

## **Course 2.**

- Diagnosis of health status
- The health of the family and community
- Transition from health to disease

### **Diagnosis of health status**

Health is a state of physical, mental and social well-being, in the absence of disease or infirmity. Health is the result of the collaboration of the different organs, as well as of the relationships that are established between the body and the environment.

The status of health depends on the quality of life, the knowledge accumulated in the field and the possibilities of investigating patient's health. Health is a dynamic process, constantly changing.

Medicine has particularly concerned with the disease, although the fundamental triangle of medical practice is prevention, treatment and recovery. Even today, the preoccupation for the treatment of diseases is dominant and less for the health defence, the medicine knowing much better the disease than the health, the medical programs are oriented more towards the pathology than towards the promotion and the protection of health.

In developed countries there is a tendency to pay greater attention to the healthy man and the role of medicine in increasing the quality of life, health being appreciated as a dynamic dimension of life.

The life changes determinates by the modernization of the society made a biological modelling and require the re-examination of the classic health standards, the reassessment of the main biological, anthropometric, physiological and biochemical parameters.

The conditions of modern life determinate new forms of adaptation of the human body. The continuous change of the environment is often negatively reflected on the state of health. In order to survive, the human being must change his behavior according to the environment.

In the conditions of modern life, there are eating imbalances, stress, sedentary lifestyle, abusive drug use (alcohol, coffee, tobacco, medicines), physical and mental discomfort caused by conflicting states or dissatisfaction.

#### **Healthy human medicine aims are:**

1. Recognition and control of environmental, professional and behavioral risk factors (so far as they can be modified)
2. Promotion of health
3. Elaboration of a complex educational system for health, which refers to the adaptation of the organism to the changes of the environment, the integration of the individual in the current rhythm of life and work, the optimization of health.

**Health culture** (the art of living healthy) ensures the appropriate biological, psychological and social adaptation in different stages of existence and conscious participation in the defence of one's health.

To establishing the health status, the family doctor must consider the following aspects which include positive, negative and statistical criteria:

- The mix between the state of health and the disease: many diseases can develop asymptomatic for a long time or they can develop an acute episode followed by asymptomatic periods.
- Regulatory processes: the human body manages to oppose risk and pathological factors, which could affect their health and ensure a certain independence from the environment changes (in which they live).
- Negative criteria: The negative criteria are the absence of any signs of illness, the absence of sensory deficiencies and the absence of infirmities. The patient is healthy if he does not accuse any disease, but the absence of an obvious disease is not a sufficient reason to exclude them, because there are diseases that develop asymptomatic.
  - o Absence of diseases is clinically manifest
  - o Absence of diseases that evolve in crisis
  - o Absence of asymptomatic diseases
  - o Absence of risk factors
  - o Absence of infirmities and sensory deficiencies
- Statistical criteria. The statistical criterion is based on the evaluation of the different functions and constants that are between the limits of the accepted parameters. We have values considered statistically normal for all body parameters. These values may differ from one population to another, depending on genetic, environmental and community lifestyle. In order to establish the diagnosis of mental health, one appeals besides biological dialogue and investigations to psychological tests, such as personality tests, intelligence tests, etc.
  - o Fitting the parameters within certain accepted statistical limits
  - o Behavior in accordance with the norms admitted in the respective society
- Positive criteria. The positive criteria are expressed by: the integrity and harmony of the body, the vitality and force of the person, the social and ecological adaptation and the good socio-professional results. Well-being is supported by appropriate anthropometric parameters (eg. height or weight), full functional capacity (which can be investigated with help of lab tests) and the lowest incidence of morbidity
  - o Normal morphological development
  - o Normal functioning of organs
  - o Normal behavior
  - o Force and adaptability

### **Health degrees**

Health degree	Degree of disease	Diagnostic elements
I. Ideal health	absent	1. Absence of signs of illness 2. Absence of risk factors 3. The presence of positive signs of health

		4. Special strength and resistance
I. Full health	absent	1. Absence of signs of disease 2. Absence of risk factors 3. Normal clinical and paraclinical data 4. The presence of positive signs of health
II. Acceptable health	Uncertain stage of disease	1. Presence of risk factors 2. Absence of signs of disease 3. Clinical and paraclinical data within limits normal
III. Uncertain health	Preclinical stage of disease	1. Presence of disease risk factors 2. Vague signs of illness 3. Clinical and paraclinical data reach the extreme limit of normal
IV. Broken health	Early stage of disease	1. Presence of risk factors 2. The presence of signs of disease 3. Minor pathological biological changes
V. Compromised health	Evident stage of disease	1. The presence of risk factors 2. Clinical and paraclinical modifications features
VI. Lost health	Decompensated stage of disease	1. Organic irreversible lesions 2. Adaptation disorders 3. Complications of the disease

### Mental health

Mental health is the optimal development of the mental capacities of the person.

It is assessed by positive criteria materialized in the activity performed, which must be useful, satisfy the individual and allow professional achievement, relaxation, judicious use of free time, happy family life, good interpersonal relations, civic attitude worthy, correct, honest, the possibility of adaptation to change, the control of instincts and an inner harmony.

### Social health

The man is influenced by his life or work environment. The society plays an important role in maintaining the state of health, and it is the task of ensuring and solving the nutritional, emotional, health, educational and social needs of the individual.

Social wellness is influenced by the health status of the components of the society and their behavior.

In order to ensure a real social health, the socio-economic development programs will take into account aspects related to the behavior of the members of the society, regarding their past and present, the characteristics of the group from which they come and to which they join.

## **Family health**

The family system is a complex bio-psycho-socio-cultural system, constantly changing, with internal and external openness, capable of coping with situations such as: illness, suffering, alienation, extinction.

The changes that have occurred in the life of one of the family members determine the modification of the relationships between the members of the family (with side effects on the family system).

The family is characterized by:

- ☐ composition, being made up of several members who are in a state of interdependence with each other
- ☐ balance: the family adapts to different situations
- ☐ unity: the family is a whole with precise, unitary, differentiated tasks, imposed by the demands of the society and the demands of its members.

The family system ensures:

- ☐ the material framework of the common existence
- ☐ regulating the sexual life and perpetuating the human species
- ☐ raising and educating children
- ☐ emotional stability
- ☐ the role of keeper of moral and traditional values
- ☐ development and maintenance of the micro-unit
- ☐ protection of members, their social reintegration

The FD actions at the family level are aimed at: common biological factors, habitat, social environment, lifestyle and non-discriminatory access to health services.

FD has as objectives:

1. The optimal formation and functioning of the family, attests the health status of the partners on the occasion of the marriage, is the family counselor in the problems of marital stability, of the maturation and of the expression of the family function.
2. Promoting family health, the family doctor promoting a healthy lifestyle
3. Detection of risk factors and supervision of high risk families
4. Develop scientific, multi and interdisciplinary research related to family health.

FD actions at the family level are carried out by:

- ☐ family formation, genetic counseling, contraceptive measures
- ☐ detecting malfunctions
- ☐ maintaining the state of health and preventing family illnesses
- ☐ differentiated supervision by age groups: newborn, child, adult, etc.
- ☐ supervision of risk groups
- ☐ prophylaxis of aging and supervision of old age
- ☐ complex health education
- ☐ epidemiological surveillance and application of prophylactic schemes for contagious diseases through vaccinations
- ☐ collaboration with other factors involved in the provision of primary health care: health police, protection services and social assistance

- ☐ giving necessary medical documents for the family

### **Community health status**

The diagnosis of the community health status can be appreciated as being similar, but not identical with the health status of the community members.

In order to evaluate the community health status, it is necessary:

- ☐ addressing the health status of the community
- ☐ applying some health concepts
- ☐ elaborating the objectives of community health insurance
- ☐ assessment of the health status of the community
- ☐ measurement of health status
- ☐ assessing the health status of human communities
- ☐ health promotion

The approach to the health status of the community is done by identifying the group (composition, structure by age groups, gender distribution, female / male population ratio), collecting information regarding the community, community members, their health status, processing information, calculating values environments, comparison with reference methods, elaboration of the diagnosis of the health status of the community, identification of the risk factors and / or of the diseases with high incidence, elaboration of the intervention programs that target the causal factors and the monitoring of the population health.

Measuring health status requires level indicators, environmental, biological, behavioral, health services and other indicators.

Level indicators can be:

- ☐ demographics (such as mortality, birth, fertility)
- ☐ morbidity indicators
- ☐ global health indicators

The assessment of the health status of the human communities refers to: the methods used (survey, screening, dispensing), the way of accomplishment (interview, questionnaire, clinical or paraclinical examination), the conditions of accomplishment (to be without side effects, to be simple, etc.).

The promotion of health requires:

- ☐ switching from curative medical care to preventive medical care
- ☐ national health policies aimed at promoting health, protecting it, preventing diseases, reducing the consequences of diseases, avoiding premature deaths
- ☐ adopting new strategies, which currently aim to ensure health for all, a population character and to control the high risk of illness.

### **The transition from health to disease**

Individual particularities: constitutional, endocrine, neurovegetative, personality, age, sex and lifestyle can influence the appearance of diseases and the transition from health to disease.

Psychosomatic diseases are caused by psychological factors, which manage to produce through endocrine, metabolic or immune changes, the appearance of somatic disorders, situations in arrhythmias, ulcers, high blood pressure, etc.

#### Modalities of the transition from health to disease

##### A. after the onset mode

The onset can be

Acute: myocardial infarction, pneumonia, pleurisy, otitis, meningitis

Superacute: anaphylactic shock, glottic edema, cerebral hemorrhage, pulmonary embolism

Chronic (insidious): HT, atherosclerosis, cancer, chronic hepatitis, schizophrenia.

##### B. determined by the associated risk factors

Age

Sex

Smoking

Alcohol

Food

toxic

Drugs

sedentariness

Stress

##### C. determined by perturbing the mechanisms of regulation and immunity

Genetic diseases: chromosomal abnormalities, genetic disorders (beta-thalassemia, hemophilia)

Immunological diseases: allergic reactions (asthma, allergic rhinitis, anaphylactic shock), moderate immune complex reactions (rheumatoid arthritis, glomerulonephritis, vasculature), autoantibodies (hemolytic anemia)

##### D. determined by no reach of energy needs, related to

Oxygen (Sleep apnea)

The water

Food

##### E. determined by excess of energy substances

They can cause HT, atherosclerosis, obesity, gout

##### F. determined by information overload

It can cause mental illness

##### G. determined by non-fulfillment of higher-order needs (psychological and social)

They can cause frustration and mental illness

#### The hierarchy of the requests addressed to the FD on their importance

☐ First-degree emergencies

☐ Second degree emergencies

☐ New cases of disease that are difficult to diagnose: endocarditis, cancer, blood diseases,

☐ Complications of chronic diseases: e.g. hypertensive heart disease, nephroangiosclerosis,

- ☐ Patients with multiple diseases: e.g. HT and diabetes, heart failure
- ☐ Contagious diseases: viral hepatitis, tuberculosis, etc.
- ☐ Psychic diseases: panic attacks, schizophrenia, etc.
- ☐ New cases of easily diagnosed disease: acute tonsillitis, acute bronchitis.
- ☐ Diseases that develop in periods: epilepsy, migraine, bronchial asthma, duodenal ulcer
- ☐ Chronic diseases without complications: HT, duodenal ulcer, etc.