Evidence based medicine

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Evidence Based Medicine

Evidence based medicine (EBM): In simple term, integrating the current best evidence with expertise or experience, and expectation & values of patients, people, medicine, health care is evidence based medicine. Some experts think that the word “medicine” in EBM relates to doctors` profession, and distinguish EBM from evidence based nursing or EB public health, evidence based health care. Etc...

***Goal of EBM:**

EBM has one goal : To improve the health of people through decision that maximize their health related quality of life and life span. The decision may be in relation to public health, health care, clinical care, nursing care or health policy.

***Components of EBM:**

Evidence.

Expertise of decision makers.

Expectation and values of patient/people.

***Steps in practicing EBM:**

The main (but not only) objectives o EBM is the application of the right and complete information by health care professionals in decision making. To meet this objective four keys are necessary:

Step -1: Ask for the needed information.

Step-2: Acquire(find) the information by searching resources.

Step-3: Assess or appraise the relevance, quality importance and applicability of the information this done by critical appraisal which need 4 issues:

Relevance.

Validity.

Consistency.

Importance or significance of results.

Step-4: Applying the results to your patient**.**

***Clinical question:**

To summarize, you need to specify the following in your clinical question(PICO):

Patient or population: type of patient.
Intervention :the new approach or strategy of treatment, or observation.
Comparison: the control intervention.
Outcome: clinically meaningful outcome that are important for the patients.

Classification of Evidence Levels:

Grade I

Ia: Meta analysis*** of randomized controlled trials.

Ib: At least one randomized controlled trial.

Grade II:

IIa: At least one well designed controlled study without randomization.

IIb: At least one other type of well designed experimental study.

Grade III: Well designed non experimental descriptive studies, comparative studies, correlation studies, and case (report, series) studies.

Grade IV: Expert committee reports or opinions and/or clinical experience of respected authorities.

Grade V: I always do it in this way.

Grade VI: I was told so.

***Meta analysis:** Meaning “analysis among” , is a statistical method in which the results of several trials or studies devoted to the same topic or research question are combined . It is being used increasingly in medicine to try to obtain a qualitative or a quantitative synthesis of the research literature on a particular issue , and to obtain greater statistical power or more accurate estimates in other sentence meta analysis can be defined as a systematic, organized and structured evaluation and synthesis of a problem of interest based on the results of many independent studies of that problem (disease cause, treatment effect, diagnostic method, and prognosis, etc) .

***Objectives:**

1: To confirm information.

2: To fined errors.

3: To search for additional findings (induction).

4: To find new ideas for further research (deduction).