

Teaching EBHC in Italy

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1. The National context
2. Other organizations
3. GIMBE

- 1. The National context**
2. Other organizations
3. GIMBE

What role for EBP in the core curriculum of medical education

- Formally included in the undergraduate six years course.
- Mostly are “vertical” courses of statistics/epidemiology not integrated with clinical disciplines.
- It is possible to find occasional EBP courses in some postgraduate courses.
- Most EBP courses are planned for CME.

What role for Clinical Governance in health care?

- The National Health Service is financed by the taxpayer
- There are several references to EBHC in the last two National Health Plans
- In Italy there are 21 regional applications (federalism).
- Several Regional Health Plans have introduced Clinical Governance





Evidence-based Medicine



Evidence-based Health Care



Clinical Governance



Clinical Governance



Evidence-based Health Care



Evidence-based Medicine

1. The National context
- 2. Other organizations**
3. GIMBE

2. Other Organizations

- **Cochrane Italian Centre**

- Master in “EBM and research methodology” (in collaboration with University of Modena-Reggio Emilia and CeVEAS)
- Master in “Methodology of Systematic Reviews”
- Several workshops for systematic reviewers



2. Other Organizations

- EBP has become a fashionable subject in CME courses.
- Unfortunately resulting in several untargeted, uncoordinated and fragmented teaching scenarios.
- Only few courses have a high quality of teaching and standards of evaluation.
- Most of the teachers are statisticians or epidemiologists (non clinical).

1. The National context
2. Other organizations
- 3. GIMBE**

3. GIMBE®

3.1. What? Who?

3.2. Teaching framework

3.1. GIMBE®: What? Who?

- A non-profit organization, established in 1996 for spreading EBM in Italy, through teaching and publications
- Three full time professionals: scientific director, organising director, computer scientist.
- A multiprofessional faculty of teachers (physicians, nurses, physiotherapists, pharmacists, midwives, etc.) following a three step accreditation process (tutor → junior teacher → senior teacher)

3.1. GIMBE®: What? Who?

- The main centre – “Centro Studi GIMBE” – is located in the centre of Bologna and is equipped with a multimedia teaching room.
- “Centro Studi GIMBE” hosts the “EBM International Library”, a rich collection of methodological literature (books, monographies, articles, multimedia) structured in three main areas:
 - Evidence-based Practice
 - Evidence-based Health Care & Clinical Governance
 - Methodology of Clinical Research

3. GIMBE®

3.1. What, who

3.2. Teaching framework

3.2. GIMBE®: Teaching framework

A. Workshop and advanced courses

- How many: up to 24 participants
- Where: multimedia teaching room

B. Interactive clinical workshops

- How many: up to 100 participants
- Where: conference room, with televoting system

3.2. **GIMBE[®]**:Teaching framework

A. Workshop and advanced courses

B. Interactive clinical workshops

A. Workshops and advanced courses

A1. Evidence-based Practice

A2. Evidence-based Health Care & Clinical Governance

A3. Methodology of Clinical Research

A. Workshops and advanced courses

A1. Evidence-based Practice

A2. Evidence-based Health Care & Clinical Governance

A3. Methodology of Clinical Research

A1. Evidence-based Practice

General aim: introduce the “EBP core curriculum”

- Awareness of information need
- Ability to formulate clinical questions
- Efficient retrieval of evidence:
 - Appraised
 - Not appraised → critical appraisal of main primary clinical studies (diagnosis, therapy) and secondary (systematic reviews)
- Application to the individual patient

A1. Evidence-based Practice

BMC Medical Education



Debate

Open Access

Sicily statement on evidence-based practice

Martin Dawes*¹, William Summerskill², Paul Glasziou³,
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Amanda Burls⁸ and James Osborne⁹

A1. Evidence-based Practice

Target

- Specialised medical staff
- Nurses
- Midwives
- Pharmacists
- Physiotherapists
- Librarians

A1. Evidence-based Practice

Critical issues 1

- Basic individual skills (EBP pre-core-curriculum):
 - clinical epidemiology, English, computer science
- Lack of infrastructure:
 - information technology, full text medical journals
- Differing perceived usefulness of EBP, due to available evidence:
 - health professions (cardiologist vs endocrinologist)
 - medical speciality (physician vs nurse)
 - information needs (therapy vs diagnosis)

A1. Evidence-based Practice

Critical issues 2

- Growing complexity of critical appraisal (*Users' guides* necessary, but not sufficient)
- Pre-digested sources (*Clinical Evidence, Cochrane Library*) are partial, incomplete and research-oriented (only therapy questions).
- Difficulty in identifying misleading claims and conflict of interests: *Evidence-B(i)ased Medicine*
- Low applicability of evidence, especially in general practice

Users' guide to detecting misleading claims in clinical research reports

Victor M Montori, Roman Jaeschke, Holger J Schünemann, Mohit Bhandari, Jan L Brozek, P J Devereaux, Gordon H Guyatt

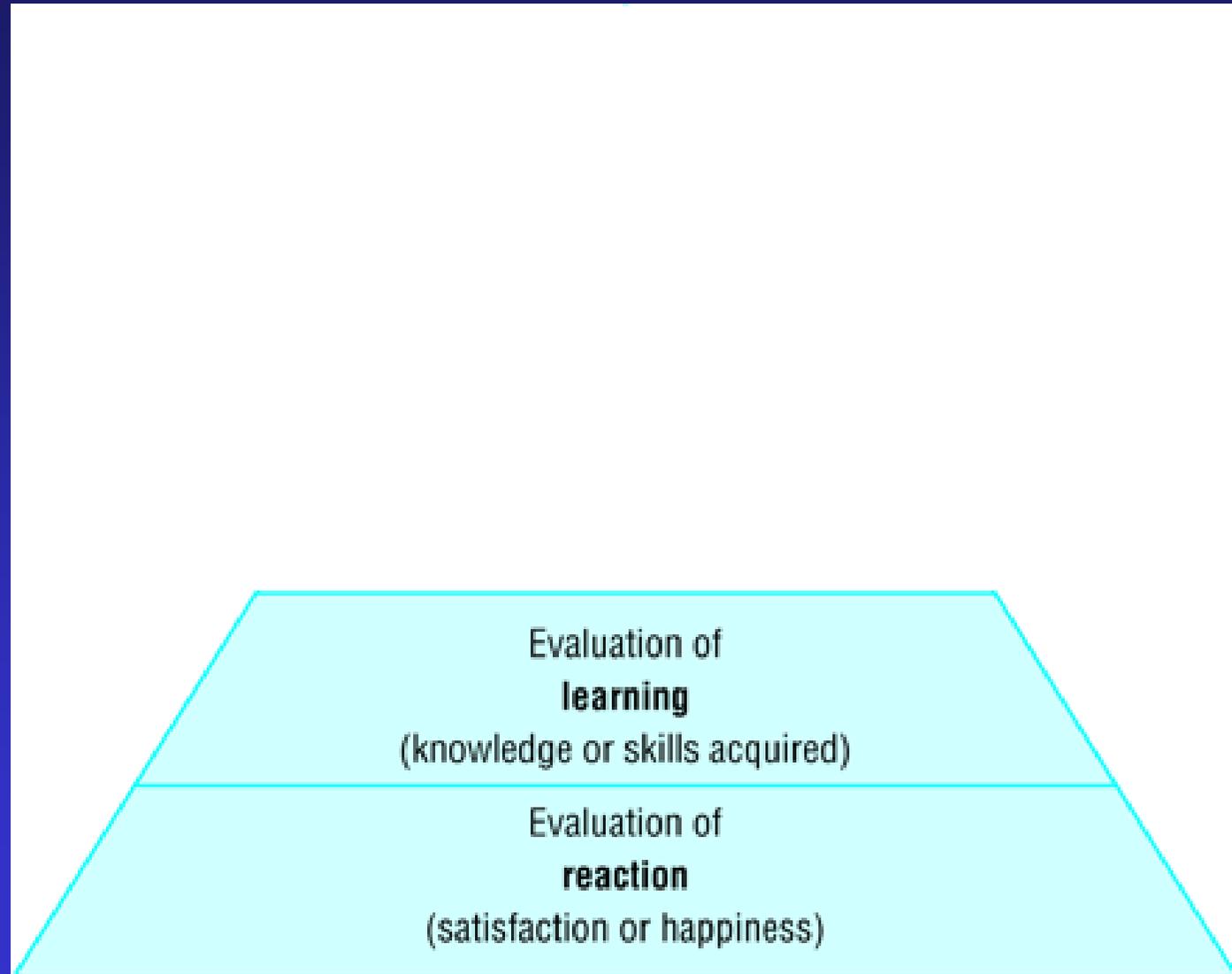
Plenty of advice is available to help readers identify studies with weak methods, but would you be able to identify misleading claims in a report of a well conducted study?

A1. Evidence-based Practice

Evaluation of efficacy

Kirkpatrick's hierarchy of levels of evaluation

EBP →



Kirkpatrick DI. McGraw-Hill, 1967

A1. Evidence-based Practice

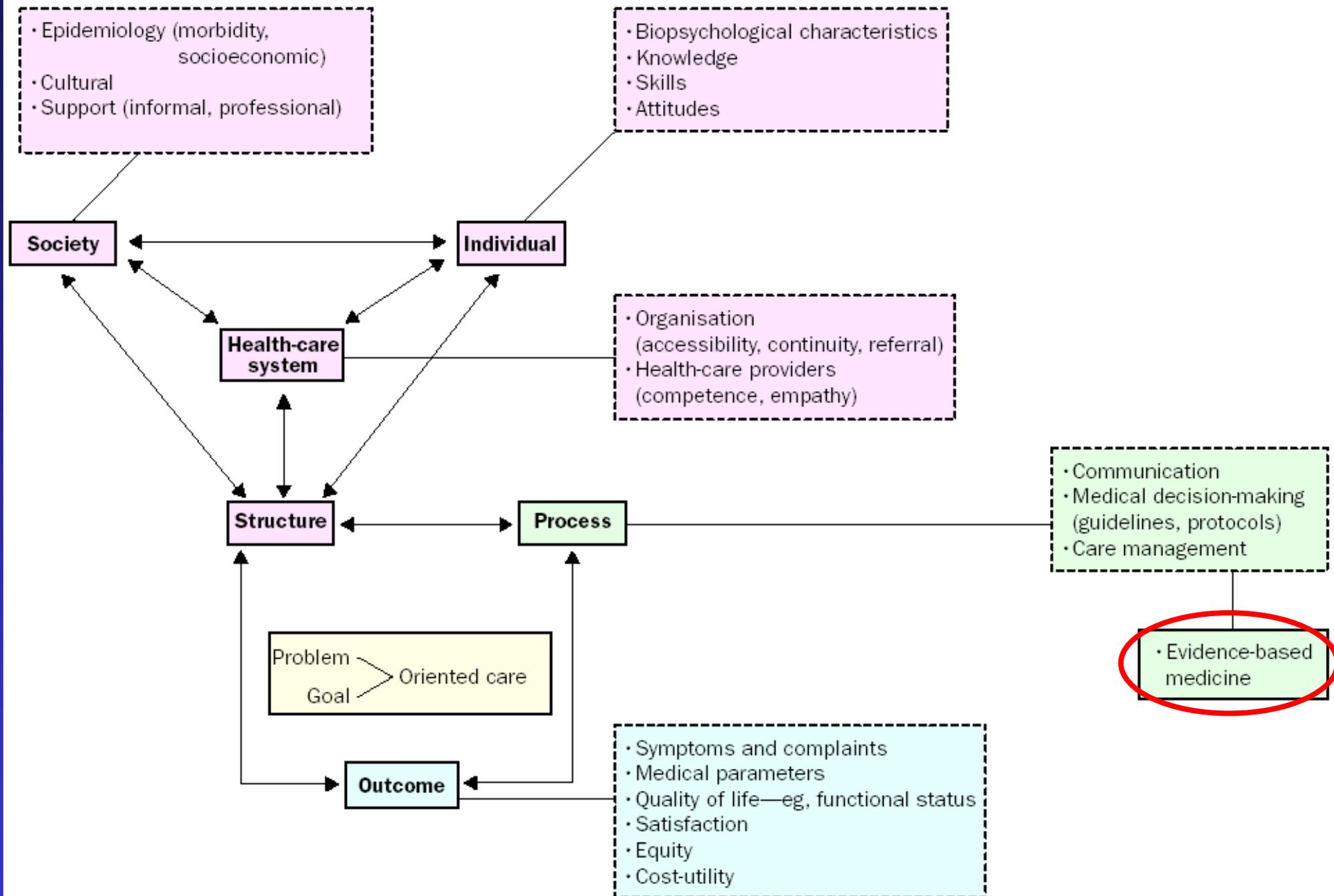
Evaluation of efficacy

- Measurable only with:
 - feedback questionnaires
 - evaluation of knowledge and learning acquired
 - Berlin Questionnaire (*BMJ 2002;325:1338-41*)
 - Fresno test (*BMJ 2003;326:319-21*)
 - Other unpublished tests

Hatala R, Guyatt G.

Evaluating the teaching of evidence-based medicine

JAMA 2002;288:1110-2



A2. Evidence-based Health Care & Clinical Governance

Target

- Professionals involved in the planning, organisation and evaluation of health services:
 - healthcare management
 - responsible for quality control, accreditation, professional training, CME
 - directors of departments, districts, wards
 - nursing managers

Clinical Governance tools & skills

Evidence-based Health Care

- Evidence-based Practice
- Information & Data management
- Practice Guidelines & Care Pathways
- Technology Assessment
- Clinical Audit
- Clinical Risk Management
- CME, professional training and accreditation
- Staff management
- Consumer involvement

*Cartabellotta A, et al.
Sole 24 Ore Sanità & Management
Novembre 2002*

Grol R, Grimshaw J

**From best evidence to best practice:
effective implementation of
change in patients' care**

Lancet 2003, 11 October

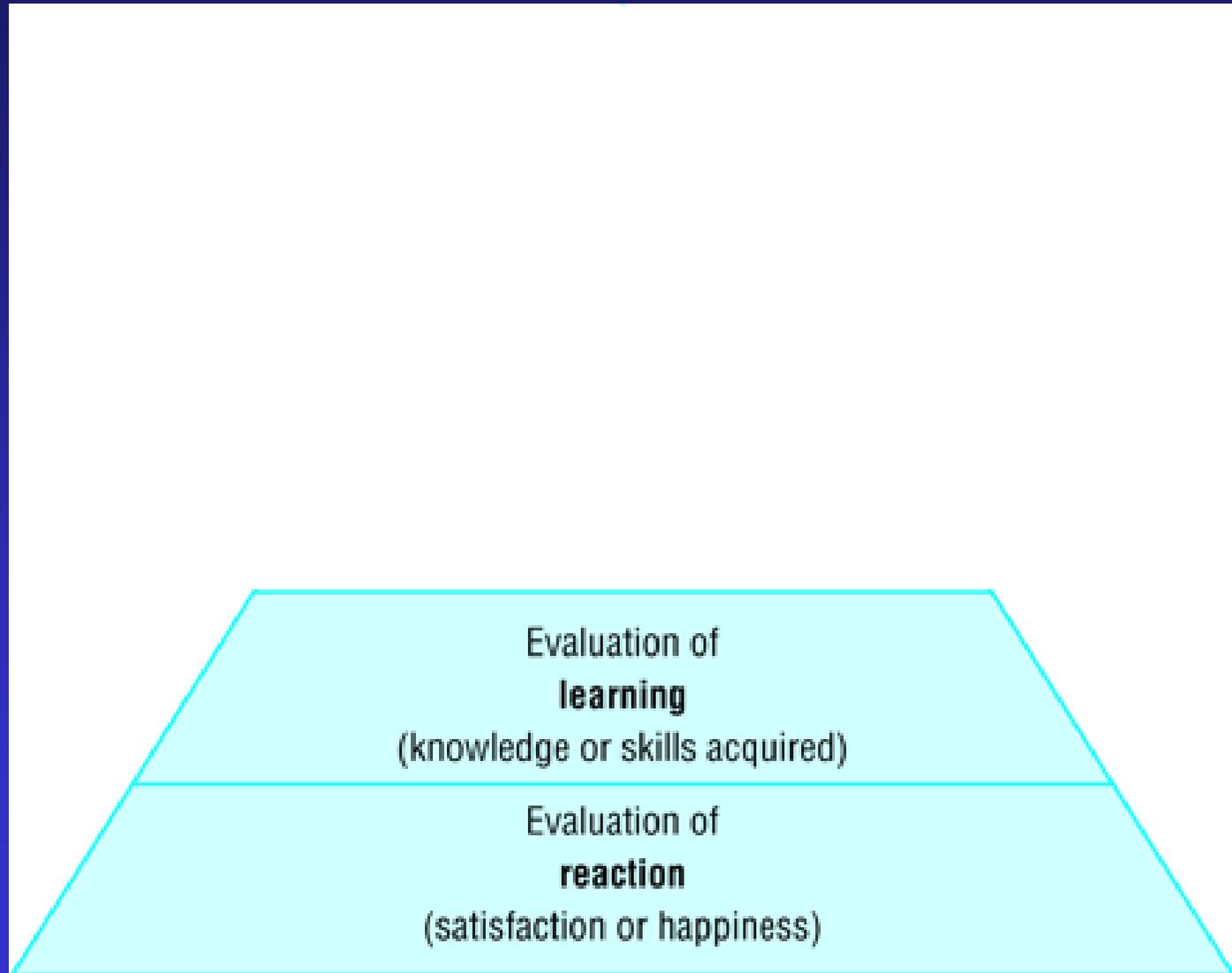
Changing professional behaviours

- Local consensus processes between multidisciplinary groups of professionals, for sharing the clinical standards (guidelines, clinical pathways).
- Retrospective audits to identify the gap between professional behaviours and defined standards
- Use of reminders
- Clinical interactive workshops
- Prospective audits to verify changes in professional behaviours

Kirkpatrick's hierarchy of levels of evaluation

**EBHC
& CG** →

EBP →



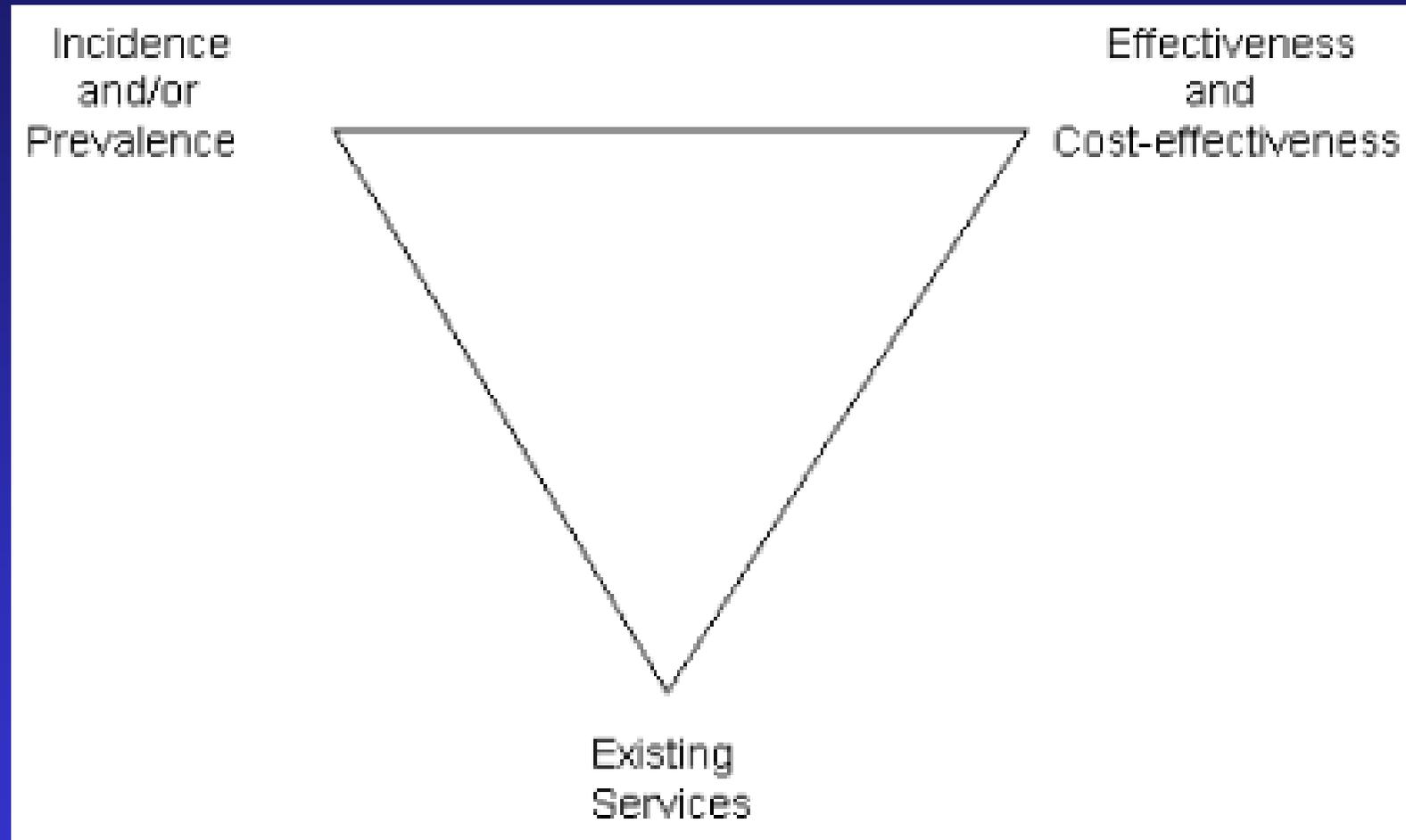
Kirkpatrick DI. McGraw-Hill, 1967

A2. Evidence-based Health Care & Clinical Governance

Critical issues

- Limited role of evidence in managerial and policy decisions (especially if they increase the appropriateness reducing volume of interventions).
- Coordination and support infrastructure are lacking
- Difficulty to integrate, in health organisations the learning programs together with quality improvement projects
- The “epidemiological approach to health care needs assessment” which is lacking

The triangulation of health care needs assessment



A3. Methodology of Clinical Research

General aim

- Acquiring the knowledge and skills to plan, conduct and publish good research evidence.

A3. Methodology of Clinical Research

Target

- Professionals involved in planning, conducting, publications and evaluation of clinical research (ethical committees, clinical researchers, others)

A3. Methodology of Clinical Research

1. Anatomy and Physiology of Clinical Research

- Defining the aims: etiology, prognosis, diagnostic accuracy, efficacy of health interventions
- Choosing the best research design:
 - Observational studies: descriptive and analytic studies
 - Experimental studies: clinical trials

A3. Methodology of Clinical Research

2. Pathology of Clinical Research

- Low quality: grey zones, redundance, disaggregation
- Commissioning bias (neglected diseases)
- Publication bias
- Conflicts of interest
- Scientific frauds

A3. Methodology of Clinical Research

3. Prevention and Treatment of Clinical Research

- Methodology, ethics of research and ethics of publications
- The role of systematic reviews
- Ethical committees
- Registration of RCTs
- Peer-review
- Reporting statement: CONSORT II, STARD, QUOROM, MOOSE, ASSERT
- Pre-print publications systems
- Institutions for prevention of frauds
- Disclosure on conflict of interest

A3. Methodology of Clinical Research

Evaluation of efficacy

To design a research project (including issues related to conduction, analysis and reporting) to answer to question of:

- Etiology
- Prognosis
- Diagnostic
- Therapeutics

3.2. **GIMBE**[®]:Teaching framework

A. Workshop and advanced courses

B. Interactive clinical workshops

B. Interactive Clinical Workshop

Objective

- Encourage the EBP through discussion of relevant clinical problems, for which there are variable levels of evidence to support the clinical decisions.

B. Interactive Clinical Workshop

- The physician presents the scenario with relevant clinical questions.
- The learners answer through a televoting system: the results are showed and analysed.
- The EBP expert present the validity of best available evidence: RCTs, systematic reviews, guidelines.
- The discussants (GPs, specialists, decison makers), judge the clinical relevance of such evidence focusing on grey zones.
- The learner are involved in general discussion.

Many thanks