

## YEREVAN DECLARATION

### *on the consistent promotion of evidence-based medicine*

We, the participants of the international conference “Evidence-based medicine in Armenia: Myth or Reality”, held on October 18-20, 2012 in Yerevan,

*being aware* of the social significance of the age-old problem: assurance of the balance of price and quality of medical care to the greatest number of consumers;

*considering* that “evidence-based medicine” (EBM) has become a paradigm of modern medicine, according to which the health systems and private medical practices are formed;

*taking into account* that the scientific principles underlying the EBM are derived from the discipline called “clinical epidemiology” (CE);

*holding* EBM as a tool for practical implementation of the CE methodology in medicine;

*being convinced* that EBM technologies enable the choice of priorities in any national health care system and formation of national treatment protocols;

*as well as*

*considering* the well-known conservatism of the medical community and existing different forms of passive and active resistance to the ideas of EBM by the medical establishment, the industrial and state bureaucracy and some of the practicing doctors;

*recognizing* the importance of promoting a public debate on the issues arising from the implementation of EBM in healthcare practice;

*emphasizing* the importance of international cooperation in the mentioned areas;

*considering the importance* of the Declaration provisions not only to the medical community of Armenia, but also for all the CIS countries,

*reached an agreement and declare:*

1. According to the modern model of clinical decision making, the competence of a physician is defined not only by the knowledge of disease mechanisms and clinical experience, but also by the ability to assess and use in the practice the scientific information published in peer-reviewed medical journals. This is impossible without knowledge of the CE basics, absence of which cuts off the clinician from the quality information that should underlie his professional knowledge.

2. Countries, where teaching CE has become a mandatory part of medical education already 15-20 years ago, have made the greatest progress in the modernization of health systems and in the development of human resources – both medical and research. In the UK, Canada, Australia, USA, Sweden, Norway, Finland and other countries the promotion of EBM is carried out on a level of public policy and secured institutionally, in particular through the creation of specialized national agencies. The objectives of such agencies as NICE (UK), AHRQ (USA), SBU (Sweden) include preparation of the information for government decision-making in health care (e.g. preparing a list of medicaments and other medical services provided free of charge), development of clinical guidelines, prioritization of research, support of NGOs, which play a key role in the promotion of EBM (e.g. the Cochrane Collaboration).

3. In the former Soviet countries the ideas of EBM started to develop 10-15 years ago, however, the implementation of EBM in practice remains partial, since it relies on the enthusiasm of individual physicians and is not supported institutionally. CE is still not a mandatory course during the training of doctors and health managers. Therefore, the limited resources of the national health system are spent inefficiently, without scientific evidence of efficacy and safety of medical or healthcare services.

4. The low level of information literacy creates ground for incompetence and deception in the medical community, as well as conflicts of interest at all levels of the health system. A typical example of incompetence is the replacement of necessary clinical knowledge with information from advertising leaflets of pharmaceutical companies and manufacturers of medical products. A typical example of deception is prescription of drugs, interventions and procedures, for which the physician is paid by the representatives of companies producing medicaments, products or services. The incompetence of officials is manifested in the inability to organize the preparation of policy papers on the basis of “transparent” procedures and synthesis of quality scientific data; the incompetence of the physician is apparent in prescription of interventions that are unproven

in terms of safety/efficiency and/or harmful; incompetency of the researcher is revealed by a pseudoscientific justification of all the above.

5. The quality of clinical research in CIS countries is characterized best by the level of scientific publications in national medical journals. The typical features of these journals are: publication of studies with inadequate designs, violations of copyright, concealment of conflicts of interest, poor quality of the statistical analysis of the study results, plagiarism and data falsification. All of the abovementioned is also true for PhD theses in clinical research.

*The described problems are institutional and without their immediate solving all attempts to directive modernization of national health systems will be futile.*

Thus, based on the above written, the conference participants consider the following recommendations as the most important for the development of health care in Armenia and other CIS countries:

1. Include the course on “clinical epidemiology” in undergraduate and postgraduate medical education curriculum, as well as in the continuing professional development of doctors and health managers.
2. Include the course on clinical epidemiology and biostatistics in the training program of PhD and Doctoral Students in medicine. The training of trainers, i.e. the supervisors of PhD students, should be a priority.
3. Implement certification of lecturers of clinical epidemiology and biostatistics. The Society of Evidence-based Medicine in Russia is ready to initiate the development of certificate courses, certifications procedures and distance education modules.
4. Provide medical universities and research institutions with statistical support of the ongoing research projects through establishment of biostatistics labs.
5. Medical journals should perform their editorial work in accordance with modern international standards (Uniform Requirements for Manuscripts Submitted to Biomedical Journals), particularly:
  - include specialists in biostatistics in the editorial boards or in the pool of external reviewers;
  - set requirements to authors on disclosure of conflicts of interest;
  - oblige authors to register clinical trial protocols in the International Registry.
6. Health agencies and professional medical associations should involve experts in the field of clinical epidemiology and evidence-based medicine in the development of clinical guidelines, protocols, and standards.
7. Health agencies should follow the results of systematic reviews of scientific evidence on effectiveness, safety and cost effectiveness of healthcare programs during the administrative decision-making on financing.
8. Provide free access to quality information to health providers and patients in the medical and healthcare educational institutions. For making adequate clinical decisions the physicians should be provided with up-to-date sources of high quality information at their workplace: professional journals, Clinical Evidence, Cochrane library, clinical decision making support system.
9. Recommend establishment of Cochrane Collaboration regional branches in Armenia and other CIS countries for promotion of the ideas, principles and methodology of clinical epidemiology and evidence-based medicine, as well as for the development and compilation of systematic reviews and meta-analyzes.

The Declaration is made in Armenian, Russian and English, all having equal force. The Declaration is sent to the Ministers of Health of the former USSR countries, the leadership of the Cochrane Collaboration, the leadership of World Association of Medical Editors, the leadership of the World Federation for Medical Education. The Declaration is also available on the websites of the Republican Scientific Medical Library of Armenia (<http://www.medlib.am>), the Russian Society of Evidence-Based Medicine (<http://www.osdm.org>), website “BIOMETRICS” (<http://www.biometrica.tomsk.ru>). The Declaration is available for signing by all interested parties. Contact: 0051, Republic of Armenia,

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