

# CONCEPT OF HEALTH & DISEASE

**Ranjeeta Kumari**  
**Associate Professor**  
**Deptt. of Community & Family Medicine**

What is the most important thing in  
your life?

# Responses

Health is a neglected topic  
UNTIL it is LOST

# Concepts of health

- What is health according to you?

# Responses

# CONCEPT OF HEALTH

## Definitions:

“Absence of disease”

In some cultures, health and harmony are considered equivalent,

Harmony: "being at peace with the self, the community, god and cosmos". (Indian Ayurveda and Greek)

- Modern medicine: Studies disease, and neglects of the study of health.
- In 1977, the 30th World Health Assembly decided that the main social target of governments and WHO :
  - "the attainment by all citizens of the world
  - by the year 2000
  - of a level of health
  - that will permit them to lead
  - a socially and economically productive life”,
- "Health for All"



# Changing concepts of health

**Biomedical concept**



**Ecological concept**



**Psychosocial concept**



**Holistic concept**

## Changing concepts (1/4):

### Biomedical concept:

"Absence of disease" based on "germ theory of disease"

- **Drawback:** minimized the role of the environmental, social, psychological and cultural determinants of health.

# Changing concepts (2/4):

## Ecological concept:

According to ecologists:

- Health is a dynamic equilibrium between man and his environment, and
- Disease is a maladjustment of the human organism to environment.

# Changing concepts (3/4):

## Psychosocial concept:

- Health is not only a biomedical phenomenon, but one which is influenced by
  - social,
  - psychological,
  - cultural,
  - economic and
  - political factors of the people concerned.

# Changing concepts (4/4)...

## Holistic concept :

It recognizes the strength of social, economic, political and environmental influences on health.

- Implies that all sectors of society have an effect on health
- Ancient view: Sound mind, in a sound body, in a sound family, in sound environment.
- Emphasis is on promotion and protection of health

# DEFINITION OF HEALTH:

- Health is a state of
- Complete physical,
- Mental and
- Social wellbeing and
- Not merely an absence of disease or infirmity
- To be able to lead a "socially and economically productive life"

# "Operational definition" of health:

(a) No obvious evidence of disease, and that a person is functioning normally, i.e., within normal limits of variation

(b) the several organs of the body are functioning adequately in themselves and in relation to one another

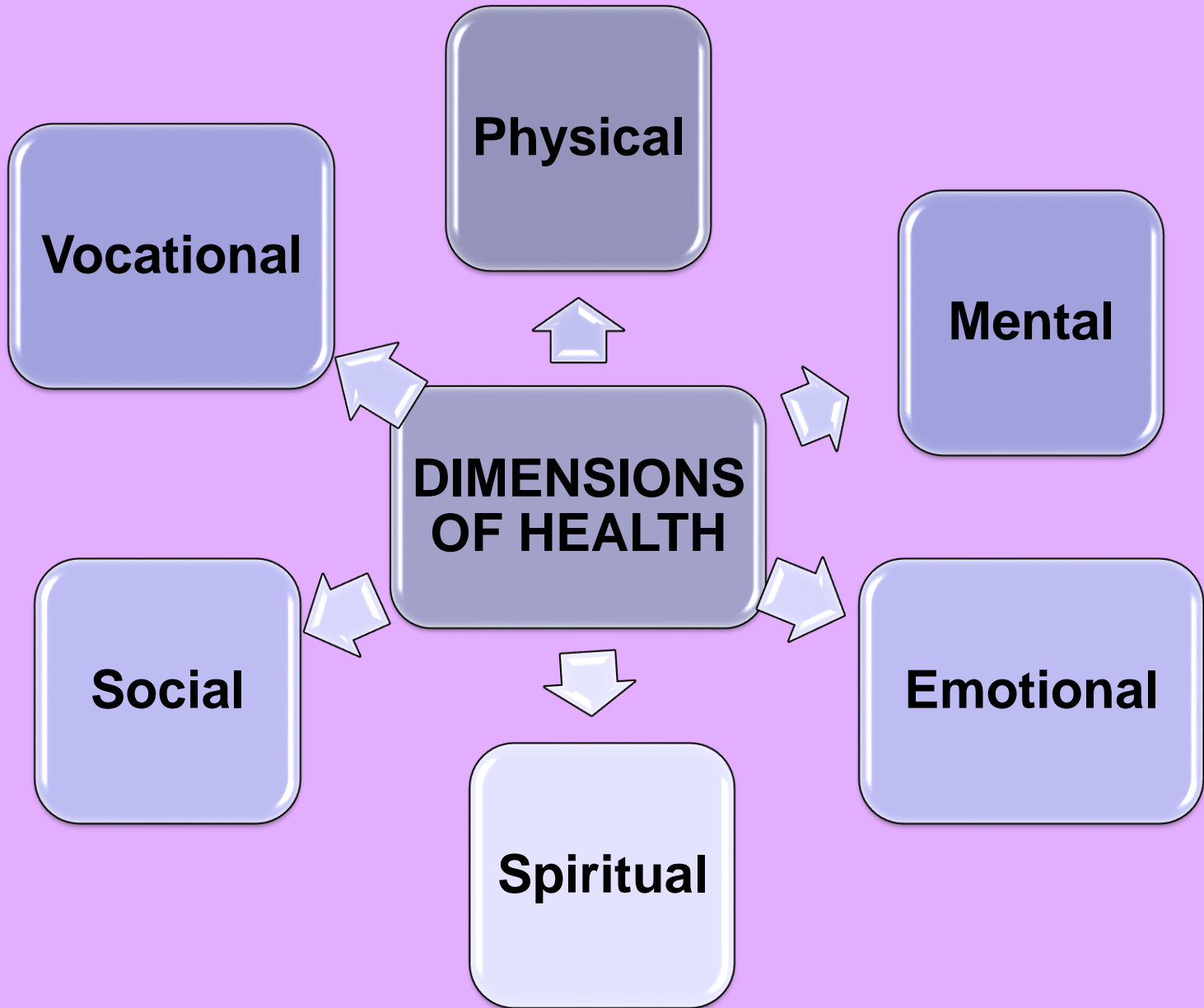
# New philosophy of health

- Health is a fundamental human right
- Health is the essence of productive life, and not the result of ever increasing expenditure on medical care
- Health is intersectoral
- Health is an integral part of development
- Health is central to the concept of quality of life
- Health involves individuals, state and international responsibility
- Health and its maintenance is a major social investment
- Health is a worldwide social goal.



Thank you

# Dimensions of Health



# PHYSICAL DIMENSION:

- **What does physical health mean?**
- Perfect functioning of the body in which each organ is working in harmony with the maximum capacity
- **How is it achieved?**
- By exercise, healthy diet, adequate rest & sleep, and no addictions.



# Physical Dimension:

- **What are the signs of good physical health?**
  - A healthy skin texture
  - Bright eyes
  - Not too thin or fat
  - A good appetite
  - Regular bowel and bladder activities
  - Smooth and easy coordinated movements
  - The resting pulse rate, blood pressure and exercise tolerance are all within the range of "normality" for the individual's age and sex.
  - Steady gain in weight till 25 years and constant thereafter

## **Physical Dimension:**

- **How can proper physical health be maintained?**
- **By various preventive measures and regular follow up with health care providers**

# Evaluation of physical health

- self assessment of overall health
- inquiry into symptoms of ill-health and risk factors
- inquiry into medications
- inquiry into levels of activity
- inquiry into use of medical services
- standardized questionnaires for cardiovascular diseases
- standardized questionnaires for respiratory diseases
- clinical examination
- nutrition and dietary assessment, and
- biochemical and laboratory investigations.

# MENTAL DIMENSION:

- **What is good mental health?**
- the ability to respond to the many varied experiences of life with flexibility and a sense of purpose

## **Definition:**

- "A state of balance between the **individual and the surrounding world,**
- a state of harmony between **oneself and others,**
- a coexistence between the realities of the **self and that of other people** and that of the **environment"**



# Attributes of a mentally healthy person:

- free from internal conflicts; he is not at "war" with himself.
- he is well-adjusted, i.e., he is able to get along well with others. He accepts criticism and is not easily upset.
- he searches for identity.
- he has a strong sense of self-esteem.
- he knows himself: his needs, problems and goals (this is known as self-actualization).
- he has good self-control-balances rationality and emotionality.
- he faces problems and tries to solve them intelligently, i.e., coping with stress and anxiety.

## **SOCIAL DIMENSION:**

- harmony and integration within the individual,
- between each individual and other members of society and
- between individuals and the world in which they live

## **Definition:**

- "Quantity and quality of an individual's interpersonal ties and the extent of involvement with the community"

- **SPIRITUAL DIMENSION:**

It includes integrity, principles and ethics, the purpose in life, commitment to some higher being and belief in concepts that are not subject to "state of the art" explanation

- **EMOTIONAL DIMENSION**

- Mental health can be seen as "knowing" or "cognition" while emotional health relates to "feeling"

# VOCATIONAL DIMENSION

- When work is fully adapted to human goals, capacities and limitations, work often plays a role in promoting both physical and mental health.
- the culmination of the efforts of other dimensions as they function together to produce what the individual considers life "success"

# Other dimensions

- philosophical dimension
- cultural dimension
- socio-economic dimension
- environmental dimension
- educational dimension
- nutritional dimension
- curative dimension
- preventive dimension

**Thank you**

# CONCEPT OF WELL-BEING

- WHO definition of health
- What is well being?
- “the state of being comfortable, healthy, or happy”
- Has Subjective and Objective components

# Objective components of well being

**1. Standard of living:** Measures of socio-economic status:

- Income and occupation,
- Standards of housing, sanitation and nutrition,
- The level of provision of health, educational, recreational and other services

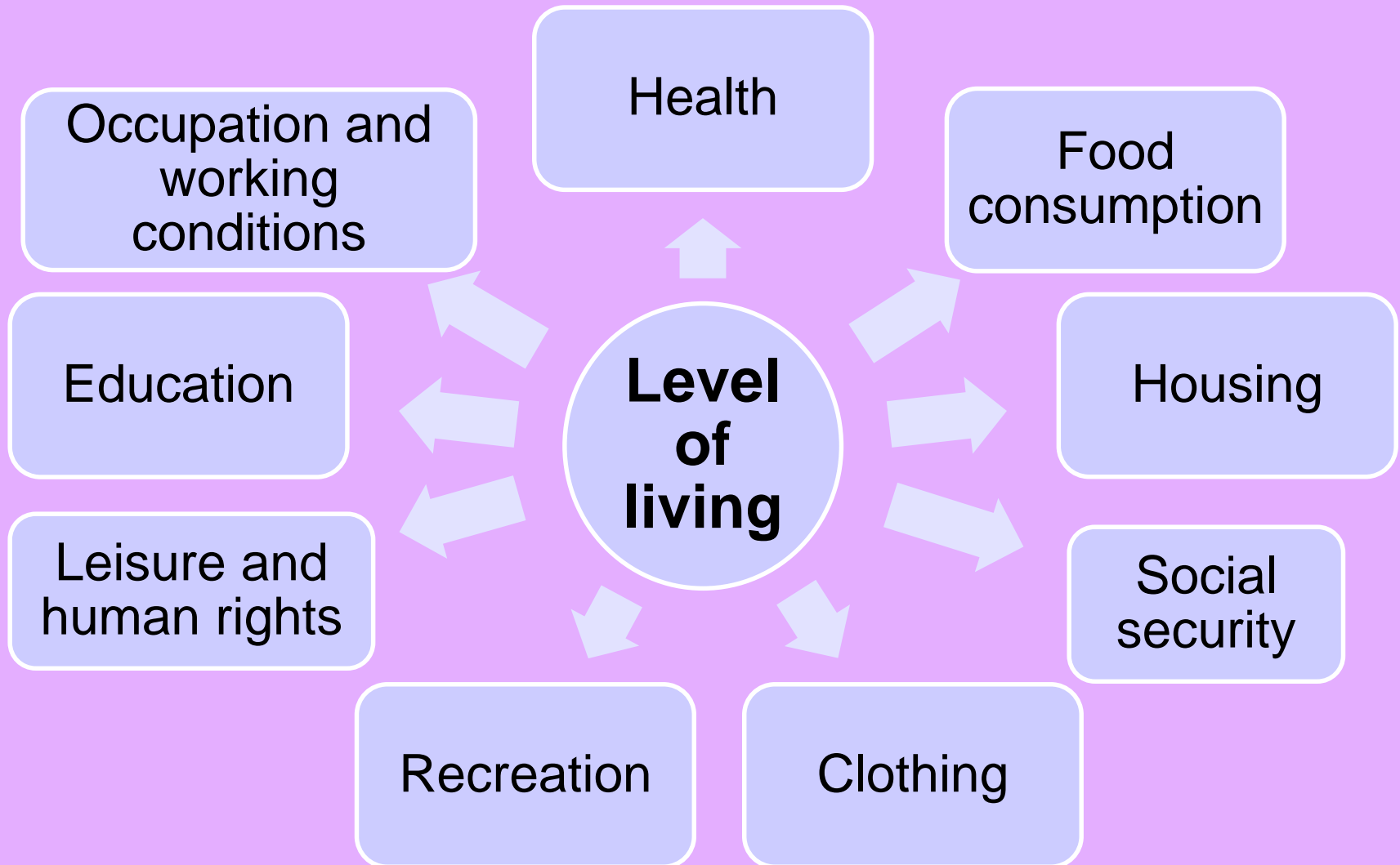
Collectively used as an index of the "standard of living"

The extent of differences in SOL are usually measured through the comparison of per capita GNP on which the standard of living primarily depends



# Concept of wellbeing: Objective component

## 2. Level of living: Nine components:



# Concept of wellbeing: Subjective component

## Quality of life :

- A composite measure of physical, mental and social wellbeing as perceived by each individual
- Evaluated by:
  - Assessing a person's subjective feelings of happiness or unhappiness about the various life concerns
- Improvement of quality of life means increased emphasis on social policy and on reformulation of societal goals to make life more liveable for all.

**Indices for  
measuring  
Quality of life**

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graph TD; A[Indices for measuring Quality of life] --> B[PQLIQ]; A --> C[HDI]; A --> D["HPI:  
Measures deprivation  
in the basic  
dimensions of  
human  
development."];
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**PQLIQ**

**HDI**

**HPI:**  
Measures  
deprivation  
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development.

# Concept of wellbeing:

**Physical quality of life index** consolidates three indicators,

- Infant mortality,
- Life expectancy at age one
- Literacy

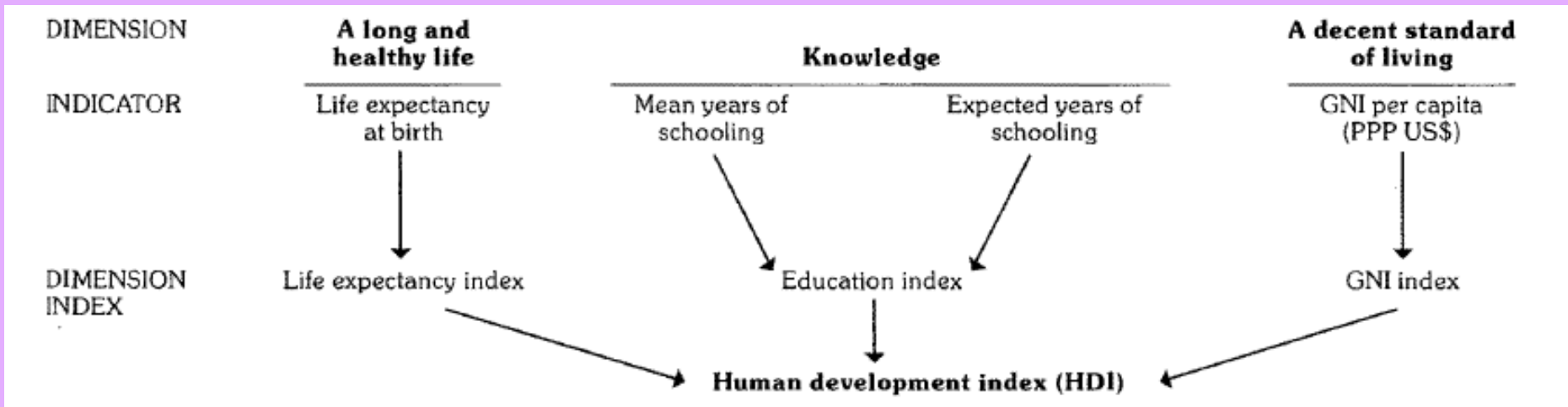
● Pneumonic: **PILL**

## Physical quality of life index

- Each indicator is given equal weight from 0-100
- PQLI is the average of all indicators.
- Ranges from 0-100.
- Does NOT take per capita GNP into consideration.
- **Aim:** To attain a PQLI of 100.
- India – 43, Kerala – 67 (highest)
- **Measures:** Social, economic & political policies
- PQLI does not measure economic growth.
- It is intended to complement, not replace GNP.

# HDI: Human Development Index (Pneumonic: KIL)

- K: Knowledge (expected years of schooling & mean years of schooling)
- I: Income (real GNI per capita in PPP in US \$)
- L: Life expectancy at birth.



# HDI: Human Development Index

HDI values range from 0-1.

(<http://hdr.undp.org/en/composite/HDI>)

- **Very High:**  $\geq 0.800$ : 51 countries (Norway : 0.949)
- **High:** 0.700- 0.799: 54 countries
- **Medium:** 0.550- 0.699: 42 countries- India 131 no. (0.624)
- **Low:**  $< 0.550$ : 41 countries

Measures average achievements in the basic dimensions of human development

## Minimum and Maximum values for each indicators:

- Expected years of schooling: 0 and 18.0
- Mean years of schooling: 0 & 13.1 (Czech Republic)
- Combined education index: 0 & 0.978 (New Zealand)
- GNI per capita (PPP\$): 100\$ & 107721\$ (Qatar) -  
Log values are taken
- Life expectancy at birth: 20 yrs & 83.4 yrs (Japan)

Formula for calculating Individual indices:

$$\text{Index} = \frac{\{(\text{Actual value}) - (\text{Minimum value})\}}{\{(\text{Maximum value}) - (\text{Minimum value})\}}$$

The HDI is the geometric mean of the three dimension indices:

- $( I_{\text{Life}}^{1/3} \times I_{\text{Education}}^{1/3} \times I_{\text{Income}}^{1/3} )$



# HDI calculation for India 2010

| Indicator                           | Value |
|-------------------------------------|-------|
| Life expectancy at birth (years)    | 65.4  |
| Mean years of schooling (years)     | 4.4   |
| Expected years of schooling (years) | 10.3  |
| GNI per capita (PPP \$)             | 3,468 |

$$\text{Life expectancy index} = \frac{65.4 - 20}{83.4 - 20} = \frac{45.4}{63.4} = 0.716$$

$$\text{Mean years of schooling index} = \frac{4.4 - 0}{13.1 - 0} = 0.335$$

$$\text{Expected years of schooling index} = \frac{10.3 - 0}{18 - 0} = 0.572$$

$$\text{Education index} = \frac{\sqrt{0.335 \times 0.572} - 0}{0.978 - 0} = 0.447$$

$$\text{Income index} = \frac{\ln(3468) - \ln(100)}{\ln(107,721) - \ln(100)} = 0.508$$

$$\text{Human development index} = \sqrt[3]{0.716 \times 0.447 \times 0.508} = 0.547$$

# Human poverty index: Measures deprivation in basic dimensions of human development.

|  | HPI 1  | HPI 2  |
|--|--|--|
| Used for                                     | Developing countries   | Developed countries  |
| Dimensions used                              | 3  | 4  |
| Probability at birth of not surviving to age | 40   | 60   |
| Knowledge exclusion                          | Adult illiteracy rate  | % of adults (16-65) lacking functional literacy skills                 |
| SOL deprivation                              | Unweighted average of:<br>- % of population not using an improved water source<br>- % of children under weight- for- age | % of people living below the income poverty line                       |
| Social exclusion                             | NA   | Proportion of long term unemployment ( $\geq 12$ months)               |
| Formula                                      | $[1/3 (P_1^\alpha + P_2^\alpha + P_3^\alpha)]^{1/\alpha}$  | $[1/4 (P_1^\alpha + P_2^\alpha + P_3^\alpha + P_4^\alpha)]^{1/\alpha}$ |

## **Other indices:**

**Gender Related Development Index** : Achievements in the basic human development adjusted for gender inequalities

**Gender Empowerment Measure**: gender inequalities in economic and political opportunities.

# Summary

- Health is a neglected topic UNTIL it is LOST
- There have been **changing concepts of health**: Biomedical- ecological- psychosocial- holistic
- **Dimensions of health**: Physical, Mental, Social, Emotional, spiritual, Vocational etc..
- **Well Being**: Subjective & Objective components

● Thank You