The concept of information in medicine

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Evidence in health service

- Evidence in health service is an outcome of a communication process between a clinician and patient ... but not only
 - It is a 2 way street
 - Clinician



Patient, Librarian,

- Gathering evidence is essential to clinicians for
 - Decision making
 - Continuous patient support

What evidence in health service is about?

Definitions

- Portion of knowledge likely to be represented using convention to be archived, managed or communicated.
- Meaningful process that associates the producer of information and the receiver around a common language

Tools to clinicians

- Evidence collection
- Systematic retrieval of the best evidence
- Structured approach: from an analysis process to a decision making process.

GP's internal assets

- Clinician knowledge
 - Academic curriculum
 - Continuing education
- Procedural assets = know-how, methodology
- Conditional assets = interpersonal skills (listening, communication, ...), experience

External assets

- Reference librairies
 - Knowledge database (Medline, Pascal, SUDOC ...)
 - Encyclopaedias
 - Books and periodic
 - Academic post
 - Newsletter
- Patient values and expectations
 - Circumstances and references
- Non scientific knowledge
 - Foundational literature (philosophical, anthropological, social,...)

Evidence collection

• Is a must

But not enough to make a decision

Retrieval of the best evidence

- A continuous process to
 - Reflect the evidence from research
 - Filter from the irrelevant to the very important
 - Eliminate uncertainty ... as possible
- A structured approach Vs empirical

3 steps process

- Step I
 - Evidence collection
 - Establish correlation between evidence and GP's expertise
 - Reasonable fit: evidence belongs to a known field
 - No matching : further analysis required beyond current evidence



it must trigger a specific process (see step 2)

3 steps process

- Step 2 (no matching)
 - Establish correlation between evidence and clinical research
 - Emergence of different types of reasoning:
 - Analogic
 - Logic, deductive
 - Intuitive (gut feeling)
 - Learning phase to integrate a new era of information

3 steps process

- Step 3
 - Integrate new learning into GP's expertise and practices that can be
 - A dramatic shift
 - Complementary to current expertise

Fact based, evidence (inert material)



 Best evidence retrieval (filtered and structured material)

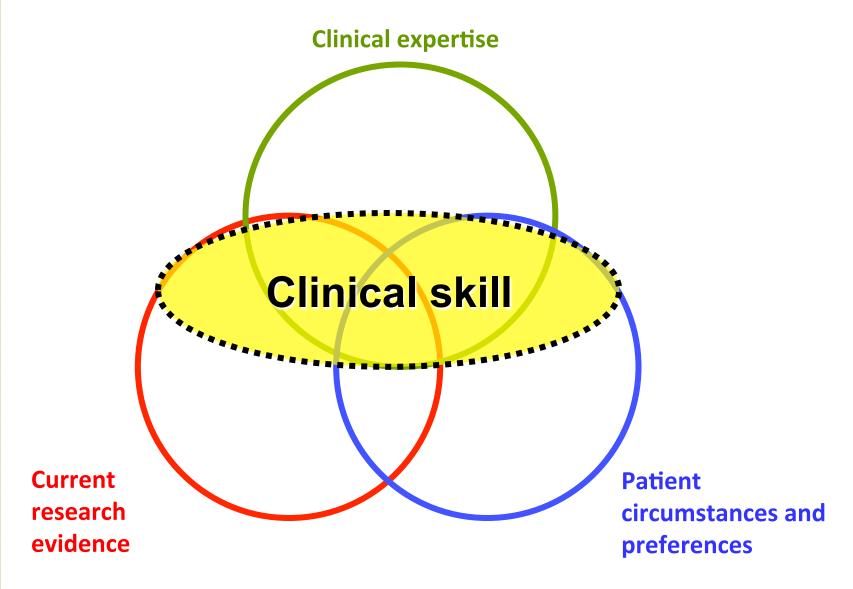


Diagnostic, reasonable assumptions

The Evidence Based Medicine (EBM) approach

- Translation of uncertainty to an answerable question
- Systematic retrieval of the best evidence available
- Critical appraisal of evidence for internal validity
- Application of results in practice
- Evaluation of performance

Clinical decision « Evidence Based Medicine »



- For all patients, the doctor implements a reasoning that includes:
 - Physical check-up,
 - Medical interview
 - Attentive listening to the patient, capturing his values and expectations,
 - Incidence and prevalence of diseases
 - Integration of surrounding factors,
 - Clinical examination
 - Any other relevant input or data

 In summary medical evidence is based on a bi-directional communication process between a GP and his patient or a GP and any medical resources that may contribute to solve an health issue.

Conclusion

- « Toute décision naît de la conjonction d'une information et d'une compétence »
- « Any decision is made from evidence gathering combinied with academic knowledge »

F. Bloch Laine

Thank you for your attention

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