

## The Importance of Evidence-Based Approach in Medical Education and Research

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Explosion of low information and resources in medical field, that also occurred alongside the other sciences, has led to this phenomenon that a large flow of information in the scientific and clinical decisions involved and engaged and also has led to this event that intellectual and logical concepts revived based on the philosophy and history of philosophy and from the depths of books and libraries re-enter to daily discussions (1).

Critical thinking (critical thinking), conditional reactions to clinical challenges (conditional reflex), medical-based on resolve challenges (problem-based medicine), scientific inference (scientific reasoning), the relationship between action and idea (concept of essence challenge), smart thinking (systematic thinking), all and all are small fractions of concepts which were revived during two past decades (2). Along with maturing all these issues and barricading hermeneutics philosophy discussions and also entering them to the empirical sciences fields raised and formed a fundamental question in the minds of researchers and activists in the empirical sciences (3).

How should face with raw theoretical information?

Raw theoretical information is what defined in general as «evidence» but medical training and research in the fields has changed and should be changed over and over.

Today, you as a physician working in the clinical field, before each skill should know:

1. How to ask your questions;
2. How to search about your question within scientific information;

3. How to extract evidence;
4. How to evaluate extracted evidences and be able to rank evidences based on value;
5. How to do scientific analysis of valuable evidences and be applied to your clinical question;
6. How to be able to make decision based on your analyzing evidence and have decision monitoring and refining;
7. And finally, how to be able to produce and provide evidence from your experience series.

This important issue will not happen unless the entire time of teaching and research for medical students conduct in an environment and situation that all believe in “evidence-based medicine”; they must avoid eminence-based approach, vehemence-based approach, eloquence-based approach, providence-based approach, diffidence-based approach, litigation-based approach, confidence-based approach, etc. (4).

### References

1. Dawes M, Summerskill W, Glasziou P, Cartabellotta A, Martin J, Hopayian K, et al. Sicily statement on evidence-based practice. *BMC Med Educ*. 2005; 5(1): 1.
2. Ackoff RL. *Scientific Method and Social Science*; East and West. *Scientific Monthly* 1952; 75: 155-60.
3. Ogburn WF, Nimkoff MF. *A handbook of sociology*. London, UK: Routledge & K. Paul; 1964.
4. Kloek AT, Verbakel JR, Bernard SE, Evenboer J, Hendriks EJ, Stam H. The desirability of education in didactic skills according to medical interns. *Perspect Med Educ*. 2012; 1(5-6): 262-9.

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