

A Reflective View of the Practice of Evidence-Based Healthcare in Saudi Arabia

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Objectives

- To give an overview of the concepts of EBHC.
- To give a historical perspectives about the movement of EBHC in Saudi Arabia.
- To give future perspectives of the movement of EBHC in Saudi Arabia.

What is Evidence Based Medicine ?

- Integration of **best research evidence** with **clinical experience & patient values**.



What is Evidence Based Medicine ?

- **Design Best Research Evidence:**
- Therapy: RCT, Systematic Review
- Prognosis: Prospective Cohort study
- Diagnosis: Cross-sectional study

What is Evidence Based Medicine ?

- **Orientation of Best Research Evidence:**
- Patient Oriented:
 - MI, Stroke, Fracture rates, function
- Disease Oriented:
 - Cholesterol level, BMD, Blood sugar

What is Evidence Based Medicine ?

- Patient Values:
- Quality of life.
- Cultural values.

History of EBM

Ibn Al-Razi (Rhazes) 864-930 AD

• ما اجتمع عليه الأطباء وشهد عليه القياس وعضدته
التجربة فليكن أمامك

- Follow what is agreed up on by physicians and supported by experiments.

History of EBM

Ibn Sina (Avicenna) (980-1037),

- Drugs that work in animals like horses might not work on humans.
- A drug that may be effective in the early stage of a disease might be totally ineffective in the advanced stage of the disease.

قُلْ هَاتُوا بُرْهَانَكُمْ إِن كُنْتُمْ صَادِقِينَ ﴿١١١﴾

*Bring Your Convincing Evidence, If You
Are Truthful*

History of EBM

- 1972: Archie Cochrane *Efficiency and effectiveness*,.
- 1992: McMaster EBM Group and JAMA published the User's Guide series.
- 1993: The Cochrane Collaboration was established.

Why the sudden interest in EBM?

- Limitations of Textbooks
- Efficient searching strategies.
- Simple practical appraisal methodology.
- The revolution of Systematic Reviews.
- Secondary sources of Evidence.

Levels of Evidence

Levels	Types of Studies
1a	Systematic reviews of randomized controlled trials
1b	Individual randomized controlled trials
2	Individual cohort study
3	Individual case-control study
4	Case-series
5	Expert opinion

Evidence for EB-CPG

- Following EBCPG for HTN resulted in cost saving of 20 million dollars (40% spending on antihypertensive medications).

JAMA. 2004 Apr 21;291(15):1850-6.

- Implementation of EBCPG of chest physiotherapy for VAP resulted in significant reduction in mortality and morbidity.

Indian J Crit Care Med. 2010 Apr;14(2):70-6.

- Implementation of a severe sepsis EBCPG was associated with decreased in-hospital mortality OR 0.36 (0.17-0.79) *Crit Care Med. 2007 Apr;35(4):1105-12.*

Evidence for EB-CPG

- Surgical site infection prophylaxis.

J Am Coll Surg. 2008 Sep;207(3):336-41

- hospital-acquired/ventilator-associated/healthcare-associated pneumonia.

J Trauma. 2010 Feb;68(2):382-6.

- Brain-injured patients

J Trauma. 2004 Mar;56(3):492-9

EBM and Undergraduate Education

EBM and Undergraduate Education

History

- Started as a critical appraisal of an article about therapy in 1996.
- Only One session (two hours)
- Checklist for the critical appraisal of Articles about Therapy.
- Resistance

Current Course Content

- Five Sessions:
- Introduction
- Searching
- Critical Appraisal
- Revision and Homework
- Presentaion of Projects

EBM and Undergraduate Education

Evaluation of the course

- A survey of 43 students six months after completing EBM course.
- Response rate was 93%.
- EBM course helped students in clinical practice (98%).
- EBM to be taught within the FM rotation (90%).
- Used EBM in other clinical rotations (45%).
- Had registration to EBM database (33%).

EBM and Postgraduate Education

EBM and Postgraduate education

- EBM education is incorporated into the postgraduate programs of most specialty training in Saudi Arabia.
- Critical appraisal paper is part of the Board exam for the Saudi Board of Family Medicine and the Saudi Board of Ob/GYN.

The National Committee for EBM in Saudi Arabia

The National Committee for EBM

- Established in 2000.
- Consists of 11 members.
- Include Experts in EBM and other influential members.

History of EBM in Saudi Arabia

- KFSHRC EBM Group 2001
- Jeddah EBM group 2002
- National & Gulf Center for Evidence Based Health Practice (NGCEBHP). March 2004.
- Madinah EBM group 2005
- Taif EBM group 2006
- Research Chair for Evidence-Based Health Care 2008

EBM Activities in Saudi Arabia

- EBM Foundation Workshops
- Systemic Reviews Workshops.
- EB CPG Workshops.
- Knowledge Translation Workshops
- Economic Analysis and Decision Analysis Workshops
- Training the Trainers Workshops.

EBM Activities in Saudi Arabia

- Members of the National Committee for EBM helped in the organization of EBM workshops in the region e.g. Egypt, Bahrain, Lebanon, and UAE.

Involvement in EBM Research

- 40 SR and Meta-analysis
- 200 RCTs
- A few Guidelines

The Saudi Society of Evidence Based Health Care

- Established 2009
- Continuation of the National Committee for EBP.
- Strategic Plan approved.

EBM in Saudi Arabia

Future Plans

- To have more involvement with allied health specialties.
- To improve access to EBHC resources.
- To do more of the “How to do” courses.
- To improve the quality and quantity of health care research.
- To establish a postgraduate Clinical Epidemiology program.
- To work on the implementation of EB practice.
- To establish a Saudi Center for Health Care Excellence SCHCE.

The Need for SCHCE

- Saudi Arabia is the leading country in the region in the field of EBHC education.
- We should be the leader in the field of EBHC implementation.
- There is an urgent need to establish a national center for clinical excellence to be devoted for the development, monitoring and implementation EB-Guidance in Saudi Arabia.

Mission of SCHCE

- To provide, implement and monitor high quality evidence-based recommendations to support, and guide health care practice in Saudi Arabia.

SCHCE Scope of Guidance

- Technology appraisals:- Guidance on the use of new and existing medicines and devices.
- Clinical guidelines:- Evidence-Based guidance on the management of specific conditions.
- Diagnostic procedures:- Guidance on procedures used for diagnosis.
- Public health guidance.

Strategic Goals of SCHCE

- Development and adaptation of high quality Evidence-Based Clinical Practice Guidelines.
- Development of tools for the dissemination and implementation of SCCE guidance.
- Development of tools to monitor the implementation of SCCE guidance.
- To conduct, Inform and direct health care research in Saudi Arabia.

Conclusions

Thank You
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