Comparing UpToDate and Pubmed Clinical Queries in answering clinical scenarios: A Randomized Cross-over Study

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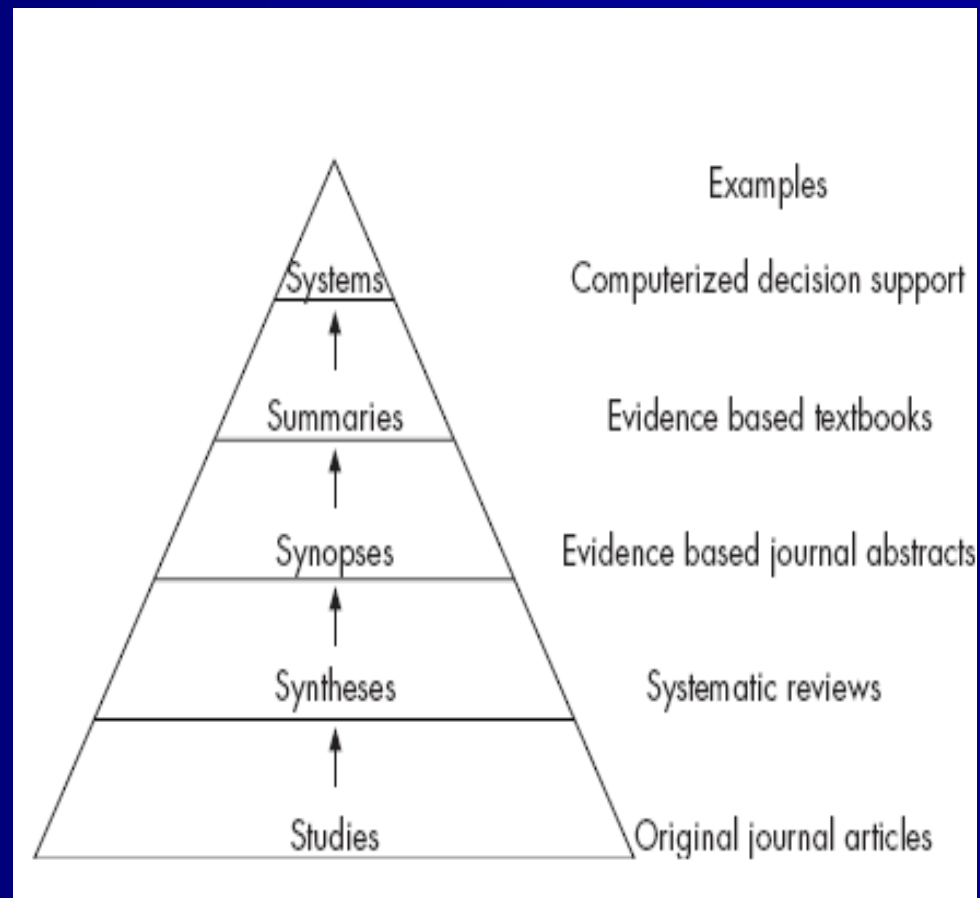Iran University of Medical Sciences

Introduction:

- The importance of finding current best evidence in health care systems

- Practical resources and the Information Mastery hierarchy

Introduction:

- The 5s approach: Systems, Summaries, Synopses, Synthesis and Studies

	Examples
Systems	Computerized decision support
Summaries	Evidence based textbooks
Synopses	Evidence based journal abstracts
Syntheses	Systematic reviews
Studies	Original journal articles

Introduction:

- Time problems in finding the current best evidences

- What's going on in EBM workshops

objectives:

- In order to compare the proportion of correctly answered clinical scenarios and users' satisfaction using UpToDate (a point-of-care system) and PubMed Clinical Queries during a workshop.

Materials and Methods:

- Type of study:

    Randomized crossover trial

- Participants and Situation:

    44 mostly first year residents

    A 4-hour Information Mastery workshop

    Iran University of Medical Sciences,

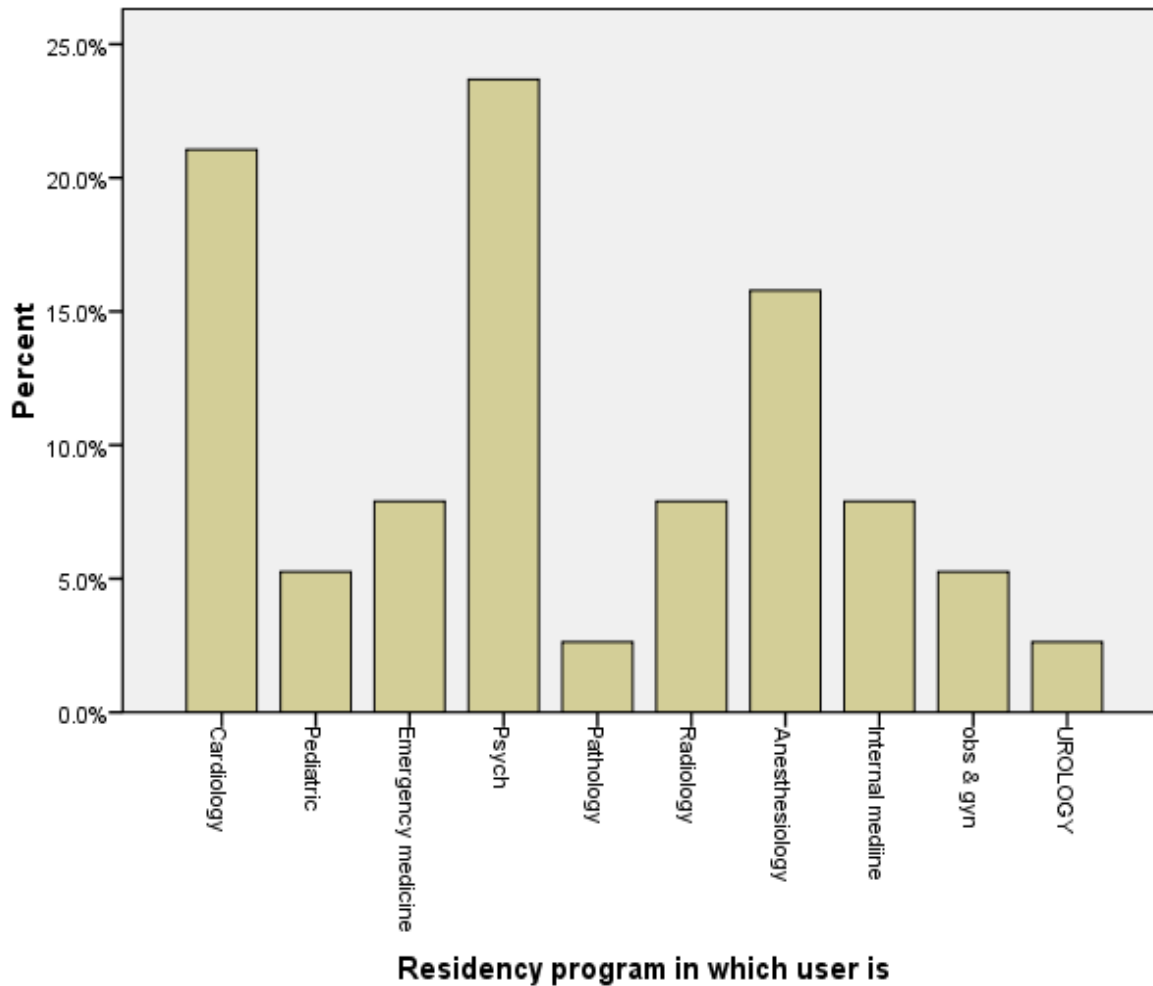   Tehran, Iran

    February, 2009

Materials and Methods:

- Randomization:

    Random allocation software, Simple random method

- Allocation concealment:

    Sealed opaque envelope

- Procedure:

    Totally 16 different scenarios including diagnosis and therapy

    2 scenarios for each database

Materials and Methods:

- Retrieved answer were recorded
- Assessed by the researcher team
- A questionnaire for the level of satisfaction

Results:

- Psychiatry: 9 (23.7%)
- Cardiology: 8(21.1%)
- Anesthesiology: 6(15.8%)
- Emergency medicine= Internal medicine=Radiology: 3(7.9%)

Results:

Gender (male/female)	26(63.4%)/ 15(36.6%)
The year of study (1st/2nd)	37(90.2%)/4(9.8%)

Results:

	Total questions	Lost to follow up
UpToDate	88	6
PubMed CQ	88	6

Variable	UpToDate	PubMed CQ	Pvalue
Correct answer	81.70% (67/82)	46.34% (38/82)	<0.001*

Comparison of measures of users' satisfaction in PubMed Clinical Queries and UpToDate

	PubMed Clinical Queries	UpToDate	P
Interacting with system*, median (IQR)	4 (3 to 4)	2 (2 to 3)	<0.001
Amount of retrieved information*, median (IQR)	3 (2 to 4)	3 (3 to 4)	0.114
Accuracy of content*, median (IQR)	3 (2 to 3.75)	2 (1 to 3)	<0.001
Overall satisfaction*, median (IQR)	3 (3 to 3.75)	2 (1 to 2.75)	<0.001

Results:

	Median time to answer (min)	95% CI
UpToDate	16.95	16.26-17.63
PubMedCQ	29	26.13-31.86

P value < 0.001

Conclusions:

- Up to our knowledge there is just one study which compares UpToDate as a point-of-care system with PubMed as a study. There wasn't any comparing PubMed clinical queries with UpToDate.

- Our study shows that teaching UpToDate was more productive in retrieving relevant answers and also more satisfying for participants of the workshop

Conclusion:

- On the other hand the findings of this study challenges teaching PubMed Clinical Queries as the best database in EBM workshops which could be replaced by higher level databases such as point-of-care systems.

Thank you for your attention.