Evidence Based Medicine

6th Year Surgery II

Introduction

Explosion in medical knowledge has resulted in rapid changes in patient management. After graduation, the Medical Prctitioner is unable to keep up with the rapidity of newer modalities of management of a patient. Many medical practioners believe that their judgement is nullified by "practice of medicine by Medline search". On the other extreme, some practioners will blindly follow the "latest" treatment modality without confirming that this treatment is infact suitable for their patients.

It is important for the medical students to realise that the facts in a textbook may be dated and that since its publication, changes may have ocurred that may be important. Therefore it is necessary for a medical student to learn how to look for answers in the vast sea of information. It is also necessary for the Student to realise that external evidence alone may be insufficient to treat without having the expertise or the equipment needed for treatment. EBM is the combination of the best available external evidence combined with individual expertise. EBM helps the medical professional to quickly respond to medical developments without being totally blinded by exaggerated claims, making clinical decisions more objective and scientific. It also helps to develop guidelines for practice and assessing one's own performance. By learning to assess literature critically, applicability of "best treatment" can be assessed.

Learning objectives: At the end of the course, the student should be able to:

1. Understand the place of EBM in clinical practice, what it can do and what it cannot.

2. Frame a properly constructed focused clinical question
3. Understand the components of a focused clinical question
4. Grasp the various databases that are available for search
5. Understand the various search strategies including the use of MeSH terms
6. Critically appraise the evidence that has been unearthed.

Venue: Computer Laboratory, College Building

Time: 0800 – 1230 hrs

Course structure and contents: The course will consist of PowerPoint presentation, handouts and hands on training.

I. Introduction:

1. Definition of EBM
2. The place of EBM in practice
3. What EBM can and cannot do
4. Components of EBM

II. Focused clinical question:

1. What is a Focused Clinical Question
2. Parts of Focused Clinical Question
3. How to frame a FCQ for therapy
4. How to frame FCQ for diagnosis
5. How to frame a FCQ for prognosis

Exercise: Students will formulate FCQs for each type; viz, therapy, diagnosis, prognosis

III. Literature Search:

1. Different databases
2. Search strategies, MeSH, Boolean etc.

3. PubMed: Introduction
4. Medscape: Introduction

Exercise: Students will perform literature search using PubMed on the FCQs formulated

IV. Critical assessment of literature:

1. Evidence pyramid
2. Basics of critical evaluation of evidence for therapy/Diagnosis/Prognosis

Exercise: Students will critically evaluate one paper each for therapy, diagnosis and prognosis.

V. Interaction