



كرسي الشيخ عبدالله بن سالم باهمدان للبحوث القائمة على الأدلة الصحية  
التي يركز على الممارسات القائمة على الأدلة والتطبيق العملي للمرضى

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# Innovative Teaching Methods for Capacity Building in Knowledge Translation (KT)

**Dr. Lubna A. Al-Ansary, *MSC, FRCGP***

Associate Professor and Consultant,

Dept of Family and Community Medicine,

*Holder of “Shaikh Abdullah S BaHamdan Research Chair for Evidence-Based Health  
Care and Knowledge Translation (EBHC-KT)”*

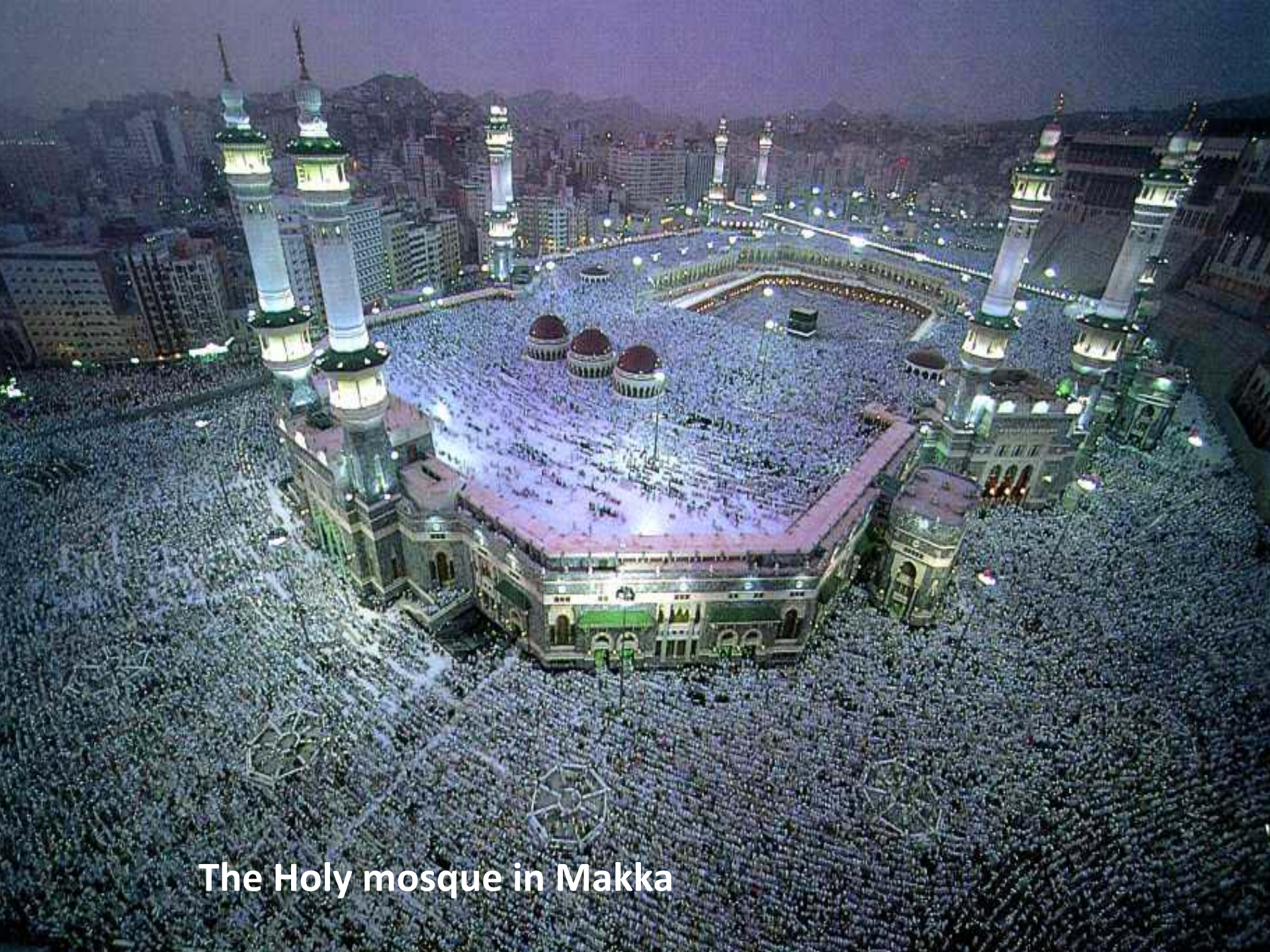
College of Medicine, King Saud University

Riyadh, Saudi Arabia



Saudi Arabia





The Holy mosque in Makka





The Holy mosque in Al-Madina...



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'To the individual who devotes his/her life to science, nothing can give more happiness than when the results immediately find practical application. There are not two sciences. There is science and the application of science, and these two are linked as the fruit is to the tree.'

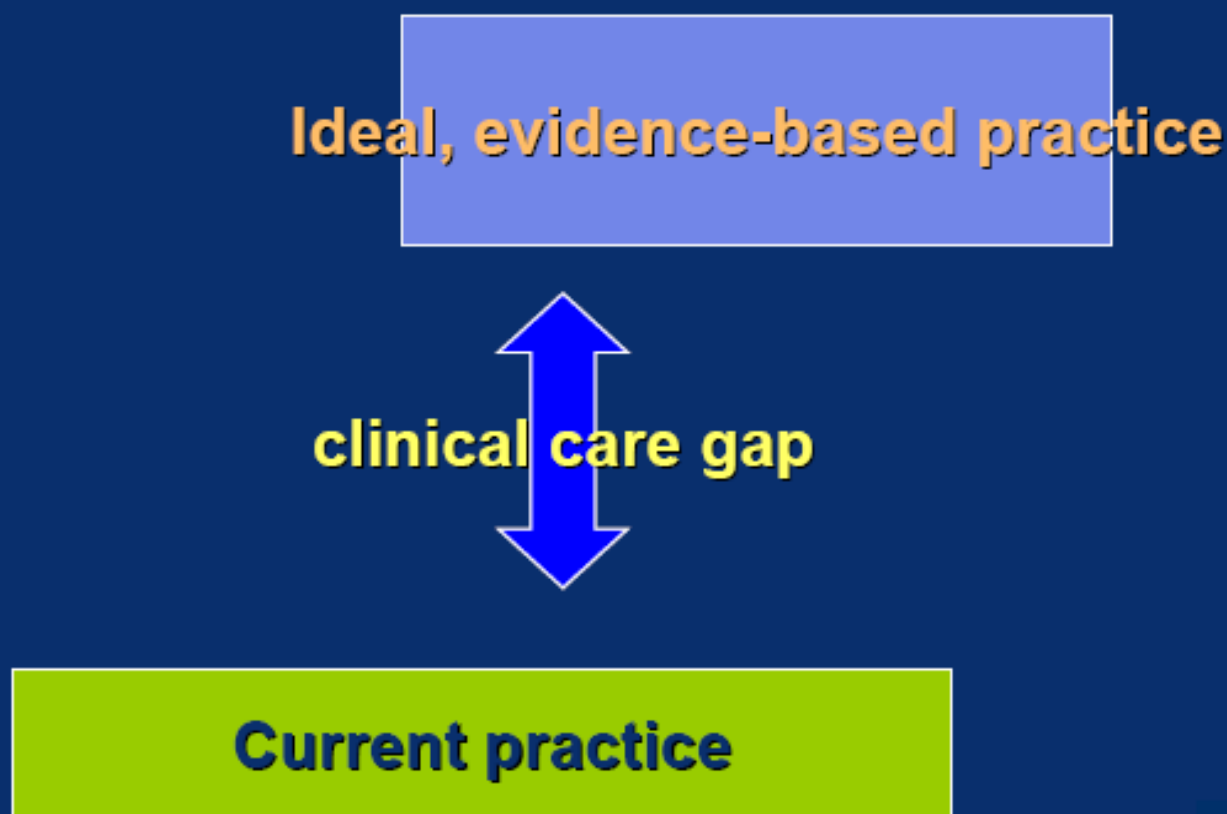


– Louis Pasteur, 1871

*(from presentation by Ian Graham, 2008 CIHR  
Knowledge Translation Summer Institute)*



# The clinical care gap





كرسي الأبحاث في الرعاية الصحية  
المنهجية على الممارسين المنهجية والتطبيق المنهجية

# Knowledge Translation (KT)

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## Knowledge Utilization

Knowledge  
Dissemination

Knowledge Brokering

Knowledge  
TO  
Action

Knowledge  
Transfer

Knowledge Exchange

*Transforming  
Health Research  
Into Action*

Commercialization



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### Context

- A week-long training of trainers' workshop in EBHC and KT.
- Participants: 18 Family Practitioners selected by the Ministry of Health from different regions of Saudi Arabia.







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### Context

- ✓ All of them attended EBM/EBHC workshops (participants)
- ✓ 47% facilitated small groups in EBM/EBHC workshops
- ✓ 47% frequently search the medical literature
- ✓ Self-rating of critical appraisal skills: Good>> Very good





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### Desired Outcomes

- Improve the effectiveness of EBHC workshops beyond exclusive training for critical appraisal.
- Introduce the concept of KT as an important milestone in teaching EBHC.
- Highlight the problems of translating evidence into practice so they can address this issue in forthcoming workshops .





## Methods

✓ Plenary session on KT as concept

### Debate



### KT Project



The participants were informed of the assigned tasks  
1 week prior to the workshop



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### Debate



- ✓ Participants divided into 2 groups
- ✓ Given a statement:
  - One group to collect evidence to support the statement
  - Other group to collect evidence to refute the statement
- ✓ At the end of the debate the **level of evidence** will be evaluated.





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### Debate



### Statement 1

“Critical appraisal workshops are not effective in changing the behaviour of health care professionals towards EBHC practice”

### Statement 2

“Clinical practice guidelines are cookbook medicine”



- ✓ The participants were presented with information based on level 1 evidence
  - *Preconception care for women with diabetes*
- ✓ Task: To convince the administrator(s) to implement this evidence in their medical facility using the KT cycle.

## KT Project







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# Assessment

## At the end of the workshop:

- Interview/direct feedback
- Questionnaire

## Three months later:

- Questionnaire





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# Results

*Immediately...*

- 100% strongly agree that KT is important
- 100% strongly agree that it is an essential complement to EBM/EBHC





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# Results

- ✓ 80% thought they would use the KT project in their future workshops
- ✓ 100% thought it was useful and gave new paradigm in their teaching of EBHC

*Immediately...*

KT Project







## Results

*Immediately...*

### Debate



- ✓ 2 participants thought it was useful
- ✓ 100% thought it was a difficult exercise
- *“A demonstration by the tutors of a debate would have been helpful:*
  - *How to run the debate*
  - *How to organize the evidence”*



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# Results

*3 months later...*

- ✓ 6/18 responded
- ✓ KT as a concept introduced by half of them in their EBM/EBHC workshops



# Results

*3 months later...*



Statement	%	#
KTP helps in using evidence in building the argument for implementing high quality evidence	83	5
KTP in EBM improve the skills for formulate question, literature search, critical appraisal and implementation of evidence	67	4
KTP is the ultimate in teaching and learning EBM	67	4
KTP needs specific skills which I can develop	50	3
KTP is useful in improving communication skills	50	3
Introduced KTP as a method in teaching EBM?	17	1





# Results

*3 months later...*



Statement	%	#
Debates are useful in improving communication skills	83	5
Debates are useful in accepting the other opinion	83	5
Debates in EBM improve lit. search and critical appraisal	67	4
Debates need specific skills which I can develop	67	4
Introduced debates as a method in teaching EBM?	None	0



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### Summary

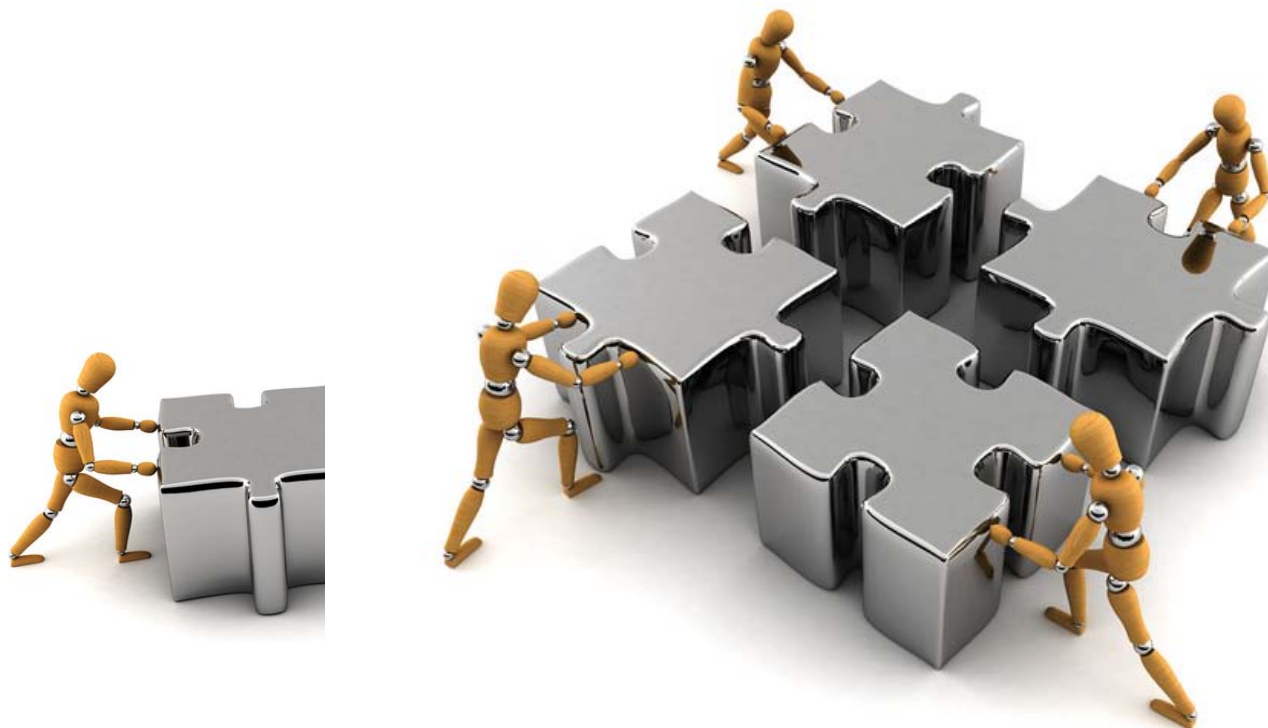
- ✓ The concept/need for KT was well received
- ✓ Willing to try new methods
- ✓ Needed more support
- ✓ Needed more time
- ✓ Further research is needed to validate these method for teaching KT in other contexts



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**The jigsaw of KT**