# Specifics of Diagnosis and Treatment in Family Medicine Diagnostic & Therapeutic Synthesis

### Lecture plan

- Types of diagnosis
- Factors determining the peculiarities of diagnosis in FM
- Diagnosis of health: criteria for establishing
- Diagnostic difficulties
- Paraclinical strategies: the need, the possibility the specificity diagnostic synthesis in family medicine
- The ranking criteria of the disease
- The main therapeutic activities
- Factors that determine treatment particularities FM therapeutic decision in family medicine
- Supervision of treatment
- Defensive medicine
- The therapeutic synthesis

#### **General remarks**

- Diagnosis is an assembly of clinical and laboratory investigations which have to define a patient's pathological state.
- The fact is that presumptive diagnosis is the first step of any diagnosis.
- The differential diagnosis is the stage of diagnosis in which presumptive diagnosis is compared to clinical and laboratory presentations of other diseases with similar symptoms.
- Clinical diagnosis is based on subjective symptoms (which the patient describes) or objective (the findings of the examiner).

## The clinical diagnosis which FP is working with has a number of features:

- Clinical diagnosis can be established by clinical means available
- Does not require special facilities
- Observation, history, physical examination are extremely important
- Clinical diagnosis should be confirmed
- The clinical diagnosis suggests the spectrum of paraclinical investigations
- MF has the necessary conditions to make the clinical diagnosis
- Family physician is required to make the clinical diagnosis.

### **Types of the diagnosis**

Family physician	Other specialists
The syndrome diagnosis	The etiologic diagnosis
The early diagnosis	The pathogenetic diagnosis
The differential diagnosis	The laboratory diagnosis
The clinical diagnosis	The morpho-pathological diagnosis
The diagnosis of health	The radiology diagnostic
The evolutive diagnosis	The intraoperative diagnosis

# The principles of making the diagnosis of health

- Vigour and high adaptability
- High resistance to pathogens
- Increased physical and mental performance
- Absence of any signs of disease
- Harmonious physical development
- Absence of the diseases with asymptomatic evolution
- Normal organ functioning
- Paraclinical investigations within the normal range
- Adequate social behavior
- Absence of risk factors
- Active and healthy lifestyle

# Factors that determine the particularities of diagnosis

- First contact
- Continuous care
- Technical endowment
- Care for the individual
- Care for the family



### First contact

- Diversity patients the need to take into account the entire pathology
- Need to know the types of onset, atypical debut, detection of risk factors to establish an early diagnosis
- Need to know all therapeutic and surgical emergencies

### Continuous care

- Supervision of chronically ill patients,
- Detection of possible complications
- Staging the diagnosis according to the evolution of disease,
- Occurrence of concomitant associated diseases

# Technical endowment

- Limited technical endowment
- Difficulty of paraclinical investigations
- Predominance of clinical diagnosis
- Cooperation with other specialists



### Care for the individual

- Considering the whole organism's integrity,
- diagnosis of all diseases global diagnosis,
- considering all diseases the patient is suffering from,
- need to consider psychological, familial, social and occupational factors
- need for diagnostic synthesis,
- prioritizing the diseases & health problems
- health diagnosis
- bio-psycho-social diagnosis



### Care for the family

- Diagnosis of diseases with family aggregation,
- Importance of genetic factors,
- Notification of family factors that may influence health:
  - Family habits
  - diseases with familial aggregation
  - Risk factors in the family
  - The economic status of the family
  - Living conditions
  - Interpersonal relationships in the family
  - The cultural level, etc..



## DIAGNOSTIC DIFFICULTIES diagnostic errors caused by disease

- Asymptomatic evolution
- Faint clinical manifestations
- Atypical onset
- Atypical evolution
- Non-specific symptomatology
- Serious diseases evolving subclinicaly, latently or masked

## DIAGNOSTIC DIFFICULTIES diagnostic errors caused by patient

- Patients unable to express their symptoms
- Uncommunicative patients
- Individual features
- Mentally ill
- Low level of culture
- Simulating/dissimulating patients

#### DIAGNOSTIC DIFFICULTIES

#### Mistakes committed by the physician:

- due to ignorance
- Because of superficiality (incompetence)
- Because of the haste
- Wrong assessment of signs and symptoms
- Phobia of Decision
- Excess of eagerness

Other causes

Insufficient technical endowment

### Mistakes in making the differential diagnosis (after Fiessinger & Hegglin)

- Ignorance of the examiner, with gaps in theoretical knowledge and superficiality in correlation of facts, insufficient medical training
- Incomplete examination with improper skills, faulty techniques, haste, lack of time, uncooperative patients, poor conditions (odor, noise, poor light), lack of necessary instrumentation

## Mistakes in making the differential diagnosis (after Fiessinger & Hegglin)

- Errors in reasoning: prejudice, preconceived ideas, insufficient induction, pride of not recognizing the ignorance, illogical conclusions
- Errors of psychological nature tendency to develop a spectacular, precious, rare, sophisticated diagnosis, complicated character of the doctor with accent of pessimism or optimism

## Mistakes in making the differential diagnosis (after Fiessinger & Hegglin))

- Errors of technical nature false positive or negative, damaged endowment (reversed poles of ECG) artifacts in imaging investigations of inappropriate choice, insufficiently small numbers, etc.
- Statistical errors probabilistic, failure to correlate with age, season, (for infectious diseases).
- Errors caused by failure to consider both values of the diagnosis - positive, confirmatory and negative, infirmatory

## The main mistakes in formulating a positive diagnosis are:

- Long illogical Diagnoses, composed of a series of signs and symptoms
- Diagnosis made by general terms group of diseases (pneumonitis, gastropathy, colopathy)
- Diagnoses that include synonyms or pleonasms (chronicpersistent)
- Diagnoses that include antonyms (failure ... compensated)
- Diagnostics consisting of acronyms abbreviation is common in specialized medical texts, but its use should be limited, and be in context (HTN, CHF, MI, CRF)

# Criteria for making strategy of paraclinical investigations in an outpatient setting

- For paraclinical investigations to be ordered, the presumptive diagnosis is needed first
- Require those investigations that can confirm or refute the clinical diagnosis
- If you know the diagnostic criteria, request paraclinicals according to the WHO or national clinical protocols
- Do not use paraclinical investigations until all the clinical resources were exhausted
- Investigation is required only to provide the information useful for diagnosis
- If there is a diagnostic algorithm, use it
- Among useful investigations choose the most easily performed ones

# Criteria for making strategy of paraclinical investigations in an outpatient setting

- If the results refute the suspicion, the clinical diagnosis should be re-considered
- Other then previously used investigations should be ordered for the review of the diagnosis
- Between the two investigations, the easiest and less risky should be chosen the patient's possibilities (physical, financial) should be taken into account
- FD must maintain functional ties and get in touch with the specialized services (planning, programming according to the Unique Program)
- In serious or emergency states, avoid delaying the necessary investigations

## **Diagnostic Synthesis in Family Medicine includes:**

- inventory of all signs
- establishing the links between symptoms
- grouping the signs and symptoms in syndromes
- grouping of syndromes in diseases
- establishing links between the diseases
- diagnosis of all<sub>1</sub>diseases
- establishing links with living conditions
- prioritizing the diseases developing the complete diagnosis

## The ierarchisation criteria for the diseases

- Placing in the forefront the diseases imminently threatening the vital functions of the body
- Placing acute diseases before chronic ones
- Placing the diseases with faster progress before the diseases with slower progress
- Placing the diseases with unfavorable evolution before the diseases with favorable evolution

## The ierarchisation criteria for the diseases

- Placement of the diseases with unpredictable evolution above the diseases with predictable evolution
- Placement of diseases producing stronger suffering above those producing less suffering
- Placing the diseases having effective treatment above those having no effective treatment
- Reviewing the hierarchy whenever there are changes in the patient's condition

## 12 factors determining particularities of treatment in Family Medicine

- 1. Limited possibilities of family doctor
- 2. Particularities conditioned by the nature of disease
- 3. Particularities determined by patients
- 4. The need to intervene in emergencies
- 5. The need for collaboration with other specialists
- 6. Integrated treatment of the patient
- 7. Continuous follow-up of the patient
- 8. Difficulty of compliance with hygienic & dietary recommendations
- 9. Involvement of the patient
- 10. Involvement of the family
- 11. Counseling the patient
- 42. Necessity of terminal care

# 1. Limited possibilities of family doctor

- Dealing with cases exceeding the therapeutic possibilities of FD (the existence of serious illness)
- Existence of patients requiring hospitalization,
- Limited technical possibilities, knowledge and skills of family doctor
- Need to provide medical care in different health conditions,
- Obligation to carry out continuous treatment of chronic diseases
- Dependence on the patient's cooperation
- Obligation to treat the family
- Dependence of the treatment on the family
- Care for the patients who do not have the minimum necessary conditions of care

# 2. Particularities conditioned by the nature of disease

- Imminently life-threatening diseases
- Diseases that seriously affect the vital functions
- Diseases requiring immediate surgery
- Diseases that require continuous monitoring
- Serious diseases for which we do not have a certain diagnosis
- Diseases that involve an unfavorable evolution
- Diseases in which serious complications can occur
- Diseases requiring special investigations
- Diseases that require special treatment
- Serious mental illnesses
- Some infectious diseases

# 3. Particularities determined by patients

- Patients requiring hospitalization
- Vulnerable socio-economic conditions
- Assessing the possibilities of the patient to apply the treatment

### Patients requiring hospitalization

- Patients with poor general status
- Patients with particular reactivity
- Some allergic patients
- Patients who do not cooperate
- Some patients with mental conditions
- Patients not having the minimum conditions for home care
- Patients from dysfunctional families
- Patients leaving alone

# 4. The need to intervene in emergencies

- Family doctor's obligation to provide first aid in all emergencies,
- Maintenance of vital functions
- Prevention of fatal complications
- Obligation to do everything possible in emergencies

# 5. The need for collaboration with other specialists

- Existence of more complicated cases that require collaboration with specialists in a specific field
- Maintenance of functional links with departments concerned
- Timely cooperation

## 6. Integrated treatment of the patient

- Considering all the diseases and establishing pathogenetic connections between them
- Hierarchy of all diseases in terms of therapeutic, family, socio-economic, conditions, and the patient's personality
- Developing the therapeutic synthesis and
- Optimal therapeutic management, avoiding drug interactions and side effects

### 7. Continuous follow-up of the patient

 Obligation to monitor the treatment outcomes and adapt the treatment over time depending on the evolution of the disease, prevent complications and relapses

# 8. Difficulty of compliance with hygienic & dietary recommendations

- In the outpatient treatment, the most difficult is to eliminate risk factors and to follow hygienic-dietary recommendations relevant to the disease;
- Combating inappropriate skills
- Adaptation to socio-economic conditions

# 9. Involvement of the patient

- Necessary to attract the patient to comply with recommendations and eliminating the risk factors;
- Informing the patient correctly
- Adapting the decisions, to the patient's possibilities
- Need for psychotherapeutic interventions

### 10. Involvement of the family

 As the treatment takes place in the family, it needs incentives to comply with the recommendations and create a favorable climate for curing the patient.

## 11. Counseling the patient

 The family doctor should counsel the patient because FP is the interface between the patient, health care system, family and society, defending the interests and rights of the patient = the patient's advocate

## 12. Necessity of terminal care

- Ensuring quality of life and a decent death without pain, bedsores, dehydration, other signs and, most important, without <u>FEAR</u>
- Ensuring psychological support to patients and family members

# Major therapeutic activities carried out by Family Physician

- Diet and nutrition recommendations
- Lifestyle modification counseling
- Applies prevention methods (ex.: Vaccination)
- Prescribes pharmacological treatments
- Applies alternative methods of treatment
- Performs small surgery
- Recommends and performs hospitalization
- Recommend balneo-climatic and sanatorial treatment
- Recommends physiotherapy
- Makes recommendations for new employment or retirement
- Compiles a dispensary plan that includes specific regular checks & summaries on main diseases

# **Ordinary supervision**

Factors	Particularities
Compliance	<ul> <li>Lack of trust in physician</li> <li>Difficulty to administer medication</li> <li>Solutions, suppositories</li> <li>Unpleasant taste,</li> <li>Complicated schemes</li> <li>Adverse reactions</li> <li>Denial and abandonment of treatment</li> </ul>
Tolerance	<ul> <li>Enzymatic deficiencies</li> <li>Organ failure</li> <li>Associated diseases that affect absorption, metabolism and excretion</li> <li>Intolerance</li> </ul>

## **Ordinary supervision**

Factors	Particularities
Efficacy/ effectiveness	Reduction or disappearance of clinical signs Improving the humoral modifications, ECG, PEF-metry, etc.

## **Special supervision**

Factors	Particularities
Patients with high risk	Newborns, children, elderly, pregnant women, patients with chronic disease, renal and / or hepatic failure
Certain medications	The difference between toxic and therapeutic dose

#### **Defensive medicine**

- Presents the compromise, diversion, deviation from what the doctor thinks he has to do in the correct practice towards what the patient believes should be done.
- Patient's request is contrary to scientific opinion of the physician
- Not it is less useful medicine, it may be even more harmful
- depends on the limits to which the doctor agrees to give up
- Increases costs of health services and may expose patients to unnecessary risks.
- The Dr. acts merely not to help the patient, but rather to prevent legal action if a problem occurs.

# Causes of defensive medicine

Fact

- Intention to avoid unnecessary discussions
- Intention to avoid conflicts with the patient
- Intention to avoid complaints
- Fear of losing the patient
- Differences in opinions
- Insufficient preparation of the patient

# Causes of defensive medicine

- Time pressure
- Lack of patient's understanding
- Difficult communication with the patient
- Avoiding stress
- Uncooperative patient
- Patient with accentuated personality
- Failure to inform the patient

### THERAPEUTIC SYNTHESIS

- Inventory of all the patient's diseases
- Establishing links between these diseases
- Hierarchy of those diseases
- Developing the therapeutic conduct depending on the patient's overall clinical picture/presentation
- Avoiding adverse effects on other diseases
- Developing the therapeutic strategies based on the hierarchy of diseases
- Therapeutic behavior change depending on the evolution of the diseases
- Changing the therapeutic strategy based on hierarchy change of the diseases

### **Conclusions**

- Clinical training of the medical specialist is essential
- Emphasis should be made on theoretical, practical, and logical skills of health professional
- Family Medicine ensures the continuity of care
- Family medicine deals not only with sick, but with healthy person, family and community as well
- Family physician is the only specialist performing diagnostic and the therapeutic synthesis

### Selective reading:

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Thank you for your receptiveness and attention!