آشنایی با منابع نوین اطلاعات بالینی و نقش آن‌ها در تصمیم‌سازی اثربخش درمانی

دکتر پیام کبیری
پزشک، اپیدمیولوژیست بالینی
رئیس مرکز توسعه و هماهنگی اطلاعات و انتشارات علمی
معاونت تحقیقات و فن‌آوری
وزارت بهداشت، درمان و آموزش پزشکی

Clinical Questions

- There are 2 Types of Clinical Questions:
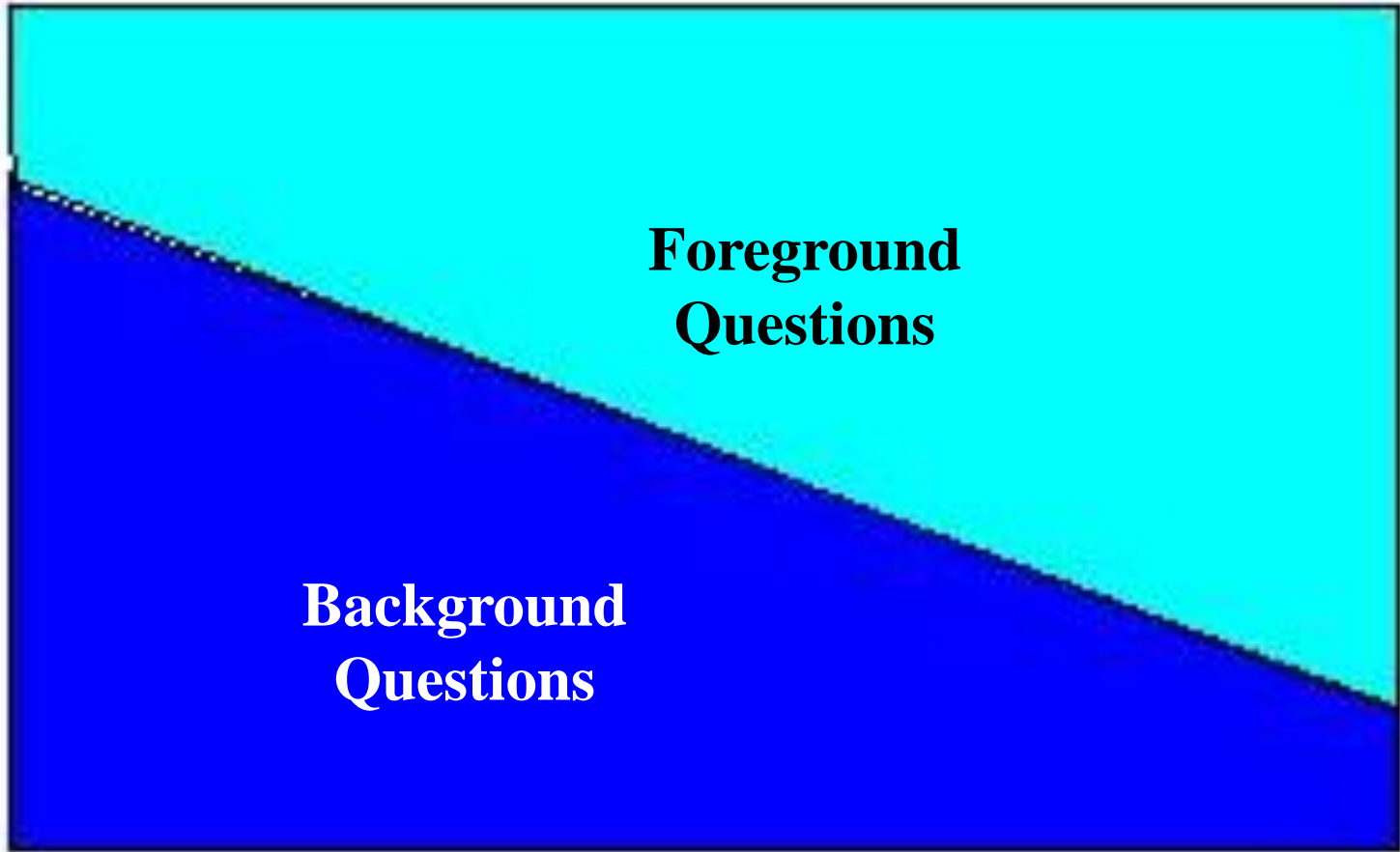
- Background Questions
- Foreground Questions

Clinical Questions

- Background Questions
  - ☐ Ask for general knowledge about a disorder.
  - ☐ Two essential components: A question root (who, what, where, when, how) a disorder, or an aspect of a disorder
- Foreground Questions
  - ☐ These questions ask for specific knowledge about diagnosis, prognosis, and treating. The Patient and/or Problem, Intervention, Comparison & Outcome are included.

Foreground Questions

Background Questions

Experience with Condition

Information Resources

- دانش پایه (Basic Knowledge)
  کتاب‌ها (Books)

- دانش روزآمد (Updated Knowledge)
  مجلات و نشریات ادواری (Periodicals)

انواع **مقالات** در علوم پزشکی

■ مقاله پژوهشی اصیل	■ Original Article
■ مقاله مروری	■ Review Article
■ مقاله گزارش مورد	■ Case Reports
■ سرمقاله (سخن سردبیر)	■ Editorial
■ مقاله کوتاه	■ Short Communication (short papers)
■ نامه به سردبیر	■ Letter to Editor

انواع **مقالات مروری** در علوم پزشکی

- **مقالات مروری سنتی**
  مرور روایتی

- Traditional Review Articles
  (Narrative Review)

- **مقالات مروری نظام‌مند**
  مرور ساختاردار

- Systematic Review
  (Meta-analysis)

Half-time or Half-life of Clinical Medical Science is now

about 6 Month

Doubling time of biomedical science was

about **19 years in 1991**

Doubling time of biomedical science was

about 20 months in 2001

So you work in a job which:

- Its half-time (half-life) is 6 months, &
- Its doubling-time is 20 month

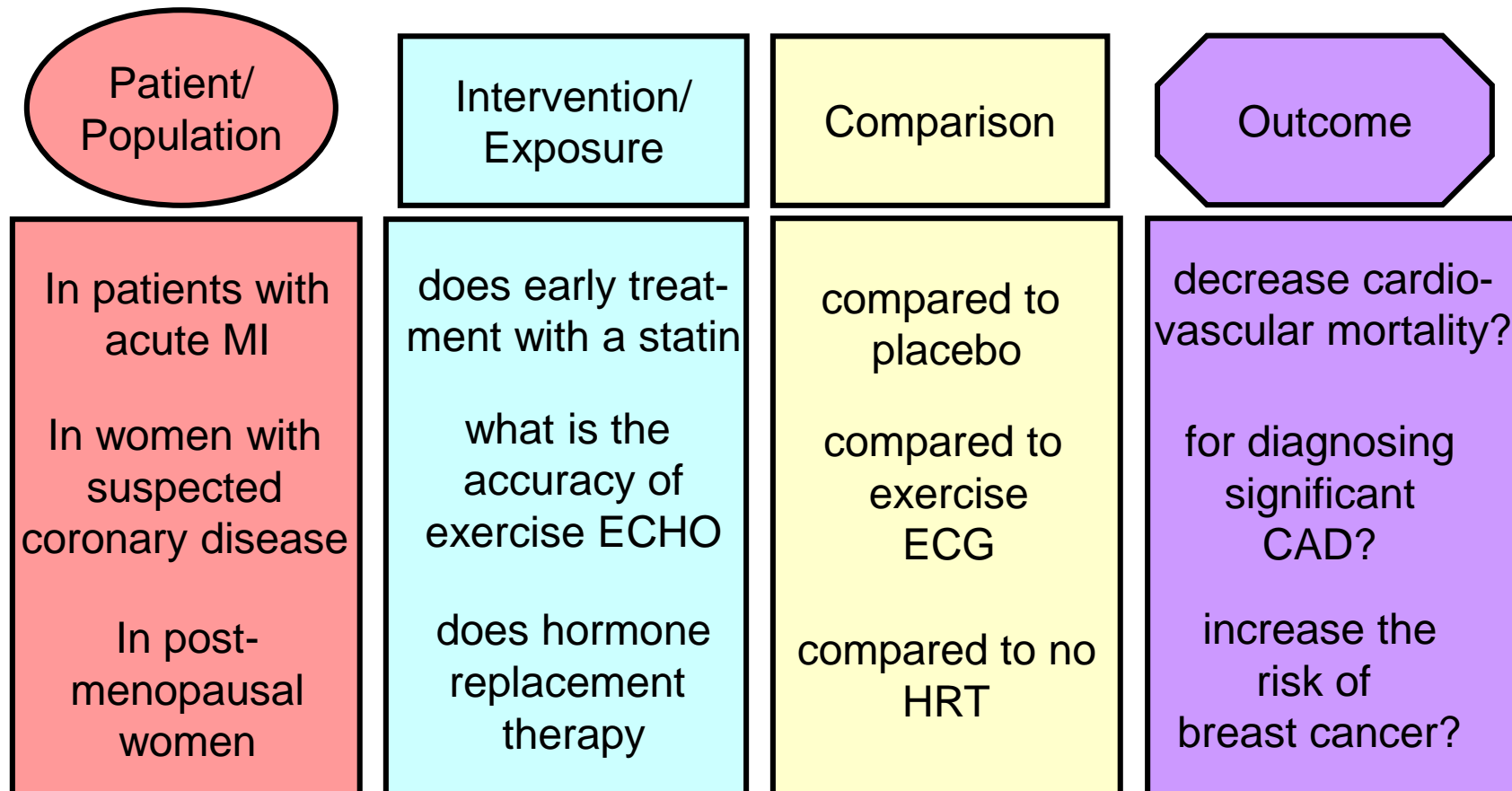- You works in a ever-changing & ever-growing profession !

- So you should keep updating !

Question components: PICO

- What types of   Patients?

- What types of   Interventions?

- What types of   Comparison?

- What types of   Outcomes?

12

طراحی سئوال بالینی در قالب PICO

Components of Clinical Questions

Patient/Population	Intervention/Exposure	Comparison	Outcome
In patients with acute MI	does early treatment with a statin	compared to placebo	decrease cardio-vascular mortality?
In women with suspected coronary disease	what is the accuracy of exercise ECHO	compared to exercise ECG	for diagnosing significant CAD?
In post-menopausal women	does hormone replacement therapy	compared to no HRT	increase the risk of breast cancer?

What is 'level of evidence'?
سطوح شواهد چیست؟

- The extent to which one can be confident that an estimate of effect or association is correct (unbiased).

Hierarchy of studies
سلسله مراتب مطالعات

Systematic Reviews and Meta-analyses

Randomized Controlled Double Blind Studies

Cohort Studies

Case Control Studies

Case Series

Case Reports

Ideas, Editorials, Opinions

Animal research

In vitro ('test tube') research

Evidence Pyramid
هرم شواهد

Systematic Review

Randomized Controlled Trial

Cohort studies

Case Control studies

Case Series/Case Reports

Animal research

Levels of Evidence

Level of Evidence	Type of Study
1a	Systematic reviews of randomized clinical trials (RCTs)
1b	Individual RCTs
2a	Systematic reviews of cohort studies
2b	Individual cohort studies and low-quality RCTs
3a	Systematic reviews of case-controlled studies
3b	Individual case-controlled studies
4	Case series and poor-quality cohort and case-control studies
5	Expert opinion based on clinical experience

Adapted from: Sackett DL et al. *Evidence-Based Medicine: How to Practice and Teach EBM*. 2nd ed. Churchill Livingstone; 2000.

انواع بانک‌های اطلاعاتی در علوم پزشکی

دکتر پیام کبیری
پزشک، اپیدمیولوژیست بالینی
رئیس مرکز توسعه و هماهنگی اطلاعات و انتشارات علمی
معاونت تحقیقات و فن‌آوری
وزارت بهداشت، درمان و آموزش پزشکی

انواع منابع اطلاعاتی در پزشکی بالینی

- **Primary** resources
- **Secondary** resources
- **Tertiary** resources

Primary Resources
منابع اطلاعاتی اولیه

- A primary source is firsthand original research or direct evidence concerning a topic under investigation not interpreted.

- Primary resources are generally original articles that appear in peer-reviewed journals and are found primarily by searching Medline.

- Require more work to validate.

- Samples are Medline, Embase, ISI Web of Science, Scopus, …

Secondary Resources
منابع اطلاعاتی ثانویه

- Secondary sources describe or analyze the primary sources, are summaries and analyses of the evidence derived from and based on primary sources.

- A secondary source is a work that appraises, interprets or analyzes.

- Already reviewed, less work to validate.

- Samples are Clinical Evidence, ACP Journal Club, and Cochrane Library, EBMR.

Tertiary Resources
منابع اطلاعاتی ثالثیه

- Tertiary resources list, compile, digest or index primary or secondary sources.

- Examples of tertiary resources include UpToDate, DynaMed, TripDatabase.

UpToDate Level of Evidence

- There are two levels of recommendation strength (**1** or **2**)
  - ☐ Strong
  - ☐ Weak
- There are three levels of quality of evidence (**A**,**B**,**C**)
  - ☐ High
  - ☐ Moderate
  - ☐ Low

UpToDate Level of Evidence

- 1. Strong recommendation: Benefits clearly outweigh the risks and burdens (or vice versa) for most, if not all, patients

- 2. Weak recommendation: Benefits and risks closely balanced and/or uncertain

Clinical Key
www.clinicalkey.com

دسترسي به مجموعه کتاب، مقاله، فیلم آموزشی، گایدلاین، مدلاین و .. Clinical Key

■ مجموعه Clinical Key از بخش Health ناشر Elsevier است که یک منبع Clinical Decision Making محسوب می‌شود.

■ این مجموعه شامل بخش‌های زیر است:

☐ کتاب‌های مرجع بالینی و پایه

☐ مجلات

☐ مدلاین

☐ فیلم‌های آموزشی

☐ بانک اطلاعاتی دارویی

☐ دست‌نامه‌های آموزش بیماران

مجموعه کتاب، مقاله، فیلم آموزشی، گایدلاین، مدلاین و.. **Clinical Key**

- **+1,400 Topic Pages**
  - Quick clinical answers and summaries from Conn's Current Therapy, Goldman's Cecil Medicine, Ferri's Clinical Advisor and First Consult

- **+1,200 Books**
  - Elsevier's world-renowned medical and surgical books, including Gray's Anatomy, Goldman's Cecil Medicine, Braunwald's Heart Disease, Campbell's Operative Orthopaedics and more

مجموعه کتاب، مقاله، فیلم آموزشی، گایدلاین، مدلاین و .. **Clinical Key**

- **+600 Journals**
  - More than 600 top journals from Elsevier, including The Lancet and Journal of the American College of Cardiology

- **+17,000** Medical and Surgical Videos
  - A continuously updated library of searchable video content

مجموعه کتاب، مقاله، فیلم آموزشی، گایدلاین، مدلاین و.. **Clinical Key**

- **+300 Procedures Consult Videos** and **Articles**
  - ☐ Step-by-step procedural videos and articles to teach techniques or simply help clinicians refresh their skills

- **+2,200,000 Images**
  - ☐ A continuously updated library of searchable images from trusted books and journal

مجموعه کتاب، مقاله، فیلم آموزشی، گایدلاین، مدلاین و.. **Clinical Key**

- **+850 First Consult Monographs**
  - ☐ Succinct, trusted clinical answers for clinicians at the point of care

- **+2,900 Drug Monographs**
  - ☐ Continuously updated, with detailed information about hundreds of specific prescription drugs, over-the counter products, nutritional supplements and herbals

مجموعه کتاب، مقاله، فیلم آموزشی، گایدلاین، مدلاین و .. **Clinical Key**

- **+15,000 Patient Education Handouts**
  - ☐ Educational handouts that can incorporate institutional branding and special instructions, as well as the patient's preferred language and text size

- **MEDLINE** Abstracts
  - ☐ Fully indexed, searchable abstracts retrieved daily from the National Library of Medicine

کتاب، مقاله، فیلم آموزشی، گایدلاین، مدلاین و ..
http://www.clinicalkey.com/

سامانه منبع‌یاب (**Res**ource **F**inder)
http://**rsf**.research.ac.ir/

No.	Title	Subject Category	Publisher/ Holder	IF ▼	IF Quartile	CiteScore	CiteScore Quartile	H-Index	Indexed in	Details
1	CA: A Cancer Journal for Clinicians ISSN/ISBN: 0007-9235, 1542-4863	Oncology Hematology	Wiely, ProQuest	244.585	Q1	130.47	Q1	137	ISI, Scopus, PubMed, Embase	
2	New England Journal of Medicine ISSN/ISBN: 0028-4793, 1533-4406	Internal Medicine General Medicine	ProQuest	79.258	Q1	14.75	Q1	902	ISI, Scopus, PubMed, Embase	
3	The Lancet ISSN/ISBN: 0140-6736, 1474-547X	Internal Medicine General Medicine	ClinicalKey, Elsevier, ProQuest	53.254	Q1	8.60	Q1	670	ISI, Scopus, PubMed, Embase	
4	Chemical Reviews ISSN/ISBN: 0009-2665, 1520-6890	Chemistry	Other	52.613	Q1	51.08	Q1	581	ISI, Scopus, PubMed	
5	Nature Reviews Materials ISSN/ISBN: 2058-8437		Other	51.941	Q1	25.79	Q1	33	ISI, Scopus	

اگر میل داشتید Email بزنید !

kabiri@research.ac.ir

kabiri@behdasht.gov.ir