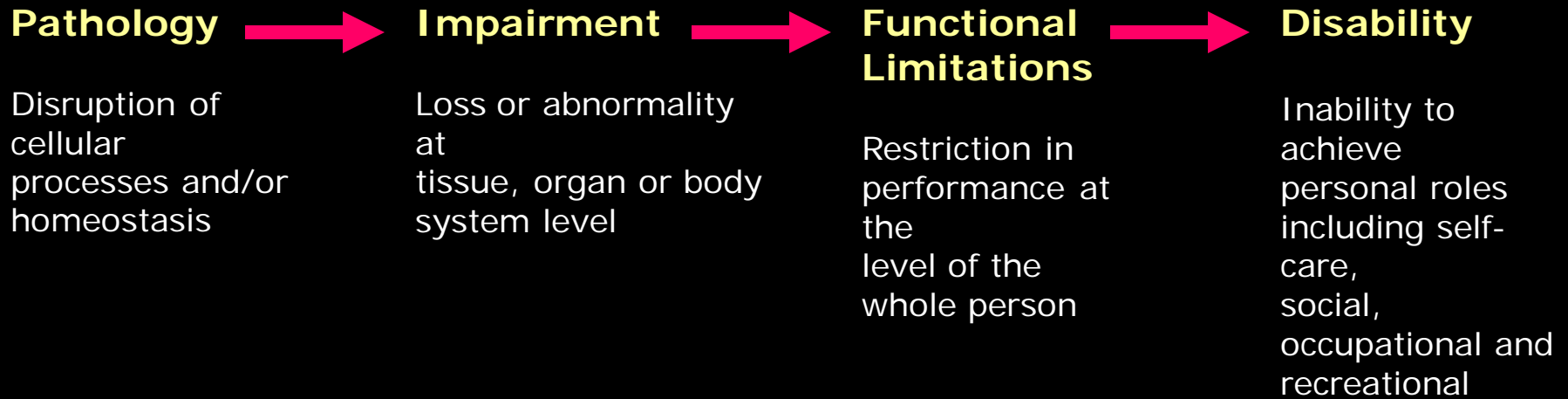
Behavioural:
Health Education

Socio-environmental:
**Advocacy, Policy
Change, Community Mobilization**

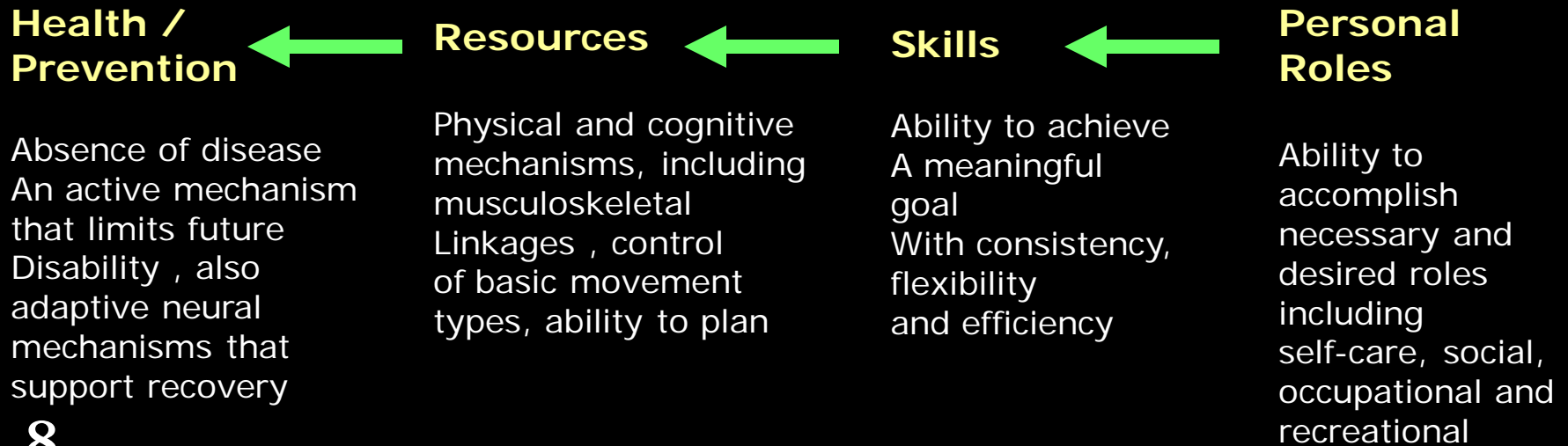
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The Nagi's Model of Disabliment :



Rehabilitation is the Mirror Image of Disabliment:

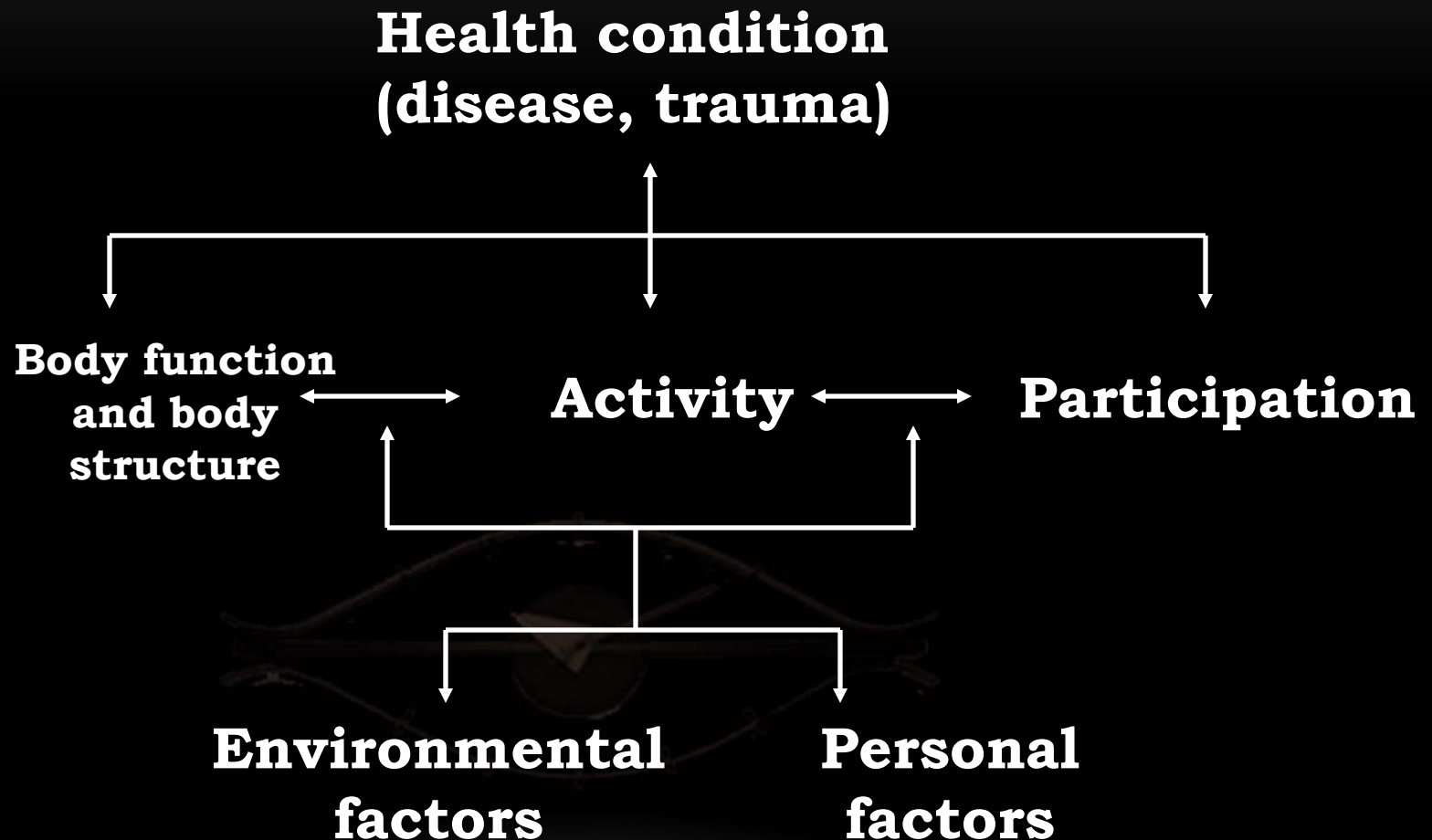


Nagi Model

Disablement: the various impacts of pathologic conditions on the functioning of specific body systems, basic human performance, and people's functioning in necessary, expected, and personally desired roles in society.

Pathology	Impairment	Functional limitation	Disability
<p>Damage or disruption of <i>cellular</i> processes, homeostasis, or the structural integrity of body parts</p>	<p>Loss or abnormality at <i>tissue, organ, or body system level</i></p>	<p>Restrictions in performance at the <i>level of the whole person</i></p>	<p>Inability to fulfill one's desired or necessary roles, both personal and social, at the <i>level of the person's relation to society</i></p>
Examples	Examples	Examples	Examples
<ul style="list-style-type: none"> • infarction of neurons in precentral gyrus of cerebral cortex • fracture of distal tibia • transtibial amputation of left leg • tear of anterior cruciate ligament of knee • viral infection of lung tissue (right lower lobe) 	<ul style="list-style-type: none"> • paralysis of lower extremities • weakness of right biceps • impaired sensation left foot • restriction in right hip ROM • impaired proactive balance control • inadequate foot clearance during gait • poor coordination of reaching and grasping movements • inability to cough 	<ul style="list-style-type: none"> • inability to walk on level surfaces • inability to dress oneself • inability to prepare a meal • inability to lift a carton weighing more than 30 pounds • inability to walk up and down a flight of stairs 	<ul style="list-style-type: none"> • inability to care for oneself without assistance • inability to work at normal occupation • inability to fulfill role as spouse or parent • inability to play golf

The biopsychosocial model of functioning and disability



Contextual factors

Body Function & Structure

- **Body functions** are physiological functions of body systems, including psychological functions
- **Body structures** are anatomical parts of the body, such as organs, limbs and their components

- Impairments



Activity & Participation

- Activity is the execution of a task or action by an individual. It represents the individual perspective of functioning.

Activity limitations

- Participation is involvement in a life situation. It represents the societal perspective of functioning.

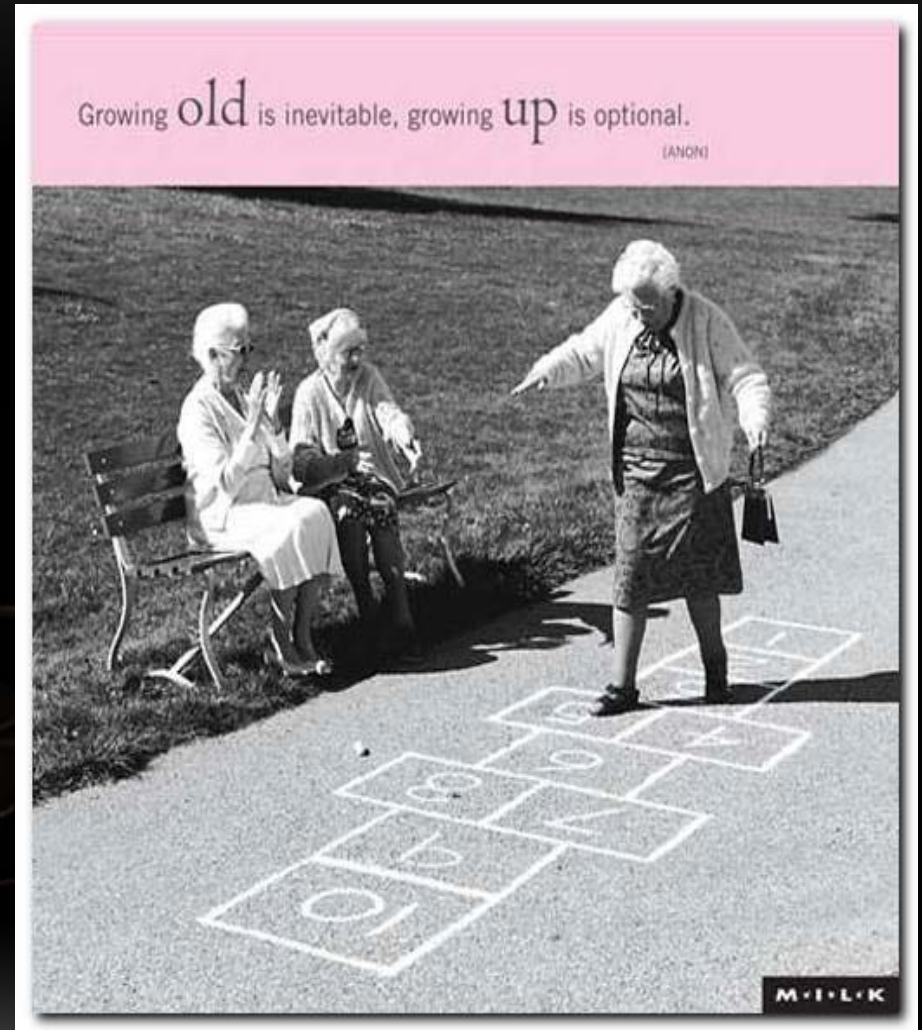
Participation restrictions

Environmental Factors

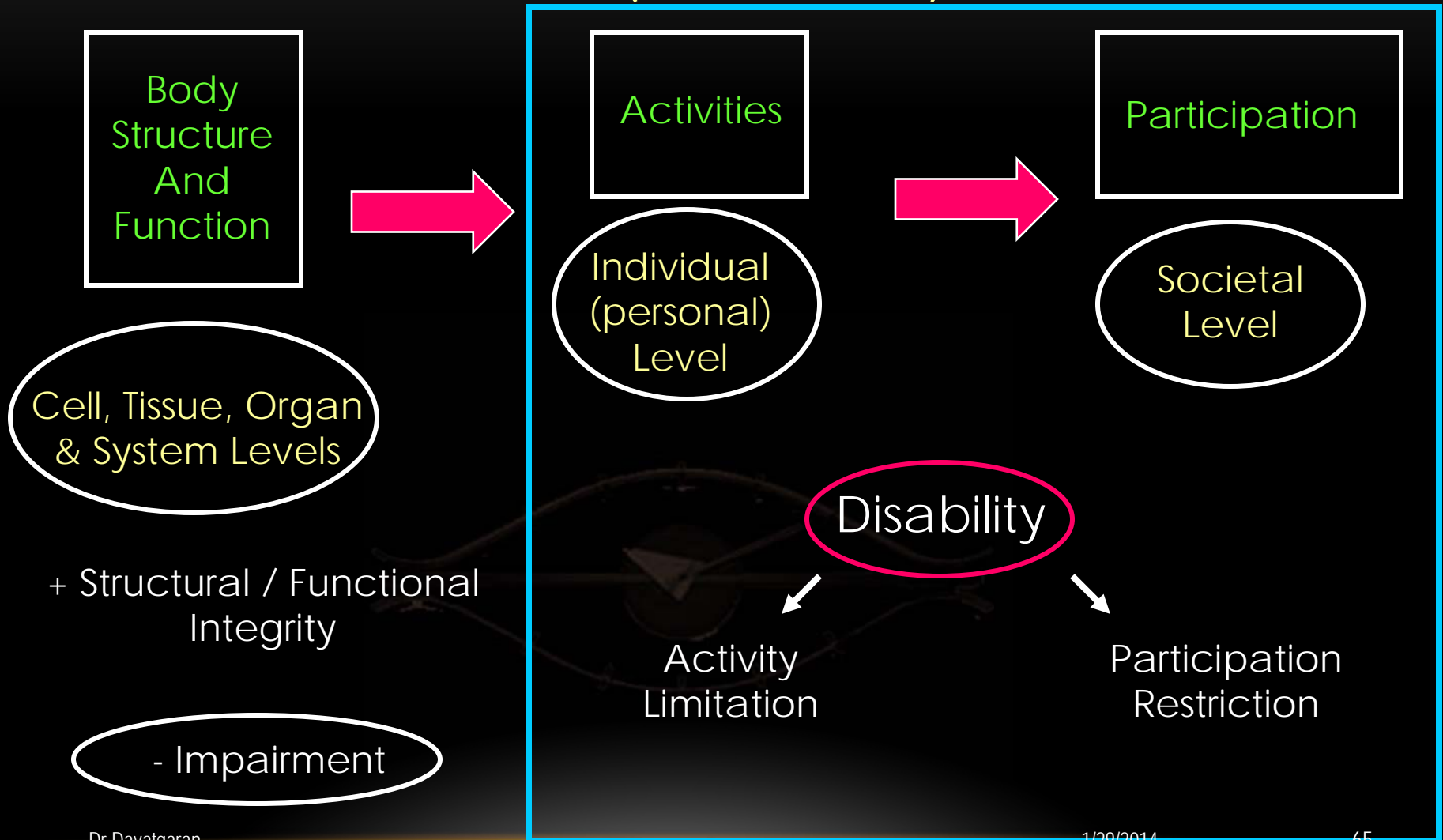
- Environmental factors make up the physical, social and attitudinal environment in which people live and conduct their lives
- Environmental factors are external to individuals and can have positive () or negative () influence on the individual

Personal Factors

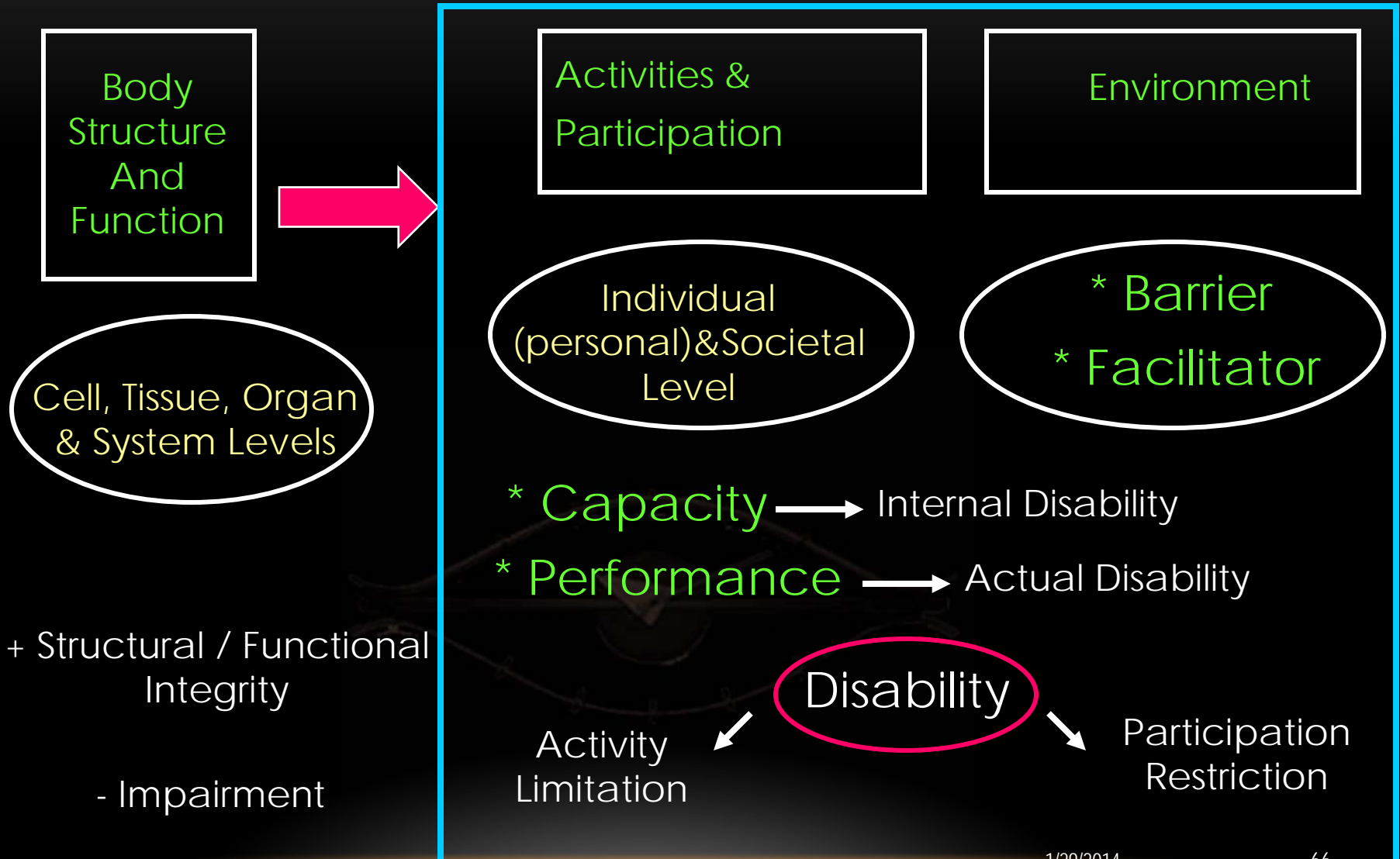
- e.g. gender, age, race, fitness, lifestyle, habits, social background, other health conditions ...



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



ICF (WHO, 2001)

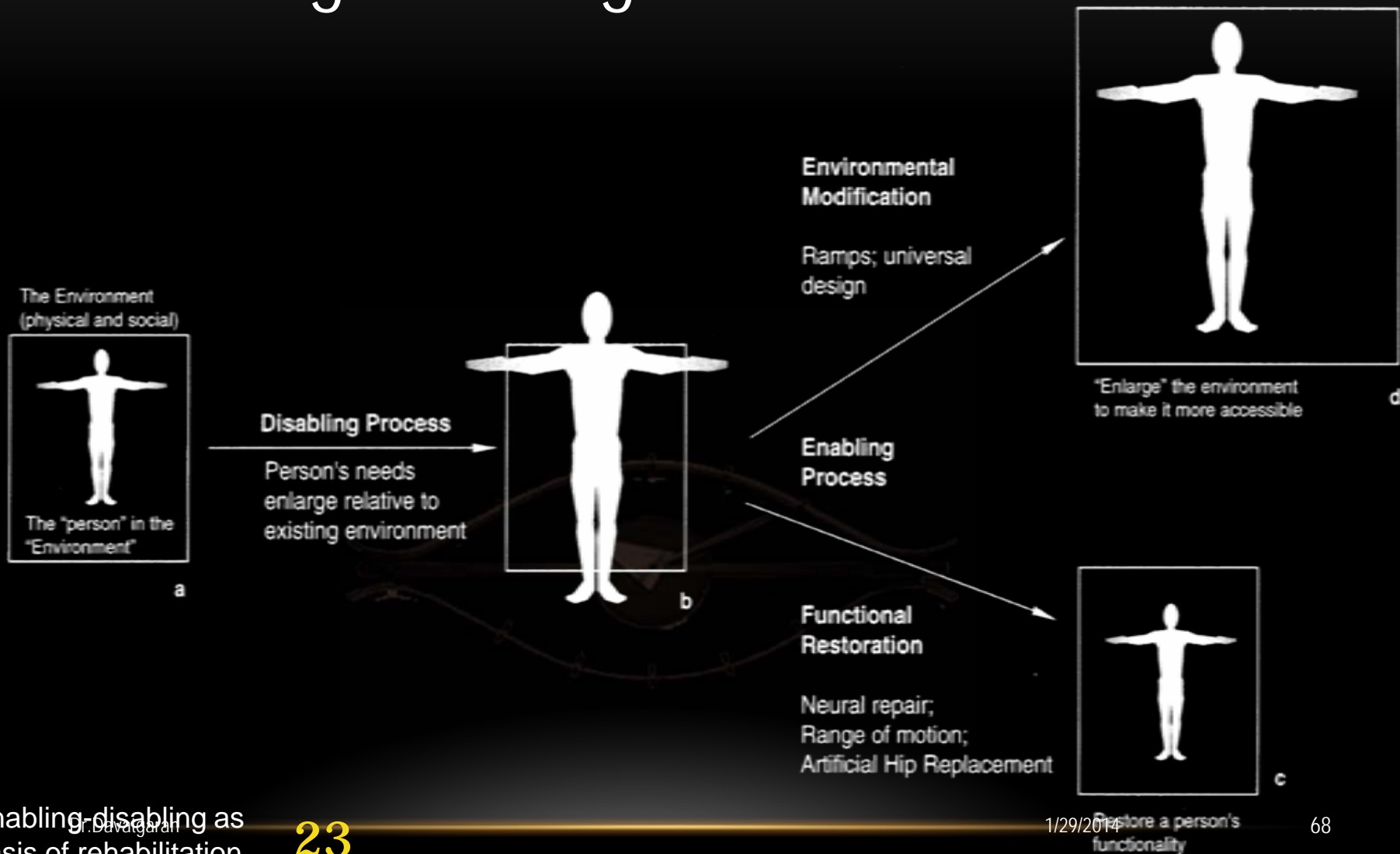


Rehabilitation

=

Management of
functioning and health

Enabling-disabling Process



**Healthy,
Active
Lifestyles for
People with
Disabilities**

**Enabling the
Environment**

**Empowering
the Person**

**Removal of Barriers to
Health Promotion for
People with Disabilities**



Disability Policy

✓ providing a comprehensive set of support measures at different levels to compensate for the impairment, Activity limitation and Participation Restriction so that it doesn't become a disability, avoid exclusion.

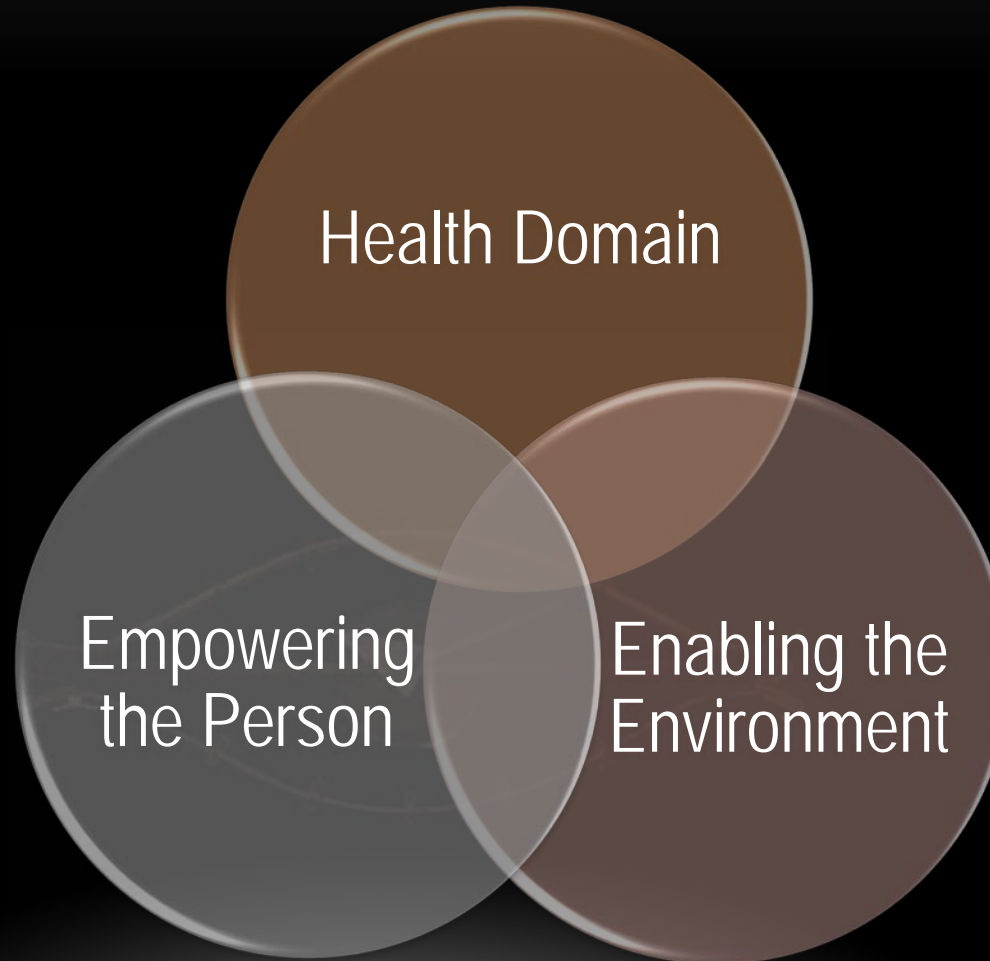
□ Goals of Disability Policy





سازمان بهسازی و رفاه کور

THE THREE MAJOR AREAS IN HEALTH PROMOTION



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سازمان بھسیرتی کھور

Disability Policy

✓ providing a comprehensive set of support measures at different levels to compensate for the impairment, Activity limitation and Participation Restriction so that it doesn't become a disability, avoid exclusion.

□ Goals of Disability Policy





سازمان بحسنیت کور

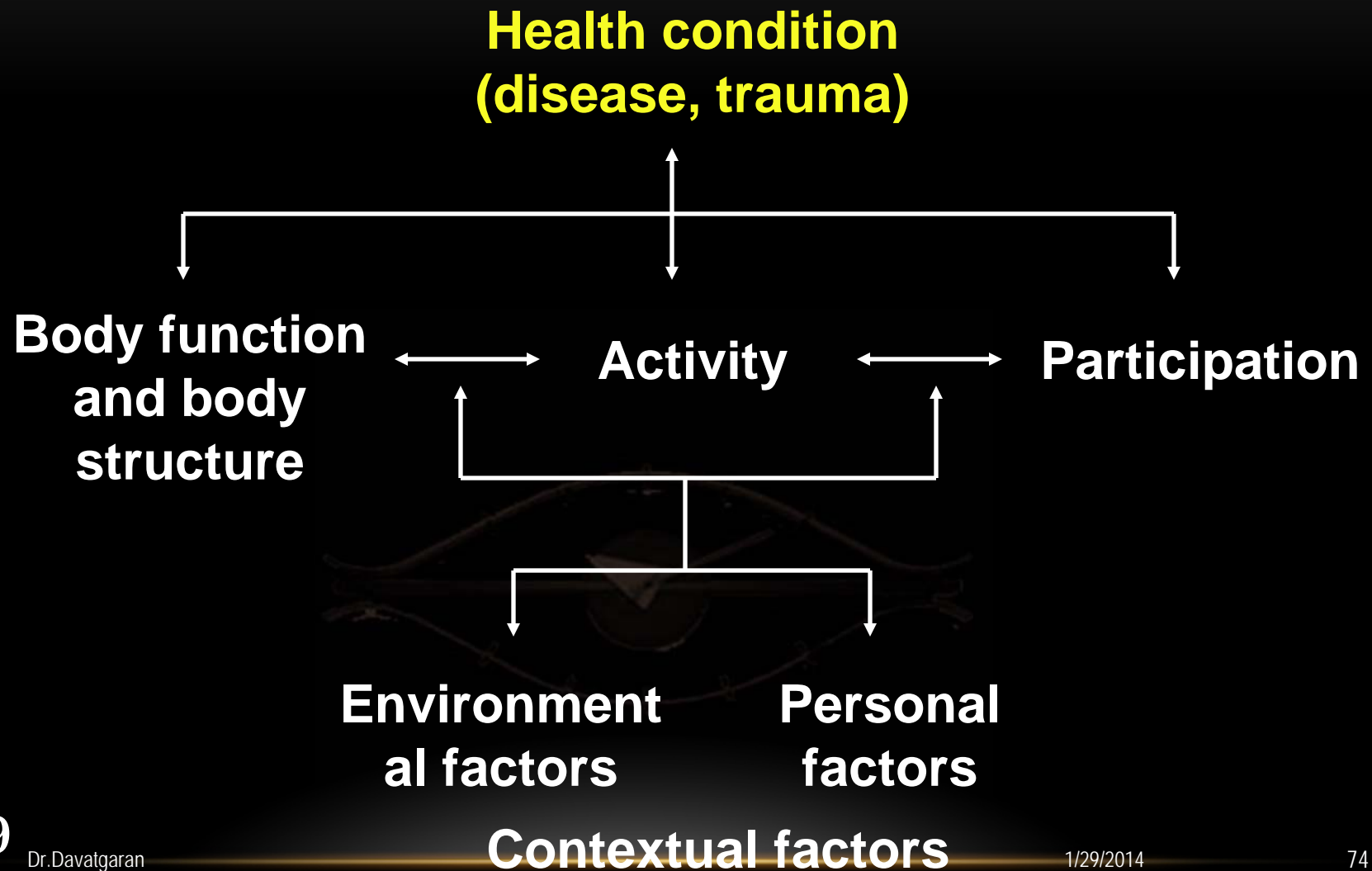
Rehabilitation

means a *goal-oriented* and *time-limited* process aimed at enabling an impaired person to reach an *optimum* mental, physical and/or social functional level, thus providing her or him with the tools to change her or his own life. It can involve measures intended to compensate for a loss of function or a functional limitation (for example by technical aids) and other measures intended to facilitate social adjustment or re-adjustment.

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The integrative model of functioning and disability



آزمون

– بر مبنای مدل پزشکی از توانبخشی همه گزینه های زیر صحیح است، بجز:

- الف) سلامتی به معنای عدم بیماری است.
- ب) ناتوانی جنبه فردی دارد.
- ج) ناتوانی نمود بیرونی آسیب، اختلال، و یا بیماری است زمانی که فرد در محیط قرار می گیرد.
- د) تمرکز این مدل بر درمان آسیب، اختلال، و یا بیماری می باشد.

آزمون

– در مورد ارتباط میان ناتوانی و وضعیت سلامتی کدام عبارت صحیح است؟

الف) شدت و ماهیت ناتوانی لزوما متناسب با شدت اختلال است.

ب) در دو شدت متفاوت از اختلال، ماهیت و شدت ناتوانی می تواند یکسان باشد.

ج) در صورتی که سطح اختلال در یک فرد با گذشت زمان تغییر نکند، شدت و ماهیت ناتوانی وی نیز لزوما ثابت باقی خواهد ماند.

د) با اعمال مداخلات درمانی، سطح عملکرد فرد تنها در صورتی تغییر خواهد کرد که سطح اختلال نیز تغییر نماید.

آزمون

در مورد رویکرد زیستی-روانی-اجتماعی کدام گزینه صحیح می باشد؟

الف) محیط تعیین کننده اصلی عملکرد فرد است.

ب) ناتوانی به خودی خود مساله ساز نیست، بلکه نگرشها و موانع اجتماعی است که منجر به ناتوانی می گردند.

ج) در این رویکرد به تمامی عوامل تاثیر گذار بر سلامتی و عملکرد، وزن یکسانی داده می شود.

د) این رویکرد مبنای اصلی طبقه بندی ICD-10 می باشد.

آزمون

بر مبنای مدل زیستی-روانی-اجتماعی از عملکرد و ناتوانی:

الف) عملکرد و ناتوانی نتیجه تعامل میان فرد و وضعیت سلامتی وی است.

ب) عملکرد و ناتوانی نتیجه تعامل میان فرد و محیط وی است.

ج) عملکرد و ناتوانی یک اصطلاح کلی است که عملکرد، ساختارهای بدن، فعالیت، و مشارکت را در بر می گیرد.

د) همه موارد فوق

آزمون

در مورد یک بیماری حاد که در مدت کوتاهی بیمار فوت می کند، کدام یک از سطوح پیشگیری مطرح نمی گردد؟

الف) سطح اول

ب) سطح دوم

ج) سطح سوم

د) سطح دوم و سوم



سازمان بحسنیرتی کشور



**STATE
WELFARE
ORGANIZATION**

**DEPUTY OF
REHABILITATION
AND
PREVENTION
OF
DISABILITIES**

عقل با عقل دیگر دو تا شود
نور افزون گشت و ره پیدا شود
خواب بیداریست چون با دانشست
وای بیداری که با نادان نشست



“حضرت مولانا”