#### SEMEY STATE MEDICAL UNIVERSITY

THE DEPARTMENT OF PUBLIC HEALTH AND EVIDENCE-BASED MEDICINE

# SIW

Discipline: Evidence based medicine

Theme: «Prospects for the use of evidence-based medicine by General practitioners»

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## Plan

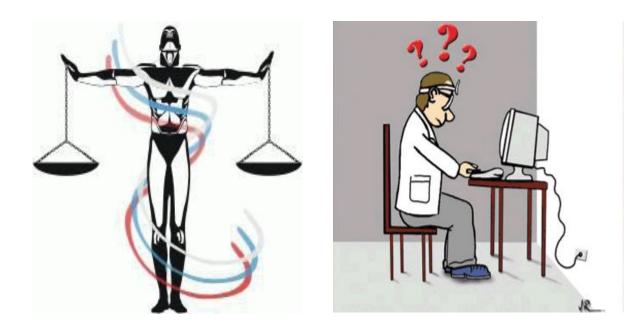
- Introduction
- Fundamentals of evidence-based medicine (EBM)
- □ The principle of EBM
- □ The concept of EBM
- The need for the introduction of EBM
- Sources of evidence-based information Real activities
- □ The role of the practitioner
- Disadvantages of the widespread use of EBM
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«The best way to the truth is to study things as they are, not to believe that they are as we were taught.» D. Lock

- The definition "Evidence-based Medicine"(EBM) was introduced by canadian scientist from Mc Master's university in Toronto in 1990.
- The data obtained using modern evidence-based methods in large, so-called controlled clinical trials (RCTS) using a randomized, controlled method of studying the effectiveness of drugs and treatment methods form the basis of evidence-based medicine.

#### The main principle

"... conscientious, accurate and meaningful use of the best results of clinical trials for decision-making in helping a particular patient".



Influence of the concept of evidence-based medicine on medical science and practice:

- Abroad, the concept of DM has spread not only among researchers in the field of clinical medicine, but also among practitioners.
- According to a 1996 survey of General practitioners in the UK, up to 80% of clinical decisions are made in accordance with the principles of DM.



#### Reasons for using EBM

- ✓ increase in the volume of scientific information.
- Every year more than 4 000 000 scientific articles are published in more than 20 thousand medical journals;
- every year in clinical practice introduced more and more new drugs.
- increasing the availability of information that requires careful analysis and synthesis;
- ✓ the need for doctors in the recommendations for the use of drugs that have the highest efficiency and best tolerability.
- ✓ lack of funds associated with the growth of health care costs in this situation, among the large number of therapeutic drugs need to choose the means that have the highest efficiency and best tolerance;
- ✓ the need for doctors in the recommendations for the use of drugs that have the highest efficiency and best tolerability.

### Sources

- One study rarely provides a clear answer to this question. At the same time, a large number of studies are conducted on many drugs, and their results often differ not only in assessing the magnitude of the effect of the drug, but also are contradictory.
- With this in mind, a method was developed for the preparation of secondary information - a systematic review (CO) of the results of several original studies of a method or drug. Unlike traditional descriptive reviews, a systematic review summarizes only good-quality data and is regularly updated as new test results are obtained. The preparation of such a review is most effective when using a special statistical approach - meta-analysis.
- A systematic review leads to the conclusion that intervention is effective and needs to be applied, or intervention is ineffective and should not be used.

#### Directions of activity

Evidence-based medicine is not only the dictate of time, but also an urgent need.

 Such as the HOT study (Hypertension Optimal Treatment optimal treatment of hypertension), PROGRESS (Perindopril Protection Against Recurrent Stroke Study-effectiveness of perindopril for the prevention of recurrent stroke), 4S (the Scandinavian Simvastatin Survival Study Scandinavian simvastatin study), and many others, constitute the Golden Fund of evidence-based medicine.

In this case, the role of the practitioner is not leveled, but increases.



### The role of the doctor

- The doctor should be aware of all evidence-based medicine data relating to drugs, treatments and try to use them in practice.
- The Clinician should not forget about the need for a critical assessment of the available data, especially when it comes to new, insufficiently studied drugs in the clinic, often advertised as the best.
- It is useful for doctors to get acquainted with the national recommendations for the treatment of certain diseases, regularly published in the West and now in Kazakhstan, which provides generalized and most objective information



Рисунок 1. Основные принципы принятия клинических решений с позиций ДМ

# Disadvantages of wide application of DM principles in medical practice:

- The data of clinical controlled studies give average," average " results, unable to take into account the peculiarities of the disease in each patient.
- Therefore, they are not always able to tell the doctor how to treat a particular situation.
- After all, even the most highly statistical processing of clinical data indicates only the probability of certain medical assumptions about the diagnosis, pathogenesis or efficacy of drugs or therapies, and not their "evidence"

#### **Conclusion:**

Modern medicine is close to the exact Sciences, but it will never be, so the individual experience and personality of the doctor has always been and will be important.

However, today it would be wrong to focus only on feelings when choosing a treatment and ignore the results of the work of researchers who specifically dealt with the problem. Ultimately, the practice of EBM involves a combination of individual clinical expertise and best evidence obtained through systematic research.



#### Literature

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