

# EVIDENCE-BASED MEDICINE IN MEDICAL EDUCATION

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# KEY QUESTIONS

- Why is EBM “in vogue” in medical education?
- When should it be taught?
- How can we assess if students are learning EBM?
- What areas regarding EBM in medical education need further research?

# OBJECTIVES OF EBM

- Educate medical students to critically read the medical literature to get the “best” evidence that is up to date, valid, and relevant.
- Educate/train medical students to develop clinical reasoning skills to aid in decision making based on the “best” evidence.

- Educate/train medical students to become life-long learners; to incorporate evidence-based learning into their practice of medicine.

# WHY EBM?

- Continuing Medical Education (CME) alone is unlikely to change professional practice.
- Interactive workshops may (or may not) result in changes in professional practice.
- Reading lots of medical journals is very time consuming (and requires a very good memory!).

# NEW FOCUS IS NEEDED

- Shift from “How do I keep up with new developments in medicine?”
- To “What developments in medicine do I need to keep up with?”

# EBM STEPS

- ASK
- ACQUIRE
- APPRAISE
- APPLY

# EBM SKILLS

- Formulate a clinically relevant and “searchable” question.
- Find the “best” evidence.
- Assess the evidence for validity, generalizability, importance for your patient.
- Apply to your patient.

# HOW EBM IS TAUGHT IN U.S. MEDICAL SCHOOLS

- 110 U.S. medical schools (88%) teach EBM in their curriculum.
- Of these, 5 taught EBM as a separate required course,
  - 101 taught EBM as part of a required course.

- Others offered EBM as a separate elective course, or part of an elective. Some schools incorporated EBM learning into special projects.

# WEILL MEDICAL COLLEGE'S APPROACH

- PRE-CLINICAL YEARS: FOCUS ON EBM CONCEPTS AND SEARCHING SKILLS.
- \* EBM is a required course in the 1<sup>st</sup> year.
- It is co-taught by the Department of Public Health and the Information Service of the Library.
- Case scenarios form the basis of instruction.

- CLINICAL YEARS: FOCUS ON KNOWLEDGE, PATIENT CARE, CLINICAL REASONING.
- EBM is integrated into several clinical clerkships.

# HOW WE TEACH EBM AT WMC

- Present a clinical case scenario
- Hold interactive seminar sessions team taught by Librarians, Epidemiologists, and physicians.

- We try to foster and develop clinical reasoning skills to aid in decision making.
- We emphasize the use of EBM in clinical decision making
- We hope we are laying the foundation for life-long learning using EBM skills.

# EVALUATION

- Searching methods and skills
- Identification of the best evidence to answer the questions
- Interpretation and analysis of the study findings
- Write up of the rationale for his or her decision—how well was the question answered?