

# Evidence-based medicine implementation into clinical practice and educational process

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# Background

- until 2006 – establishment of evidence-based medicine: GP training in the UK (British Council), Obstetrician-Gynecologists (UNFPA)
- after 2006 – training of the future Centers of Evidence-Based Medicine (CEBM)
- 2009 – CEBM establishment in medical universities, Center for Health Standardization (CHS) – parent body

# Evidence-Based Medicine Centers

- West Kazakhstan State Medical University;
- Kazakh National Medical University;
- Astana Medical University;
- South Kazakhstan State Pharmaceutical Academy

Evidence-Based Department (course):

- Karaganda State Medical University,
- Semey State Medical University

# Evidence-Based Medicine Centers

- *Universities' structural divisions responsible for the implementation of EBM principles and methodology in educational, clinical, research processes, health organization and consumers associations through:*
  1. Training
  2. Creating and supporting EBM database
  3. Specialists information support

# Implementation of evidence-based medicine into the educational process

Evidence-based medicine is a compulsory subject:

- 3<sup>rd</sup> course of all specialties (excluding Dentistry) of the Bachelor's degree program;
- Specialized Master of Public Health and Medicine
- Specialized PhD

Horizontal and vertical integration with clinical disciplines!

# Implementation of evidence-based medicine into the educational process

Evidence-based medicine prerequisites:

- Clinical guidelines/protocols – Residency, Master and PhD specialties
- Health technologies assessment: Master and PhD specialties

*E.g. Semey SMU: annually 100-120 Residency students, 60-65 Master's Degree students, 15-20 PhD students*

# Integration of the Evidence-based medicine centers

- «Journal Club» for Residency, Master's and PhD students,
- Monographs, manuals, articles publication
- G Global online conferences organization
- Introduction of clinical protocols, guidelines, expertise and reports on health technologies assessment

# Evidence-based medicine integration into clinical practice

- Training of practical health specialists by CHS/CEBM employees in evidence-based medicine, clinical guidelines and protocols, health technologies assessment (across the country – 3500 people)
- Faculty training (in each university – 350-400 people or 70-80% of faculty staff)
- Introduction of EBM issues into the programs of advanced training courses of physicians (in each university – 2000-3000 people per year)



# Evidence-based medicine integration into clinical practice

- Resource centers dealing with evidence-based medicine are open to research institutes, medical centers equipped with EBM databases
- Participation in working groups on adaptation, reviewing, developing clinical protocols (*implemented more than 460 protocols*)
- Participation in working groups on health technology assessment (37 new technologies and 45 technologies in specialized medical care (SMC), including 20 new technologies and 15 SMC – in SSMU – *were passed an expertise only in 2015 in Kazakhstan*)

# Evidence-based medicine integration into clinical practice

- CEBM employees together with CHS participated in piloting clinical guidelines in 4 health institutions: «*Diabetes treatment*» (Karaganda Regional Hospital), «*Hypertension in pregnancy*» (Astana Perinatal Center), «*Treatment of community-acquired pneumonia in children*» (Children's Almaty City Clinical Hospital №2, Aktobe Regional Clinical and Diagnostic Center) with the support of Canadian consultants

# Implementation of clinical guidelines

## “Screening and treatment of retinopathy of prematurity”

Guideline was implemented by employees from CHS and Semey SMU in the “Center of Mother and Child”, Ust-Kamenogorsk.

Blindness due to the retinopathy of prematurity has significantly decreased as a result of the implementation in the East Kazakhstan region.



Thank you for attention!