

# **Evidence-Based Medicine**

**Oleh: dr. Darwin Amir, Sp.S.**

**Bgn Ilmu Penyakit Saraf FK-Unand /  
RS DR. M. Djamil**

**Padang**

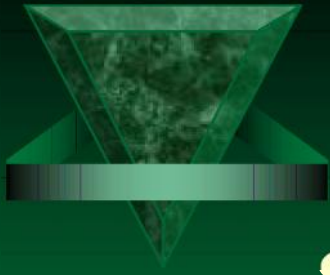


## **Pendahuluan:**


Dalam pekerjaan sehari hari, dokter dihadapkan pada kebutuhan informasi tentang masalah medis yg relevan (evidence-based) sementara arus informasi berubah dengan cepat.

## **Tujuannya:**

Mencari bukti yang relevan dan bermanfaat untuk meningkatkan kualitas perawatan pasien



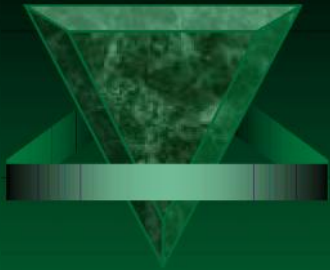
- Dokter memerlukan informasi terbaru dan mempelajari keterampilan baru (learn new skills).
- Karena itu mahasiswa kedokteran harus menguasai:
  - ▶ current information
  - ▶ technique
  - ▶ prepare for life long learning



## Aspek yg penting bagi mahasiswa dlm mempelajari EBM adalah:

- Belajar mengidentifikasi kekurangan pengetahuan.
- Menentukan pertanyaan klinik yg spesifik.
- Menemukan artikel yg relevan dalam literatur medis.

Suatu cara bagi mahasiswa menemukan ‘deficit knowledge’ yg tersembunyi adalah selalu membawa buku saku (notebook) dalam sakunya kemana pergi, catat pertanyaan klinik yg muncul.



## Apa itu EBM ?.

Adalah integrasi bukti penelitian terbaru (the best research evidence), keterampilan klinik dan masalah yang ada pada pasien.

- Reasearch evidence ---- > clinically relevan research.
- Clinical expertise ---- > ability to use our clinical skills and past experience to rapidly identify.
- Patients values ----- > preference, concerns and expectations each patients bring to serve the patients.



## The core of General Practice:

- ◇ Relationship between the doctor and patient
- ◇ The central aspects is the process of decision making
- ◇ Decision range from the simple clinical type to practice level



- Telah memperlihatkan pergeseran dlm pengambilan keputusan medis
- Secara dramatis telah memperbaiki kualitas dan mampu meningkatkan perawatan pasien.
- Tantangan bagi generasi dokter sekarang untuk belajar lebih giat.
- Manfaatkan EBM dlm pendidikan dan upayakan bagaimana mempelajarinya dan menggunakan proses untuk kepentingan profesi.

## **Definisi:**

Proses penelitian dan penggunaan informasi yg disajikan dalam literatur untuk memperbaiki perawatan pasien.

## Prosesnya:

Mengubah “kekurangan pengetahuan” (knowledge deficit) menjadi pertanyaan klinik yg spesifik,

Dgn cara meng-evaluasi bahan kepustakaan yg berhubungan dengan pertanyaan klinis, untuk memperbaiki perawatan pasien

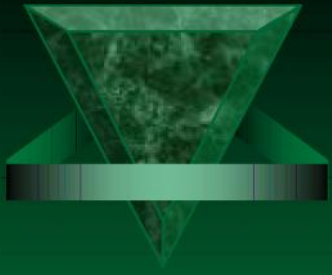




## Menemukan Pertanyaan Klinik

*David Sackett:* pentingnya menentukan pertanyaan klinik yg relevan dan spesifik.

Ia mengatakan: Agar menguntungkan bagi pasien dan dokter, pertanyaan (klinik) perlu dibangun dengan baik, yg berarti secara langsung, relevan dg masalah pasien dan diungkapkan dgn mencari jawaban yg tepat dan relevan.



## **How to get started:**

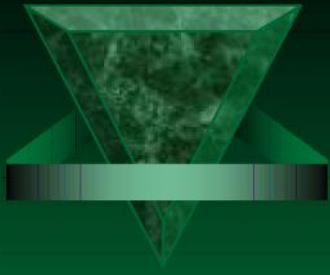
A five step process for using an evidence-based approach in General Practice

1. Define the problem (generating clinical question).
2. Tracking down the information source needed
3. Critically appraising the information
4. Applying the information with your patients
5. Evaluating how effective it is.



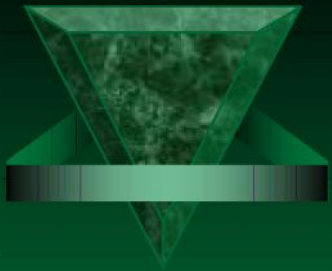
## Step 1. Defining the problem

- ✓ In every consultation decision need to be made.
- ✓ Questions frequently arise, such as the pros and cons of using of
  - particular form of therapy
  - the value a particular diagnostic test
  - the risk or prognosis of a part. disease
  - cost effectiveness of a potential intervention
- ✓ There is a clinical problem for which you are unsure of the evidence and to make a decision to investigate it further.



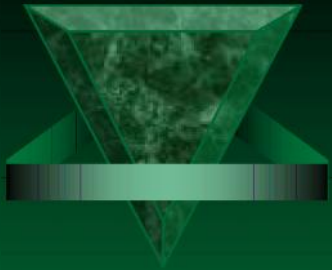
## Step 2. Tracking down the information source needed

- The body of medical literature which can assist in providing answers to the questions raised in clinical practice is broadly scattered, journals and government reports all contain



## Step 3. Critically appraising the information

- ✔ Decided which journal articles to read (not all published information is of equal value).
- ✔ Process which involves carefully reading an article and analyzing its methodology, content and conclusion.
- ✔ Do I believe these results sufficiently that I would be prepared to adopt a similar approach, or reach similar conclusion, with my own patients ?



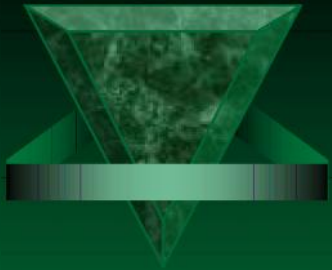
## Step 4. Applying the information with your patients

- ✔ How to apply the information obtained to the particular circumstances of your patients
- ✔ Probably the most crucial step in the process as well as the most complex.
- ✔ Whether there are any methodological issues raised about the evidence which might prompt you to reject it outright.
- ✔ The process requires a partnership between the doctor and patient



## Step 5. Evaluating how effective it is

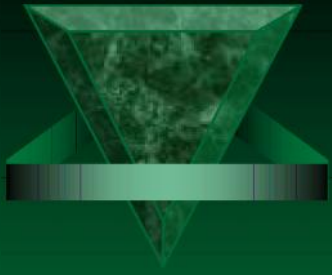
- ✔ To evaluate the effect of the evidence as applied to specific patients.
- ✔ The expected benefits that arose from using a particular item of evidence were consistent with the observed benefits
- ✔ It may well generate the need for further research to identify why some patients have not responded in the expected manner and what can be done rectify this
- ✔ The practitioner is having sufficient time to apply these steps routinely in their daily practice



## Supporting a framework for EBM within general practice

- ✔ As professional you have the challenge and responsibilities in facing general practice
- ✔ Framework needs to be built around ensuring that the evidence required to inform decision making is available, accessible, acceptable and applied by GP.
- ✔ The systematic summaries of literature. Good examples are the Cochrane Library (a database of high quality systematic review)
- ✔ The journals of secondary publications.





## Supporting a framework for EBM within general practice

- At a more local level, there are a growing number of networks being amongst general practitioner of searching for and appraising evidence
- A natural extension of this process is to apply EB Protocols and guidelines, developed by the colleagues in clinical practice.



## Summary

- ✓ If the concept is embraced it will improve general practice
  - ◇ Will make the GP an even more rewarding discipline within which to practice.
  - ◇ Will support shared decision making with users. It is the ideal model of making decisions within the medical encounter.
  - ◇ EBM / EBP will help maintain the central role of general practice in health care



## The relevant clinical questions in your patients must contain 4 element:

- 1). The patients problem.
- 2). Intervention, which by research methodology, diagnostic test and the treatment
- 3). If needed with intervention comparable.
- 4). Clinical outcome or outcome of interest.

The 4 element to form the terminology i.e. PICO

P= Patient,

I = Intervention,

C= Comparison,

O= Outcome.

## Contoh:

Seorang pasien wanita 46 thn dgn kolitis ulseratif selama 17 thn, mengenai kolon secara ekstensive dgn gejala yg cukup hebat. Saat ini kolitisnya kambuh, ia tdk mau di-operasi tetapi sadar akan resiko kanker yg ia dengar dan baca dari newsletter. Suaminya tlg meyakinkannya akan resiko yg akan terjadi.

P = 46 yrs old women

I = Long standing ulcerative colitis, now in remission

C = Patients without ulcerative colitis

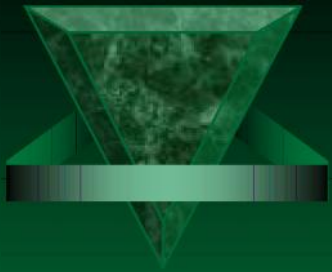
O = Prevention / control of colon cancer

P = 46 yrs old women with long standing ulcerative colitis, now in remission.

I = Mesalamine

C = Standard therapy.

O = Prevention of relap



Terima Kasih