

# CLOSING THE GAP: EVIDENCE TO ACTION



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# Outline

- Evidence based practice ?
- Source of evidence and its level?
- Translate the evidence into practice?
- Perceive knowledge and attitudes on evidence based practice in nursing?
- The process involve in evidence based practice?
- Barriers or gaps between evidence?
- Nurses roles in translation of evidence into action?

# Introduction

- The availability of information and the growth of science -significant improvements in health outcomes in the world.
- However differences in outcomes, health inequalities and poorly performing health services cause real challenge to nurses.
- World Health Organization (WHO 2004) acknowledges the not enough understanding on how to make effective interventions widely available to the people who need it.
- Stronger emphasis is needed not just on the discovery of new drugs and diagnostics but on how we put knowledge into use; on *how we close the gap between evidence and action.*



# Perception on EBP

- A study on American Registered Nurses' perceptions, attitudes and knowledge/skills associated with evidence-based practice (Koehn & Lehman 2008). The finding shows that participants had moderate scores on practice and attitudes towards evidence-based practice.
- The knowledge/skills mean scores were somewhat lower. Differences were found for attitudes between those with baccalaureate and higher education compared to those with associate and diploma education.
- The two most cited barriers to implementing evidence-based practice were time and knowledge.
- The finding suggest the value of providing adequate knowledge for better nursing care

# Perceives awareness on EBP

- A descriptive survey was conducted with a convenience sample of 160 nurses who were attending EBP conferences or workshops in four states located within the Eastern Region of the United States (Melnyk et al 2004)
- The finding shows that although participant beliefs about the benefit of EBP were high, knowledge of EBP was relatively low.
- Significant relationships were found between the nurses' practice is evidence-based and (1) nurses' knowledge of EBP, (2) nurses' beliefs about the benefits of EBP, (3) having an EBP mentor, and (4) using the Cochrane Database of Systematic Reviews and the National Guideline Clearinghouse.

# Evidence Based Practice (EBP)

## Definition:

- Evidence Based Practice (EBP) is an integration of individual clinical experience with the best available evidence from research, available resources, the patients' value, and circumstance (Centre of EBP Medicine ,2006).
- EBP aims to base health care on the finding from systematic evaluation of the efficacy of given interventions, rather than tradition or custom and practice (Taylor 2003)

Individual  
Clinical  
Expertise

Improved Patient  
Outcomes

Patient's  
Values and  
Expectations

Best Available Clinical Evidence

# What is 'Evidence'

- Define as :  
  
the availability facts or  
circumstance, supporting or  
otherwise a belief, proposition  
or indicating whether or not a  
thing is true or valid  
  
(Oxford English Dictionary 2009)



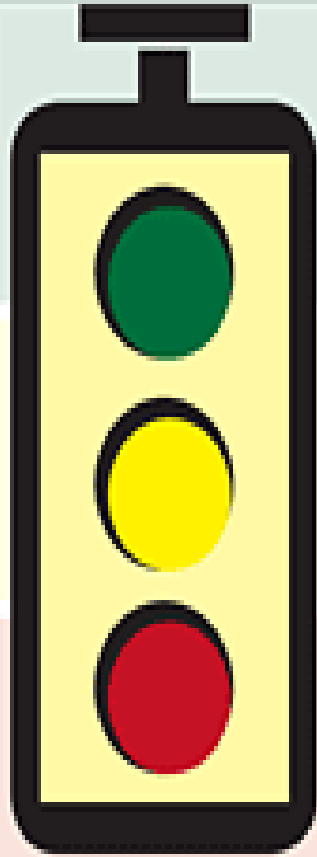


# Types of evidence

- Not all evidence is equally useful- research findings are weighed more heavily in decision making process because it uses systematic methods to collect the data.
- Different types of evidence are more relevant to different questions and nurses need to be actively engaged in making sure that relevant research, where available, is identified, appraised and used appropriately.



# How do we decide on the evidence?



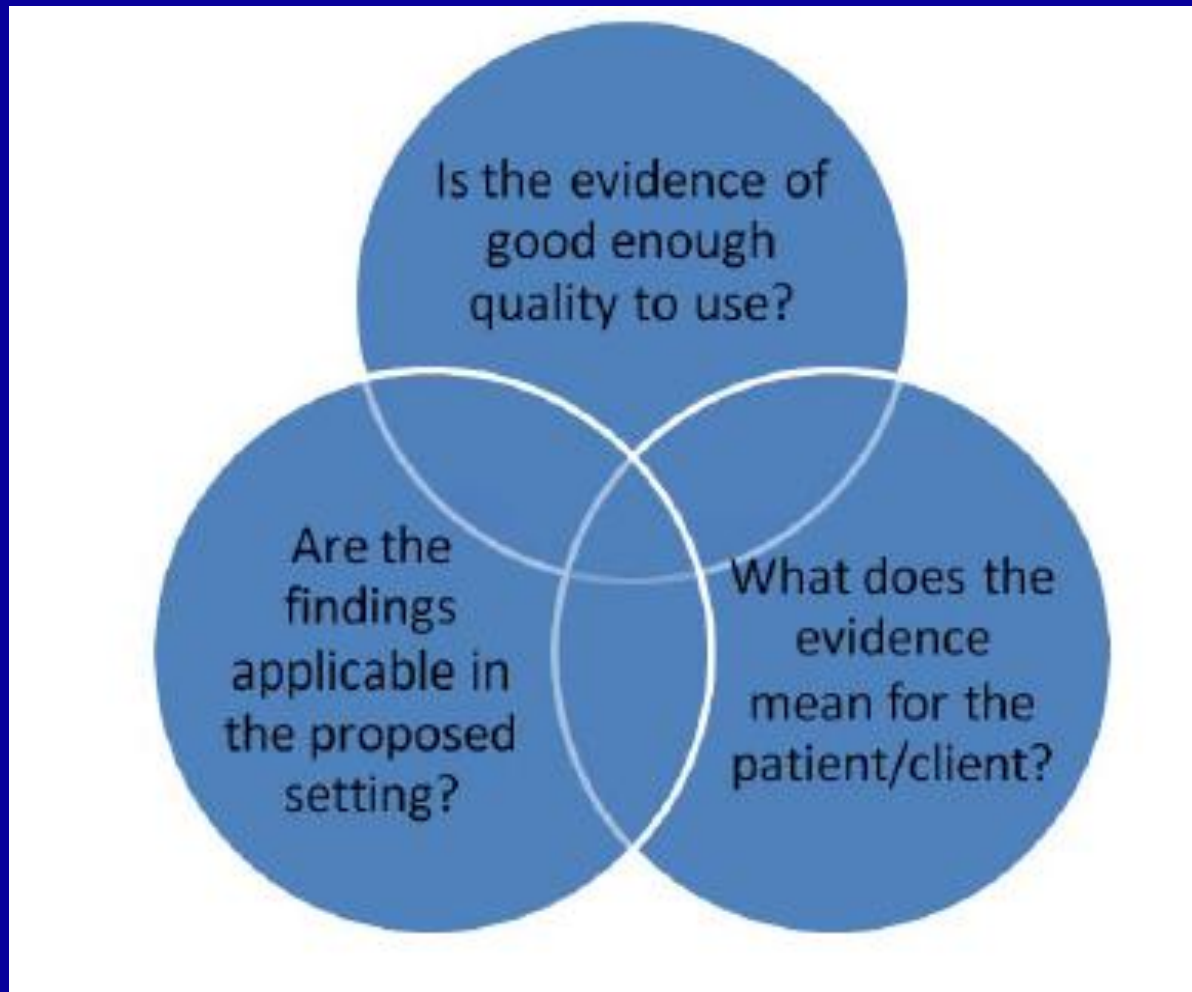
**Green = GO!**  
The evidence supports the consideration of these interventions in practice.

**Yellow = CAUTION!**  
There is not sufficient evidence to say whether these interventions are effective or not.

**Red = STOP!**  
The evidence indicates that these interventions are either ineffective or may cause harm.

# Applicability of the evidence?

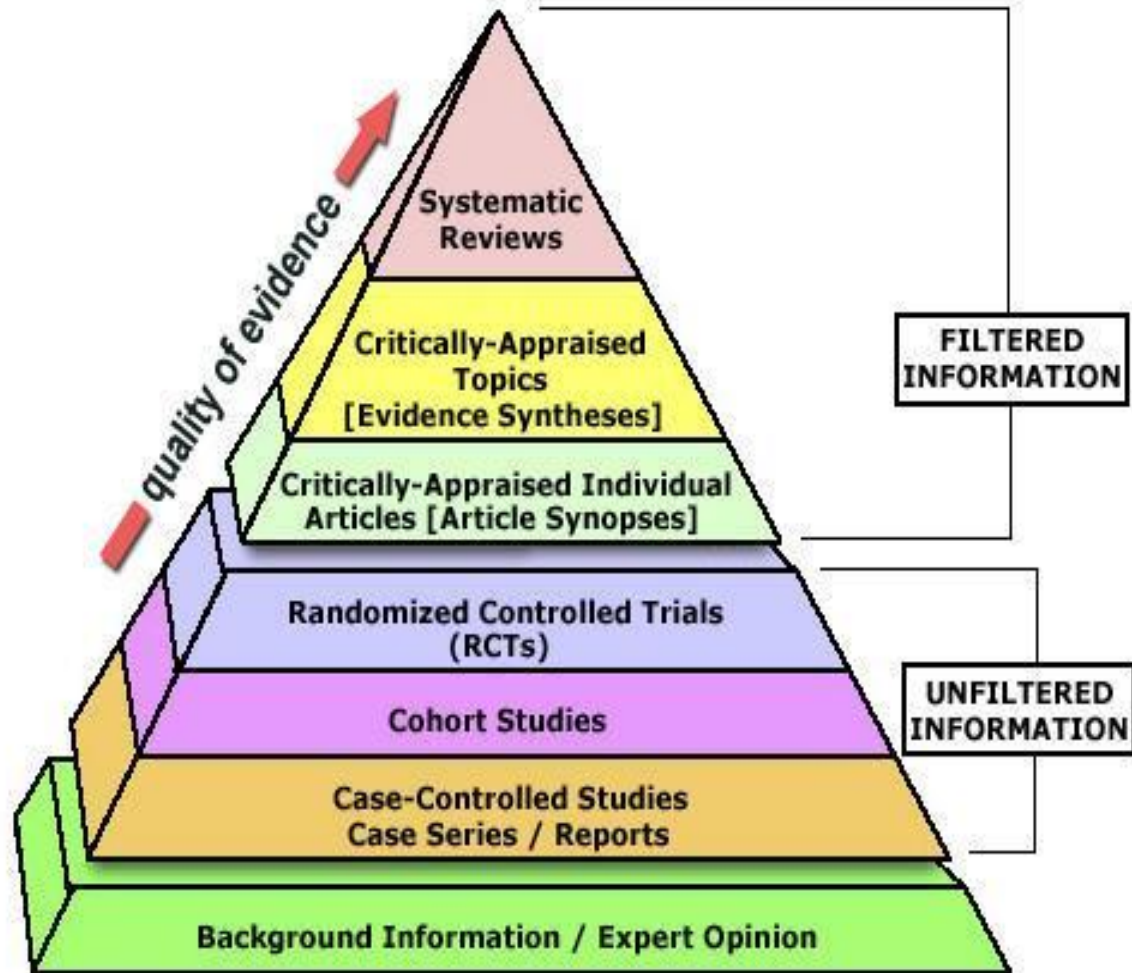
-Critical appraisal



# Potential Source of evidence

- Research by health professionals , academicians or companies
- Systematic reviews of research  
(Cochrane Collaboration, Joana Briggs Institute)
- Critical reviews
- Clinical guidelines
- Clinical experience
- Expert advice
- Patients' experience, carers or clients
- Clinical audits data
- Colleague opinions

# Level of evidence



# The need to translate evidence into action

Pravikoff, Tanner and Pierce (2005) found that nurses typically using their knowledge from school, their own experience from the past, or usual practice and knowledge from co-workers to guide their practice

USA's Institute of Medicine (OIM 2001) found that medical science and technology have advanced at extreme rapid pace, but delivery of health care has lagged behind.

This report made it clear that “usual practice” is not good enough anymore. The switch must be made based on evidence.

This does not mean that clinical experience and patient preferences should be ignored.

# Strategies- Evidence Based process (Ciliska 2005)

- Asking a clinical question
- Searching for literature for relevant research
- Critically appraising what has been found. If change is warranted by research evidence, if it is fit with clinical skills, resources availability and patient preferences, then the following stage will take place.
- Implementing/apply the change in practice
- Evaluating the change in practice





# From evidence to action:

- Changes are rarely easy as it involves changing the way people and the system behave.
- Change can frequently be messy, waste time and can have unpredicted consequences.
- However change can be exciting and motivating.
- Understanding and planning how to take evidence into practice, to action knowledge, is important.
- This area, because it is so critical, has been the subject of an increasing amount of research itself.

# Perceive barriers to EBP

- A study done by Brown , Wickline , Ecoff & Glaser (2009) on nursing practice, knowledge, attitudes and perceived barriers to evidence-based practice at an academic medical center in USA, shows that organizational barriers (lack of time and lack of nursing autonomy) were the top perceived barriers.
- Statistically significant correlations were found between barriers and practice, knowledge and attitudes related to evidence-based practice

# Gap (barriers) between translating evidence into action:

- Practice environment (organizational context)
  - Financial disincentives-lack of reimbursement
  - Organizational constraints-lack of time, work demand
  - Perception of liability-risk of formal complaint
  - Patient expectations
  - Insufficient guidelines
- Prevailing opinion
  - Standard practice-Satisfied with usual knowledge and practice
  - Key person does not agree with the evidence
  - Lack of knowledge in research method, condition, management

# Gap (con't)

- Knowledge and attitude
  - Clinical uncertainty-test done vague problem
  - Sense of competence- self confidence
  - Information overload- unable to identify the correct evidence
- No access to published papers
- No access to internet at work or at home
- Literature is ambiguous or conflicting

# Bridging the gap-Evidence into action

- Building partnerships
  - bringing individuals, groups and teams together to develop a shared vision and sense of purpose.
- Using champions/change agents /opinion leaders
  - identifying and recruiting key people to support the change; they need credibility and to be respected by the individuals you are seeking to influence.
- Feedback on performance

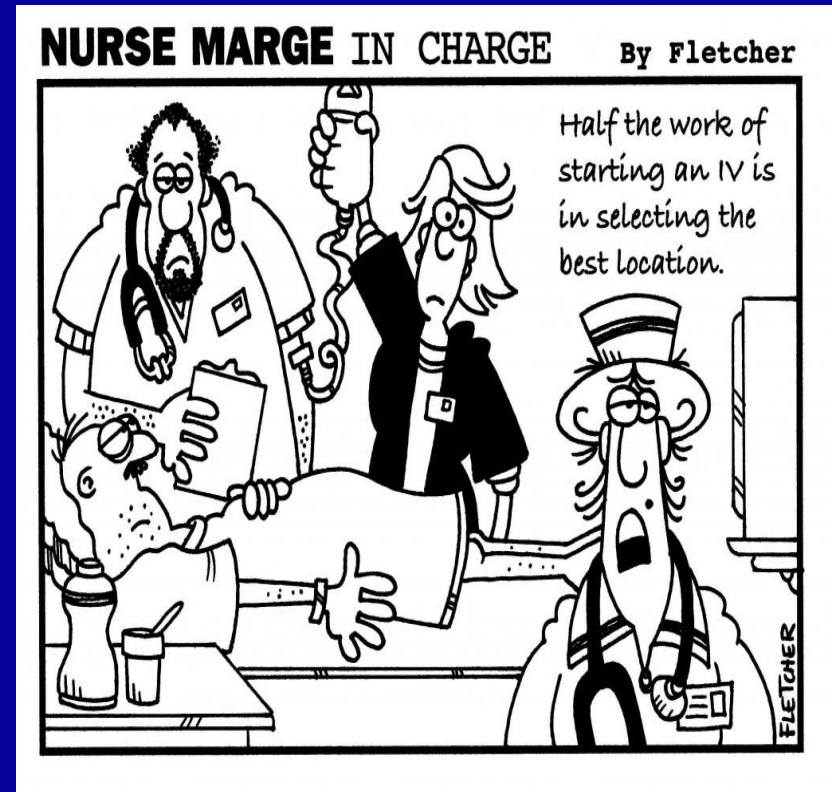
- Sharing and disseminating information
  - – through a variety of media, and designed with specific audiences in mind; it can involve writing leaflets, the use of plays, and the use of social media platforms.
- Education and training interventions – such as continuing education modules, decision support systems, one to one coaching, online learning, use of simulations.
- Standardizing practice – using care pathways, clinical audit, variance reporting, checklists and guidelines.

# Nurses' role

- Understand about EBP and involve in putting the knowledge into action- vital to local service innovation and the development of new ways of working.
- Disseminate the available evidence
- Committed to developing an environment conducive to evidence
  - -informed decision making and practice- work closely with the teams that use their findings, including the wider community.
  - Building partnerships among health professionals and policy makers, nursing education to facilitate disseminating and application of evidence
- Building capacity-promote EBP

# Conclusion

- Health care systems need to implement interventions that not only increase nurses' EBP knowledge and skills, but also strengthen their beliefs about the benefit of evidence-based care.
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- Strategies must be taken to close the gap between the evidence and action in order to accelerate a more rapid shift toward evidence-based nursing practice.





# Example of EBP

- Breech delivery-SVD
- No more episiotomy
- Use of Fentanyl instead of morphine as pain killer during delivery
- Not doing auscultation of air insufflations to test NG tube placement
- Home delivery in foreign countries
- Maggot therapy for diabetic wound
- Not using of sterile water irrigation during ETT suctioning
- Not doing percussion, only vibration in chest physio
- Usage of sterile gloves during dressing related to infection rate and health care cost

# Reference

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- Melnyk BM, Fineout-Overholt E, Fischbeck Feinstein N, Li H, Small L, Wilcox L, Kraus R 2004, **Nurses' perceived knowledge, beliefs, skills, and needs regarding evidence-based practice: implications for accelerating the paradigm shif.** Worldviews Evid Based Nurs. 1(3):185-93.



**THANK YOU**