

TEACHING MEDICAL STUDENTS

EBM



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COURSE OBJECTIVES

- To develop relevant skills in question framing, critical appraising, and database searching.
- To show the importance of understanding research designs and methodology.
- To improve the student's ability to analyze, synthesize, and apply knowledge.
- To enable the student to apply the results to patients.



END RESULTS OF COURSE

- The student should be able to analyze clinical scenarios from an individual patient and population perspective.
- The student should be able to search on-line for the literature most relevant to answer specific clinical questions.
- The student should be able to discuss the strengths and weaknesses of the studies.
- The student should be able to appraise the evidence for its validity and usefulness.



COURSE ORGANIZATION

- FORMAT:

- 50 minute lecture

- 75 minute small group seminar

COURSE CONTENT



- Week 1: General Overview

Instruction in framing background and foreground questions.

Introduction to database searching.



COURSE CONTENT

- Week 2: Diagnosis

Review of sensitivity, specificity, pre-test probability, likelihood ratios.

Small group seminar focuses on clinical scenario relating to a diagnostic test.



COURSE CONTENT

- Week 3: Treatment/Therapy

Review of relative risk, relative risk reduction, absolute risk reduction, number needed to treat, number needed to harm.

Small group seminar focuses on a clinical scenario relating to treatment.



COURSE CONTENT

- Week 4: Prognosis

Review of prognostic vs. risk factors; censored data; survival curves.

Small group seminar focuses on clinical scenario relating to disease prognosis.



ASSIGNMENTS

- Write up of a clinical scenario and journal article relating to the case assigned for that week. The student must discuss:
 - * the study design and methodology of the assigned article.
 - * the strengths/weaknesses of the study and implications of the findings.
 - * the relevance of the findings to the patient in the scenario.



FINAL EXAM

- A clinical scenario is assigned (either pertaining to diagnosis, treatment, or prognosis).



The student must

- * include a search strategy
- * indicate the databases used
- * discuss 3-5 articles found representing the “best evidence”
 - * describe why he/she thinks the study findings are valid
 - * conclude by responding as if discussing the case with the patient.



Assessment of Write-Up

- How was the search conducted?
- What types of studies were assessed?
- Did the student address focused clinical questions?
- What was the criteria to select articles?
- How did the student assess if the results were valid?
- Did did the student explain how the results could be applied to the patient in the scenario?



EBM FACULTY

- EPIDEMIOLOGISTS

- Linda Gerber, Ph.D.

- Phyllis Supino, EdD.

- Holly Atkinson, MD

- Alvin Mushlin, MD, .

- Nathaniel Hupert, MD

- LIBRARIANS

- Helen Ann Brown

- Kristine Alpi

- Daniel Cleary

- Caroline Reid